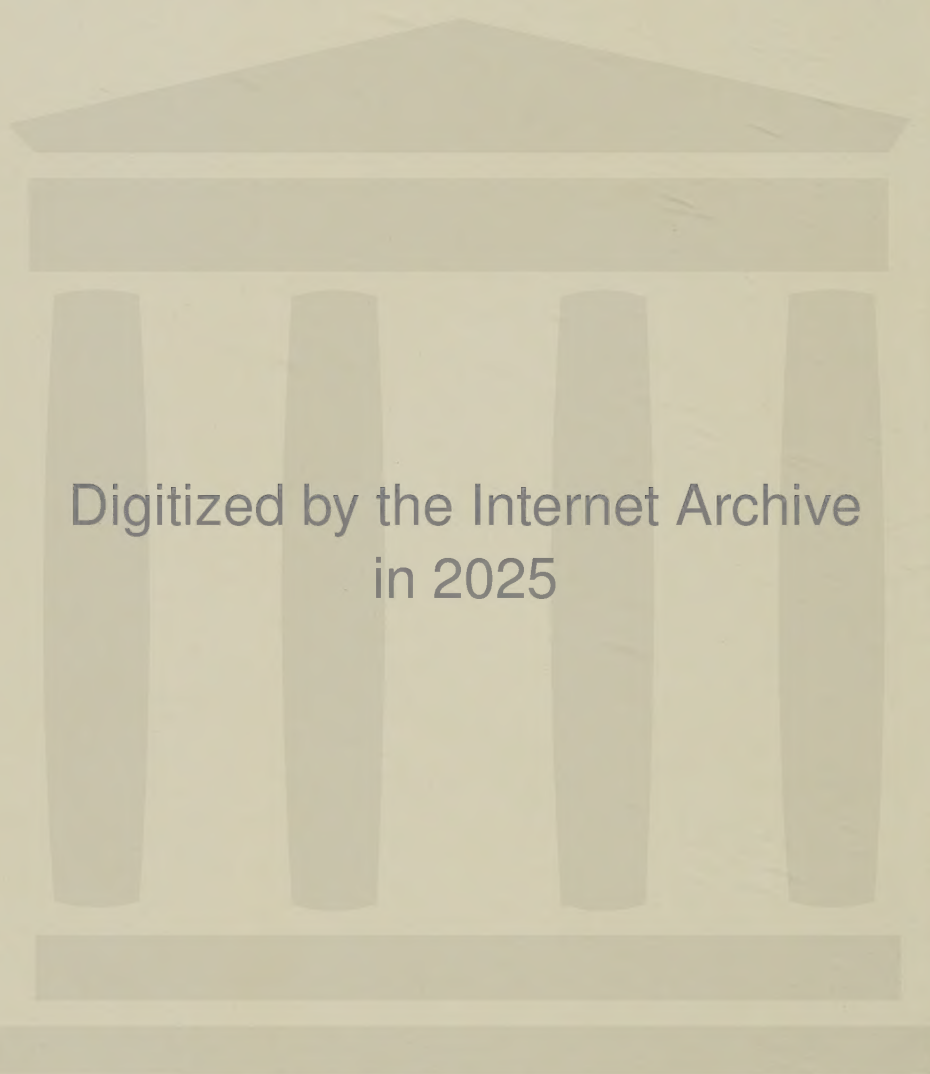




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VOLUME I.

EDITED BY

THOMAS WAKLEY, SURGEON,

M.P. FOR THE METROPOLITAN DISTRICT OF FINSBURY,

AND CORONER FOR THE COUNTY OF MIDDLESEX.

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CLINICAL LECTURES

ON THE

PRINCIPAL FORMS OF INSANITY,

DELIVERED IN THE MIDDLESEX LUNATIC-ASYLUM
AT HANWELL.

BY JOHN CONOLLY, M.D.,

PHYSICIAN TO THE ASYLUM.

LECTURE VII.

Melancholia—description of.

I HAVE this morning, in our walk through the wards, directed your attention to a class of patients differing very much from those yet spoken of to you, and generally characterized by an absence of the activity and vivacity which are so conspicuous in the greater number of recent maniacal cases.

Melancholia constitutes an ancient and general division of mental maladies, although the cases of melancholia are, in reality, only forms of maniacal disorder. But the contemplation of this form excites the deepest interest and pity, the sufferings of the patient being very great, the sensibilities of the mind generally acute, the depression and wretchedness almost continual, and the malady usually long incapable of relief. Although, strictly speaking, it is but a variety of maniacal affection, has its paroxysms like mania, and often alternates with great maniacal excitement, it is altogether sufficiently peculiar in its symptoms to indicate a modification of the treatment adapted to cases of mania, and it is therefore convenient to speak of it separately.

The cases which you have noticed this morning are all marked by despondency, or a tormenting and almost constant depression of mind. The patient cannot be aroused to hope, cannot be made joyful, and seldom smiles. The subjects of this form of malady sit inactive, brooding for ever over some self-accusation, or haunted with some ever-during dread. These cases are often confounded with what are really cases of dementia, but their distinction from them is very important; for melancholia is often curable, and dementia affords no hope of cure. It is improper to apply the term melancholia to the numerous cases seen in all large asylums, in which, after a short attack of mania, an incurable debility of the brain seems to have ensued, shown by a total indolence, almost perpetual silence, and a general apathy. Young persons of education, so afflicted, neglect all their former pursuits, or follow them without interest; life has lost its savour for them; they lose all their mirth, forego all custom of exercise; everything goes heavily with them; nothing delights them, yet they have no sorrow. In the ward of asylums the subjects of this mental infirmity are seen, in its advanced stages, sitting in one position from morning to night; they seldom utter a word; never move but when directed to do so; have no melancholy or any glad thoughts, and apparently scarcely think at all; living in this way for years; and at last not uncommonly dying of phthisis. There is, however, a close relation between these cases and the examples of melancholia met with in elderly subjects, on which a state of dementia gradually supervenes.

Referring again to the printed forms of cases used in the asylum, and placed before you, it will be found that the general filling up of a case of melancholia is as follows. My general description will fall short of the terrible pictures found in many books; to account for which, I shall not make any present attempt, but shall describe what I daily see.

Melancholia most commonly affects persons whose habits or occupations have been sedentary; frequently appears between the age of forty and fifty; and sometimes much earlier; in men and women, in the married and unmarried. Its moral causes are, grief, care, distress, religious despondency, and, if such an expression may be permitted, conscientiousness in excess. Any depressing influences may induce it. I have known it occur in newly-married young women, oppressed with the novel cares of housekeeping, or affected by a separation from the parental roof. But often it creates its own distresses, coming on without adequate moral cause, some state of the brain being induced by which it is incapable of receiving pleasing impressions. This state is sometimes obviously connected with morbid actions or conditions of the liver, of the heart, of the intestinal canal, or of the uterus; but oftentimes the cause is wholly obscure; and the unexplained disposition to sadness hereditary. Its history usually shows that its

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approach has been gradual; but it may supervene on a sudden and violent shock. In women, it very frequently appears about the period of the cessation of the catamenia, continues a year or two, and then goes off. If it appears earlier, suppression seems generally to follow. All the forms of melancholia are obstinate, and some, of course, are hopeless; but, upon the whole, as many patients seem to recover from this form of disorder as from mania.

The state of the ordinary senses is usually natural, but there seems to be a loss of some sensorial function, in consequence of which, pleasure is no longer derived from ordinary impressions; for in health, the ordinary exercise of the senses, especially those of sight, hearing, and touch, is attended with a pleasure independent of their merely useful exercise. The intellect, also, in the melancholic, is usually clear and composed; unable only to resist the morbid depression or the hopeless delusions that spring from and feed it. The elevating, adorning, and comforting power of the imagination, seems to be extinct; no hope points to the future, or lends enchantment to the view. The affections are seldom really impaired; but the patients disavow all kindly affections, repel the attentions of parents, wives, and children; are certainly less compassionate than the maniacal; and, too truly in some cases, although in others very unjustly, reproach themselves with loving nobody, and with being spiteful, and undeserving of the affection of others; or they accuse themselves, without any truth, of having disgraced their families, or having ruined them, or having destroyed their children; or of having sinned against the Holy Ghost and lost God's favour for ever; or assert that eternal punishment, or annihilation, which they consider a worse doom than hell, is to be their portion. These charges against themselves, and these dreadful prognostications, they repeat again and again, with the utmost precision and calmness of manner in many instances, with tears and agitation in others, ever maintaining that they are sane, and that the events of the following day will prove that all they say is correct. The chief propensities manifested are to indolence and general indifference; they read nothing, write to nobody, shun all exertion; remarking keenly on their own altered state, "Once I was industrious, now I am idle and worthless; the world does not seem as it did to me; everything good seems to have gone out of me." Young men and young women may be thus affected; ceasing to be interested in any occupations; averse to going out or to society; and in all the changes and chances of life, neither rejoicing nor sorrowful; neither hopeful nor anxious. One dominant propensity alone is too often active; that of self-destruction.

There is something remarkable in the general physical appearance of melancholic patients. The greater number of them are certainly distinguished by dark hair and eyes, long features, a sallow complexion, and the peculiarities of what is called the melancholic temperament. The face and nose are generally long, and there is even a kind of resemblance to each other, in features as well as in expression, during severe attacks of the malady. Their complexion is usually sickly, and the body is thin. The third plate in the Atlas to M. Esquirol's work, offers a kind of prototype of the appearance of many of the cases. It represents the hopeless despondency of a female patient, who, having been in youth the playmate of the unfortunate Duke D'Enghien, became insane and melancholy after his execution, and ever afterward sat with fixed gaze opposite to a window, looking for the face of him whom in this world she was never to behold more.

A few melancholic patients are continually walking about in one chosen spot, often moaning, "lips moving, and eyes fixed, foot falling slow;" but most of them are inactive, and some will sit in one place all the day long, and every day, selecting out-of-the-way parts of the asylum and unobserved corners, or covering themselves up with bed-clothes, and sometimes even inserting themselves in mattresses, as if only anxious to be hidden from every gaze. Leaning with one shoulder against a wall, or the side of a window, is a very customary attitude with them; or sitting with both hands raised and joined over the breast, supporting the chin, the head being depressed. Some cover their eyes, as if desirous to exclude the light, or stop their ears with their fingers, as if to shut out all sound of human voices. I have learned, however, since I have lived in an asylum, that many of the strangest external expressions of melancholia and of all other forms of insanity, the fixed attitudes, the automatic motions, the monotonous actions, (of which the jingling of chains is generally among those noticed in older descriptions, the fidelity of which I am far from disputing,) either disappear, or become less continual, and more easily interrupted when

all the patients enjoy liberty, and partake of frequent notice, due attention, and consoling words almost daily repeated. If possible, I would never pass any lunatic without a word of recognition; I should wish to remember every name and every history, and to have the happy faculty of condensing into a word or two some expression exactly calculated to reach every heart. The melancholic, especially, demand, and are especially benefited by, such attention. There are few on whom the frequent dropping of kind words does not at length mitigate the stony countenance and repulsive manner. In most of them, at the daily visit, may be discerned a looking for the daily accosting and the daily repetition of an assurance that their woes will some day have an end. But whilst some appear to find relief in expressing their various sufferings, and in being encouraged to hope for recovery, although professing an entire disbelief in its possibility, others will only speak when spoken to, and then in a low and depressed voice, expressing their vague fears, self-reproaches, convictions of hopeless guilt, eternal punishment, and various wretchedness. They will reject all hope and consolation, and repudiate pity as undeserved, and express their wish to be shot, to be drowned, to be burned, to be smothered, to be buried alive; yet, at the same time, confess their fears of being surrounded by those who intend to hurt or kill them. To exclude the world, and to be continually in bed, are among the most ordinary habits of the melancholic, and patients have in this state kept in bed for years.

The state of the skin in melancholic patients is less generally harsh and dry than the descriptions of different authors lead us to expect, although sometimes this condition is very marked. The head is not usually hot, but the patient often complains of pain or of weight, and sometimes of a burning sensation in some part of it. The extremities are generally of low temperature; the tongue is very variable in its appearance, sometimes clean and natural, sometimes excessively coated and foul. The desire for food is variable, and food is not unfrequently altogether refused, from a wish to die, or from a dread of expense, or, more frequently, I believe, from absolute repugnance; and this state will alternate with excessive voraciousness. A most perverse desire to mortify and punish themselves is frequently the cause of their refusing to take sufficient nourishment, or to defend themselves from the cold, or to partake of anything which is recommended for their comfort.

They complain, when any distinct complaint is made, of uneasy sensations in the epigastrium, in the left hypochondrium, or other parts of the abdomen; of a feeling of fluttering, drawing, gnawing, or tearing. They even refer a sense of terror to the epigastrium, accompanying a feeling of having done something wrong, without knowing what. These sensations sometimes alternate with uneasiness referred to the forehead or occiput, or to the portion of the head corresponding with the superior and lateral boundaries of the occipital bone. The bowels are ordinarily costive, sometimes obstinately so, and the patients are fond of taking daily medicine, except when food is refused by them, in which case they commonly resist needful medicine also. The function of the kidneys has not been observed to be particularly impaired, but the state of this function has only lately received much attention, and any conclusions drawn from the analysis of the urine alone must be of doubtful value; the functions of the skin, the variable character of the alvine excretions, and of the expired air, must be at least of parallel importance; and if the estimation of these is in some cases possible, their verification must often be unavoidably impracticable. The pulse is generally slower than in mania, and often excessively feeble; when it is stronger, there is probably some hypertrophy of the heart. The voice is almost always low, and very expressive of mental despondency; the language of the patient, even in persons of the poorer classes, is often even striking and elevated, and in educated persons it is eloquent and painfully affecting. The respiration is not disturbed, but the breath is in some cases singularly offensive, having the odour of putridity. In women, in the majority of cases, the functions of the uterus have ceased. The imperfect sleep is very remarkable; some of the melancholic patients being scarcely ever found asleep, by night or by day. Towards the afternoon and evening, there is, in most cases, a mitigation of suffering; but despondency commonly returns with the morning, and its return is anticipated with dread, so that even the slight cheerfulness of the afternoon becomes, in old cases, grievously mixed with apprehension of what the next morning will bring.

Recovery from melancholia is so slowly effected, that there are cases in the wards which have served for illustrations of it even for years; and a reference to some of these is instructive

as to the usual course and termination of them. For two successive years I pointed out to those attending the lectures, the case of M. G—, in the female ward No. 1. We generally, during that time, saw her sitting in a melancholy attitude, in the gallery, or on one of the seats in the airing court, her hands clasped, her head drooping and resting upon them. She would sit for nearly a whole day with her hands joined before her and her head drooping over them, as motionless as a statue. Her voice was scarcely audible, and tears interrupted her words. Her age, when first attacked, was about forty, and she was a person of excellent character, unmarried, and supported herself by needlework. Some religious scruples, and much anxiety concerning the circumstances of her relatives, who were among the number of those whose utmost efforts could scarcely maintain them in a decent poverty, combined to make her melancholy. Her period of life probably disposed her to it, and a sermon accidentally heard at that period powerfully affected her; so that from that time she reported that the uterine functions ceased. She then began to think herself an abandoned person, and the cause of distress to her family. She became violent, and the thought of self-destruction almost wholly occupied her mind. For more than two years after her admission to Hanwell these ideas generally prevailed, although with more or less force at different times, without any violence of conduct. Although often visited by affectionate relatives, and for a day or two consoled by such visits, the ideas would still return that she had ruined and disgraced them; that they were in prison, and could not come and see her; that they were suffering every kind of evil on her account; that she should see them cut to pieces. She could not, for a long time, be persuaded that we had not all a bad opinion of her; all our assurances to the contrary required to be daily repeated; and every day she put to us the same anxious interrogatories, as, "*Do you think I am not what I say?*" &c., wishing, apparently, to be convinced that she was wrong. In her physical state, everything indicated languor; a slow and feeble pulse, cold hands, a low voice, suppression of the uterine functions; but she did not become emaciated. Pain of the forehead, and sometimes severe hemicrania, was complained of. She entertained the painfully distinct view of her own altered state which is so often seen in melancholia; often saying, "*I am not what I used to be; I am altogether changed; nothing seems the same; I was once industrious, now I am idle; I was once neat in my appearance, now I care for nothing; I was once hopeful, now I have no hope.*" This case seemed long to be unaffected by medical treatment, either directed to the state of the head, or to the condition of the uterus. Leeches, baths, emmenagogues, tonics, purgatives, sedatives, alteratives, produced no sensible alteration. Exercise and employment seemed equally inefficacious. Her physical condition gradually improved, but the mental amendment was long delayed. At length, however, recovery began, and, excepting when affected with severe headach, to which she continues subject, you could not recognise in her the case I have described. Her countenance is animated, her manner cheerful, her dress neat, and she is restored to activity and industry, and all thoughts of suicide have long been banished from her mind. Her very amiable disposition, perhaps, secured to her even more than an ordinary share of kind attention, during the whole course of her malady, and this has appeared to be mainly instrumental in her amendment. A supposed unkind word, indicative of distrust, would long disturb her, and renew some of her apprehensions; and there are still days on which the idea that she must be taken to prison reverts to her mind: but, altogether, I consider that she is becoming quite well, and that, if she could be secured from the cares and difficulties that beset industrious poverty, she might go into the world again. Unfortunately, the only place in which such security is enjoyed, is a lunatic asylum. Our recovered patients leave us, rejoiced to be once more at liberty, and the moment the gate is closed upon them the troubles of the world gather so thickly round them, that, too often, the heart again sinks, and the mind again gives way.

In the instance of E. V—, a young woman whom you saw in the bazaar, appearances of recovery have been perceived much earlier. She became melancholic and disposed to suicide about a year ago. Fanatical preachers filled her mind with distrust of God's mercy, and she came to us in the deepest depression. Great debility existed, and its removal has been attended, step by step, by mental improvement, but still with those often recurring fits of delusion and sadness which always appear to be incidental to recovery, and often threaten to impede it.

There is a case, also, in female ward No. 4, which seems to be proceeding towards recovery, but very slowly, the subject

of it, H. E—, being sixty years of age. For some years, without any very obvious cause, she has been gloomy and desponding; nothing, she says, seems the same to her that it did. She is a very delicate, feeble person, and her spirits vary with her varying strength.

A more lamentable example of intense melancholia is that of E. B—, in female ward No. 9. I have carefully watched the progress of this case for five years, during which time, although a great variety of means have been tried, I must confess that nothing has seemed to have even a tendency to relieve her. She is now about fifty-five years of age, and, until very lately, she was of a somewhat stout frame. Her dark complexion, and dark hair and eyes, give additional expression to her melancholy representations of her state. She is said to have been about fourteen years insane, and to have inherited a disposition to the malady from her father. You will generally find her walking about the ward; she is always glad to be spoken to, and she describes her sufferings very clearly. Like many melancholic patients, she seldom or never utters an irrational sentence. There is no confusion of the intellect, only depression, but a depression which unfits for all social duties, and is productive of danger to the person affected, although seldom of danger to others. E. B— almost always complains of pain, and a sensation of burning at the back part of the head, and of uneasiness or pain in the epigastric and umbilical regions; and although she is seldom violent, she laments that she feels quarrelsome and spiteful, and describes herself as tormented with "horrid thoughts," meaning suggestions to destroy herself, to which she feels a frequent impulse, without any wish to give way to it. She once attempted to drown herself, twelve years ago. Her description of her morning sufferings is borne out by her countenance, and by her manner, and by her groans. Until the middle of the day she is restless and wretched, walks about with her arms crossed before her, beating her breast, desponding, crying, sometimes swearing. Despair seems to be excited in her, by observing that other patients get well, and that she does not. Looking about at the other patients, she often expresses a wish that she could be as happy, or as content as some of them are who are yet far more insane. Towards the afternoon, however, she usually improves, and towards night she is sometimes smiling and cheerful, and will now and then join in a dance with the other patients. But the poor woman says she lies awake in the night, dreading the wretched feelings which are sure to torment her in the morning. At one time I thought it possible that the food taken at different hours of the day might have some influence on this diurnal coming on and subsidence of the paroxysms, for which it is always so difficult to account; and the breakfast meal was directed to be nearly the same as the patient's usual dinner; but no benefit followed this change. At another time, still regarding this periodicity of the attack, the disulphate of quinine was given, but without the least advantage. Leeches and blisters to the occiput, the shower bath, warm bathing, various mercurial alteratives, the infusion of cascarilla with ammonia, and small doses of the acetate of morphia, have all at different times been tried without the smallest appearance of success. Before admission, the patient had been cupped, and subjected to nearly every variety of treatment, without any alleviation of her sufferings. Occasionally her tongue becomes thickly coated, and at such times her mental distress is evidently increased; this state is generally somewhat relieved by a few doses of the pilula hydrargyri and pulvis rhei. The appearance of the patient has lately undergone a considerable change for the worse; she is becoming very thin, and complains more constantly of severe abdominal pain, of which no manifest explanation can be found. It has been necessary to give her opiates daily, and in large doses; and she derives relief for some hours from the tinctura opii, but only if given in a dose of five or six drachms.

In this example of melancholia no delusions have been observed; but in the majority of cases the melancholy, first, perhaps, occasioned by some cause of continued grief, soon becomes associated with some delusion; and one of the most frequent, at least in classes above the poorest, is a religious delusion. I have no doubt that every practitioner who devotes his particular attention to insanity, has at all times numerous cases of this kind, especially, but not exclusively, among his female patients. The patients accuse themselves of unpardonable sin—of the sin against the Holy Ghost which is never pardoned, and of which they imagine themselves to have an exact idea. This dismal delusion perhaps comes on after some disappointment of the affections, or after the loss of a beloved relative; and religion, which should be a source of peace, and hope, and joy, becomes perverted into a source

of hourly torment. The Great Author of all good is regarded as an unappeasable tyrant, and the patient thinks herself singled out from all the world for condign punishment. Nor are men, persons of education, or even clergymen, exempt from the visitation of this malady; and all the activity of the mind and all the stores of sacred reading are employed to prove the reality of their views. Paroxysms of violent agitation and dread occur; they walk about rapidly, wring their hands, talk in a loud and crying voice, and refuse to be consoled. The next step in these cases seems always to be towards suicide. It cannot, they argue, increase their guilt; they ought to die; if not for cowardice, they would have died long ago; they must die some dreadful death. I believe that, in the greater number of such cases,—cases, I mean, in which this melancholy condition comes on after some mental shock, without any obvious bodily cause,—it will be found that there is an hereditary predisposition to mental disorder. Although the appearance of such cases is very unpromising, the patients will recover from such attacks, and, although liable to relapses, remain well for many years. Less hope is held out where the delusions are many and frequently change; fits of violent irritation commonly then ensue, and the mind passes through various stages of imbecility to dementia.

A gentleman of amiable and honourable character, after suffering intense anxiety, for a few days only, respecting one of his family, became a prey to despondency, thought that he had been a mere hypocrite all his life, and had defrauded everybody: he then imagined that several of his friends were imprisoned in the house, and some of them murdered. Every day brought some new delusion, and the progress of the malady has proved most unfavourable. A female servant, aged thirty-five, of melancholic aspect, with black hair and a sallow complexion, lost two of her relatives nearly at the same time. She continued much depressed for some weeks, and then partook of the sacrament, and read several religious works. From the time of receiving the sacrament, the sacred elements seemed always to be before her, and Christ present, whom others were reviling. These thoughts, and others less delicate, she described as being forced into her side, in the region of the heart; and she felt as if it required some words to be uttered there, or to proceed from her side, to relieve her. In other respects she was quite rational. She suffered from occasional oppression of the head, and in the situation of the heart; the uterine functions were natural; the state of the bowels was not disturbed; the pulse was eighty-eight and feeble; the appetite pretty good. No amendment took place in this case so long as it was under my observation.

Cases of melancholia being so frequently met with about the period of the cessation of the catamenia, it is difficult to avoid concluding that the cerebral disturbance is generally connected with some morbid state of the uterus; and at least some expectation seems naturally to arise that active and varied treatment may often effect a cure—as leeches, the hip-bath, mercurial alteratives, blisters to the sacrum, iodine in various forms, or cantharides. Where distinct uterine irritation exists, there is no doubt that these means, variously combined, are very useful. Examinations after death, in fatal cases, have, however, appeared to me to throw little light upon the causes of melancholia in such cases, or, I am sorry to add, on the causes of any of the forms of insanity. A female patient, M. G—, died in the asylum in 1840; she had been in a state of melancholia about six years, and died at the age of forty-six. In the ten months preceding her death, I never heard her speak; but at length she became suddenly maniacal, and shortly afterward died, apparently sinking in consequence of the irritation produced by a blister. No appearance of disease was detected in the brain; the whole body seemed healthy, excepting that there was reason to think the fluids were especially irritating and poisonous; there was also rather more serum than natural in the pericardium; and a large cyst, containing limpid fluid, with smaller cysts appended to it, was attached to one of the ovaries. Another patient, J. S—, 1841, a labourer's wife, forty-five years of age, had been four months in the asylum, and almost always moaning and crying. Her malady had commenced six months before admission. Being extremely weak, a little wine was administered; fever supervened, and she died. The uterus and ovaries were in a natural state; there was no effusion or appearance of inflammation in the brain or its membranes; the grey substance of the anterior lobes was rather dark-coloured; but the frontal bone and lateral portions of the cranium were very much thicker than natural; part of the frontal bone at the side being half an inch thick; the arterial fossæ were unusually deep.

Cases of melancholia are met with in women at the period

of the cessation of the catamenia, and after several menorrhagic attacks, in which there is a constant sense of weight in the situation of the colon, with pain apparently in the sigmoid flexure, and occasional hæmorrhage from the bowels. There is, in such cases, severe mental despondency, an inability to decide upon anything, and a loss of all hope, and joy, and religious confidence. Spasms of the lower extremities, and hysterical lameness, sometimes become complicated with this state. In some such cases the colon is probably displaced; although in the few examples of this displacement observed at Hanwell, the mental symptoms have not been uniform.

Remembering that the same invasion of despondency, lasting for a year or two, is not at all uncommon in men, as well as women, when between forty and fifty years of age, this state would seem more probably to depend upon some general alteration in the circulation, or some climacteric change in the brain itself, at that time of life when both physical and mental commotion, in some shape or other, seem peculiarly incidental to the human constitution. It is not easy to give a satisfactory explanation of the extreme pain referred by several melancholic patients to the occiput and sides of the head, or of the morning exacerbation. There may possibly be a periodically recurrent state of fullness of the cerebral sinuses, or the symptoms may arise from certain sympathies of the brain with the stomach, liver, uterus, or other organs; but such explanations are purely conjectural. In one severe case of religious despondency, in a young lady, the days were passed in misery, but during sleep the dreams were uniformly pleasing and happy; the return of the melancholy thoughts on awaking being described as peculiarly dreadful. It seemed, in this case, as if different portions of the brain were active in the states of waking and sleeping.

It certainly appears as if a loss of energy of some part of the brain often occurred in both men and women, between forty and fifty years of age; and when this first takes place, a disposition to suicide seems frequently to supervene; and although this perhaps disappears, the patient does not recover his natural or ordinary vivacity. Now it is that the wealthy tradesman begins perversely to pay exclusive attention to the bad accounts in his books, and conceives that ruin is impending. Next, he imagines that the errors of his youth are heaping up punishment upon him; that his frame is wasting, that his bones are decaying, and his life is limited to the actual day. Every morning he comes down with melancholy face, and answers in low tones, with doleful words, the customary inquiries concerning his health; and every day he revives to read his newspaper, to take his dinner, and to join in the cheerful conversation of the evening. Now also, it is, that the man of literary and laborious habits, whose whole life has been a life of well-directed industry, animated by benevolence, begins to fancy that his whole life has been but a successful performance and a cheat; that all his virtues have been fictitious; that all his enormous deception will appear in *The Times* of to-morrow; and that he is a ruined and degraded man. To all general arguments he opposes the speciality of his case. "What you say," he replies, "is very just; I should say it myself in the case of another person; but my case is peculiar. Wait until to-morrow, and you will find that all is exposed to the public: all will be known."

I have witnessed many agitating scenes, in houses in which insanity has seized on some one member of the family; but no spectacle more afflicting than that of a man of education, and of irreproachable life and character, tormented with acute melancholy. Every event of past years, every admonition received in youth, or sermon heard in after life, every remark overheard, becomes an instrument wherewith "melancholy, night and day, provokes her own eternal wound." The voice, the manner, the impassioned language, all express the intensity of despair. There are moments of desperation, also, in which all horrible feelings rush upon the patients so suddenly, that they cannot divest themselves of the idea of being possessed by an evil spirit; and they then imagine that they have exhortations to kill themselves, or to do some great wickedness. The consciousness and the reason hold out, perhaps, long unshaken, and even render the distress of the patients greater. They often say they should suffer less if they were actually mad. They feel a continual impulse to actions which they wish to avoid, and are conscious of a danger from which they cannot secure themselves by their own efforts.

Although younger men and younger women than those above alluded to are not exempt from melancholia, the malady in them has a closer relationship to dementia, and often passes into it. P. M—, in male ward No. 7, is an example, among

many, of this form of affection: he became indolent, indifferent to everything, apathetic, and almost left off speaking; he smiles when spoken to and called by his name, and is pleased when his relatives visit him. A. B—, a dark, foreign-looking girl, in ward No. 12, presents another example of a perfectly apathetic state, tending to pure dementia, supervening on what was considered melancholia. In some of these cases it is questionable if there is any real melancholy in the case: but in other classes of society, more cultivated, painful examples exist in young persons, most frequently in young women, who construe every natural feeling into a sinful desire, imagine themselves disqualified for every duty and every pleasure, and wish for death without hoping that even death will bring them relief. "I care for nothing," writes one of these victims; "in the middle of a bright world I feel like one dead, or fast asleep. My life seems a dead blank; neither past nor future have I any comfort in. I feel that my understanding is impaired, as it always is in persons of my feelings. I have lost all sense of the beautiful. The animal alone remains in me;"—with many more expressions of sorrow and distress. Something similar is met with in conscientious young men, of strong passions; and often in young clergymen: they dread the loss of mental energy and the power of being useful. Limited circumstances compel them to celibacy, and in the struggle between the feelings and the conscience reason is sometimes overthrown. In other cases, no self-accusation, no temptation, no struggle, and no grief, can be discovered. In every one of these cases, I would caution you, however fair the appearances, to be on your guard against the occurrence of suicide. A disposition to it seems almost invariably to ensue. No real grief may exist, but life is unendurable.

But melancholia has often been the result of real affliction. All who have suffered from an overpowering sorrow may readily understand how one idea, one image, may become fixed in the mind, exclude every other idea, and reign alone to the end of life. The effect may seldom be so permanent, but the look, the figure, the words of the person for whose loss we mourn, are dwelt upon for days, or for weeks, or for months: we wish only to dwell on these painful recollections; we are even dissatisfied with ourselves when we find that common interruptions have broken in upon them. We grieve, but we wish only to grieve. Happily, in a healthy mind, and in the ordinary visitations to which all are exposed, the power of receiving new and various impressions still remains: these at first obtain but a small share of our attention; but every day they silently acquire more power, and divide our thoughts more successfully with the images of our affliction, until, by the gradual operation of time, we attend again to all the duties of common life, and the memory of our sorrow is but occasionally revived. Yet, when the shock has been greater, or the mind is weaker, the power of receiving new impressions is lost, even entirely. One mournful idea then takes possession of the mind, and keeps it for ever; or new and strange delusions, unconnected with the sorrow, and shutting out all subsequent allusion to it, take entire possession of the understanding. Not long ago I saw a lady, between forty and fifty years of age, who had lost her only son, who was her idol, by a sudden and most unexpected death. He dropped down dead in the midst of apparent health. The shock stunned and overwhelmed the unfortunate parent, and, for a time, grief alone occupied her. In a few weeks her state became that of deep melancholia, in which she never in any way alluded to her cruel bereavement, but was ever reproaching herself as sinful, unworthy to live, and deserving of eternal condemnation. She became insensible to all ordinary occurrences and affections; indifferent to her family, inactive, and silent; and attempted suicide.

The termination of cases of melancholia in dementia is, I have said, very common. On looking over our general register at Hanwell, this circumstance is continually illustrated; a great number of the patients now surviving, and who were marked in the register, on admission, as affected with melancholy, being now in that state of entire prostration of the intellectual faculties to which we give the name of dementia. Of those who have died, several became phthisical before death. In some, death has seemed to be occasioned by disease of the heart. Others die without signs of specific disease; the torpor of the mind and body increases, becomes excessive; there ensue obstinate constipation, inability to eat, and almost to speak; or entire silence, coldness of the surface and extremities, and death as by a mere extinction of the vital functions. If they linger very long, scorbutus may appear, a disease rare in modern asylums; or gangrene of the extremities, also now become uncommon, in consequence of the greater care taken of the health of the insane.

A COURSE OF FIVE LECTURES ON FRACTURES AND DISLOCATIONS:

EXPLAINING
NEW MODES OF TREATMENT, FOUNDED ON ANATOMY
AND PHYSIOLOGY, AND THE LAWS
OF MECHANICS.

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UNITED STATES,

Delivered at the Royal Westminster Ophthalmic Hospital,
Charing Cross, London, November, 1845.

Illustrated by Engravings.

Division of the muscles of the thigh into classes—Mechanical actions of those muscles in fractures of the bone—Usual violation of the laws of mechanics in the treatment of such fractures—Necessary attention to fixed points in applying force to reduce luxations.

THE brief course of Lectures, of which the present forms the first, will contain a summary of my experience during twenty-six years of professional labour, the last five of which have been spent in a situation peculiarly favourable for the observation of fractures and dislocations, my attention having been particularly turned to the subject while designing, testing, and perfecting, the apparatus which is now offered to the notice of the profession for treating those injuries. Numerous opportunities have occurred to me for observation, at different hospitals in America, London, and Paris; but it is not without feelings of due respect to the opinions and practices of others, for whom I entertain the highest regard, that I attempt to advance principles and to urge treatment which is at variance with those in common use. Still it appears to me that the cause of science demands the step to be taken. Therefore I comply with the kindly-expressed wish of those who have procured for me the opportunity of delivering these discourses under the present roof, trusting that the views which I advocate will be examined with care and candour, while I cheerfully say, that whatever I recommend that will not stand the test of experience on the part of others, let it be rejected. I have come to this country for the purpose of obtaining and communicating information in matters of surgery. During my sojourn in Europe, I have visited the whole of the hospitals in Paris, as well as those of London, and in the course of two months' attendance at the former, I have performed operations in some of the wards, which were planned wholly in accordance with the principles which I am now about to develop, happily with a success which had not attended the efforts previously made in the treatment of the injuries experienced. Having now completed the round of my observations in England, I am about to retire to my native country, the delivery of the present brief course being the only object which has induced me to defer, until another voyage of the Boston steamer, my departure from this metropolis, after having derived very great pleasure and advantage from my visit.

In calling your attention to that branch of our profession which is to form the subject of our present course, I do so under the firm conviction that much of the practice of the present day is characterized by a very unsettled mode of treating fractures and luxations, and is not consistent with the laws of mechanics; or, in other words, that those laws are not so applied in practice as always to be made conformable with sound and well-settled principles in surgery. To show this, therefore, will be the object of the present lecture, after which it is my intention to illustrate the manner in which mechanical proceedings require to be conducted, in order to make them accord with those principles; and in doing so, I must once more express my obligations to the surgeon of this Hospital, Mr. GUTHRIE, and the Committee of the Institution, for their generous permission to me to meet you assembled in this hall, before finally quitting this father-land for the western world which is my home.

I shall call your attention, first, to some of the effects which muscular contraction produces on a fractured bone as the result of the laws of mechanics; and, to save time, I will confine my remarks to fractures of the thigh, trusting that if these be well understood, their comprehension will be quite sufficient to enable us to apply those principles to practice in other fractures.

It will not, however, be thought necessary, I trust, that I should go into a particular anatomical description of the femur. You are already too well acquainted with the convexity of its shaft, its condyles, trochanters, oblique neck and round head, to need descriptions of them. But respecting the *myography* of the thigh, although you may be well acquainted with that also, still I beg you to allow me to call your attention particularly to those agents of mechanical action; because, on their attachments, their locality, and the direction of their fibres, depends the relative position which the two portions of a fractured bone occupy; and in order to make plain my views on this subject, let us divide the muscles of the thigh into three classes.

First, those which pass lengthwise over the femur, and yet are not attached to it at either extremity.

Secondly, those whose fibres are attached to it at one end, while the other is united to the pelvis above.

Thirdly, those whose fibres are attached to the femur by one extremity, while the other descends, to be united to the tibia or fibula below.

I will call your attention to each particular class. Of the first, those which pass over the femur are, the rectus-femoris, the sartorius, the gracilis, the semi-tendinous, and the semi-membranous, the long head of the biceps, and the flexor cruris; and among these may also be classed (from its mechanical action on the limb when broken) the tensor vaginæ femoris. These seven, when the bone is broken, only tend to shorten the limb by approximating the two extremities of the bone; and, in a fracture of the shaft of the bone, do not, in any measure, operate directly to throw the fractured portions out of a normal line. For such an effect as that we must look to other agents than the muscles just named, because it is a well-settled principle in surgery, not less than in physiology, that a muscle acts only in a right line between the points of its attachment.

Of the second class, or those having their attachments to the femur at one end and to the pelvis at the other, there are, the pyriformis, the superior and inferior gemelli, the internal and external obturators, the three glutei (maximus, medius, and minimus,) the quadratus femoris, the three adductors, (brevis, longus, and magnus,) the psoas magnus, and the iliacus internus and pectineus. Of these, let it be remembered, all have their attachments to the femur at and above the point where the gluteus maximus is inserted, excepting the adductor longus, and about two thirds of the adductor magnus, the fibres of this last descending quite to the inner condyle.

Of the third class, or those diverging from the femur to the knee, there are the two vasti, externus and internus; and between them, on the anterior surface of the bone, lies the crureus, while on its posterior surface are attached the two heads of the gastrocnemii, and the short head of the biceps flexor cruris. Of these let it also be remembered, that they have the whole of their attachments to the femur, below the insertion of the gluteus maximus, excepting a portion of the two vasti, and a portion, also, of the crureus, whose fibres are attached the entire length of the shaft of the bone. The fibres of these muscles diverge from the femur to the knee, as the fibres of the second class do from the femur to the pelvis.

We will now examine some of the effects which the mechanical action of this arrangement of muscles would be likely to have in fractures of the femur; for, be it remembered, that the bone which before served as a connecting link for the action of all the muscles, (preserving, as it were, a just balance between them all,) now no longer serves as the centre of that harmonious action; but a new centre, and a new combination of actions, form around each broken portion, as the result of this lesion of bone.

We will now select a case by which to illustrate our views. We will suppose a fracture of the femur, between the trochanter-minor and the insertion of the gluteus maximus muscle, which, as you are well aware, would be in the upper third of the bone. Now what generally attracts our attention in a fracture at this point? It is, the distorted figure of the limb, the peculiarly distinct angle at the point of injury, the unusual convexity at the upper and front part of the thigh. And why is this the form peculiar to this injury? excepting only those cases where the force applied to produce it has evidently interfered with the natural action of some of the muscles. Is it not from the balance of power on the side of the psoas-magnus, iliacus-internus and pectineus muscles, all having their attachments, as we have seen, to the upper portion of bone, and also situated to act upon it anteriorly? I ask, is it not from the balance of power which these possess over those attached to the same portion posteriorly, which so casts the upper portion forward, while the fractured end of the lower

portion is also carried forward with it from its attachments to the two vasti and crureus muscles, while the gluteus-maximus serves as a fulcrum to the lower portion in carrying the knee backwards, while the other extremity is thrown forwards by the attachments just named, and by the force which acts on the upper portion? Here, then, arises the angle which we always see in fractures at this point; here, too, the inclination of the lower always to separate from the upper portion or rising end of the bone, and it is only prevented to a much greater extent, as we may fairly presume, by its attachments anteriorly to the vasti and crureus muscles. We also see, on the lower portion, a balance of muscular power on the posterior side, always inclining it backwards, as that on the upper always inclines that portion forwards, this arising obviously from the more favourable position which the two heads of the gastrocnemii and the short head of the biceps flexor cruris occupy for acting on this portion of the bone than their antagonists, the two vasti and crureus muscles, now that its shaft is severed; but more than this, that balance of muscular power must evidently be increased in both, as we depart from that angle of the limb which places the fractured portions nearest a normal line.

We here see, then, the mechanical effect which the muscles have on a fracture of the thigh at the point indicated. Let us next examine whether the laws of mechanics have not too often been violated or neglected in treating it; and for the sake of brevity and clearness, I will first state that there are but two positions generally adopted by the surgeons of the present day, in the treatment of fractures of the inferior extremities—viz., the straight and the bent position of the limb, the patient lying on his back. Nor are there but three distinct and leading methods adopted, at the present day, for the application of mechanical principles to this department of surgery; yet there are a thousand ingenious contrivances through which these three are applied; I refer to the double-inclined plane, to the straight splint of Desault, and to a combination of these two; all others which I have seen are mere modifications of the one or the other of these, and do not, in any measure, escape the general principles on which their originals were based, so that as these are found to be right or wrong, so must the others be also—a particular description of them will not therefore be needed—indeed, our time will not allow it. And you will doubtless examine many of them, if you have not already done so, and decide for yourselves, whether I have correctly stated—and it is quite sufficient on the present occasion to call your attention to the fact. Let us now look at some of the effects which these different positions have on this fracture; and for the sake of rendering both more clear, we will at the same time consider some of the mechanical effects of the three kinds of apparatus just alluded to. But with regard to position. It must be apparent, from what has already been shown, that to place the limb in a line with the body, inclines the fractured extremities asunder to the utmost limit which the vasti and crureus muscles will allow, from their attachments to the upper surface of the bone near the point of fracture—and much in proportion to the extent of lesion between the muscle and the bone will their tendency to separate be increased; more especially as the muscular contractions are strong or weak in the limb, will the two fractured ends be drawn asunder. Any force, therefore, which can overcome this separation, must be more than equal to all the muscular contractions which produce it; this force must be applied, too, exterior to the limb. Is it not plain, therefore, that we must apply force antero-posteriorly to overcome this separation of the fractured ends, which would be entirely uncalled for in a different position of the limb? Would it not require an amount, too, which is not always quietly to be borne? And more than this, should there be strong muscular contractions in the limb, what would be the effect of such an amount of force as to preserve co-aptation on the circulation of the limb, especially if this arose from an irritable system, with feeble constitution? Would it not also require a greater amount of extending and counter-extending force to restore the normal length of the bone, than if it were first placed so as to relax the flexor muscles of the limb? And would not the muscular tissue be more likely to be wounded and irritated by the fractured extremities, when the position is such as to render co-aptation difficult than in one where it is rendered comparatively easy? This is the position in which the straight splint of Desault is always to be applied, and in all its modified forms; and it is on account, mainly, of the extension and counter-extension to be obtained by it, that it is employed—a principle sound in theory, and important in practice, when correctly applied, but in this instance, by the very mode in which it is obtained, another one, of equal or

greater importance, is entirely sacrificed—viz., that position which inclines the fractured portions nearest a normal line, and most effectually relaxes the muscles of the limb.

It is conceived to be a sound rule in this department of surgery, so to apply force as that the smallest amount capable of accomplishing the end shall be employed; it is believed the reasons for this are too plain and obvious to need comment.

We will, however, now consider the application of the double inclined plane, and here I will observe that apparatus seems to have been arranged more for the purpose of securing such a position as the surgeon shall choose than for any other object; and so far as position is concerned, it answers such intention quite well. Here we can not only relax the muscles which pass over the thigh, but we can also relax the gastrocnemii, and short head of the biceps; we can also so flex the limb on it, as to incline the lower portion of bone nearest a normal line with the upper, and can also approach nearest to co-aptation, of which the two portions are capable by the action of the muscles. Still, unless the weight of the body is sufficient to answer all the purposes of extension and counter-extension, we shall fail to preserve co-aptation, although we may have once effected it. And here allow me to show, the importance of extension and counter-extension in this position of the limb, not more for the purpose of co-aptation, than for relieving the tendency of the fractured extremities to separate. Allow me to fix your attention for a moment on the fibres of the crureus muscle attached the whole length of the upper surface of the bone, and also to the two vasti, attached, in like manner, on each side of it, and these descending to the knee, to be united at the patella. What, I ask, would be the effect of traction, applied in the exact line of the limb, on the depressed end of the fracture, through the medium of these fibres of which we are speaking? Would it not be, to elevate the depressed portion to a line with the upper, and thus perfect co-aptation? Most certainly it would. Here, then, is where the double inclined plane, with all its modifications, is defective. But some may say, perhaps, there are many apparatus in use where extension and counter-extension may be applied with the double-inclined plane. I admit it; but not so (pardon the assertion) as that the points of traction operate in the exact line of the shaft of the bone. And here lies the fault, as I humbly conceive, in the multitude of ingenious contrivances for treating fractures; they all make the perinæum one point of traction, and the foot or the leg the other. It must be plain, therefore, to act on a limb laid on the double-inclined plane with any force from these points, that force is necessarily so applied as that more of it is spent at right angles with the bone than is exerted in the line of the limb operating favourably to produce extension and counter-extension; and furthermore, all that is thus spent there, being sufficient to produce the necessary extension and counter-extension, tends to throw the fractured portions out of a normal line; and we have an amount, too, which, if rightly applied, would be altogether beyond the amount required for the object in view. And it is, moreover, applied in a manner which would not only be likely to give pain at the knee, but as the ligaments become elongated by continued extension, they would very likely deceive the surgeon in the length of the limb. But we will not extend our remarks on this point. We will next consider some of the effects of these laws on a fracture between the insertion of the gluteus maximus and the knee. And what do we observe in this that we did not in the other case? The chief difference which we notice is the greater mobility between the upper and lower portions of the thigh; that peculiar angle and convexity of the thigh does not appear in this; and although there may be a greater deformity in the limb, still that deformity is characterized by other marks of derangement; as, for instance, the lower portion may appear as if thrown off from the upper, or if an angle appear, it may be either laterally or posteriorly; the inferior portion, however, being always found to lie at the back of the superior. And why do we find this difference in two fractures so near together and in the same bone? Is not the absence of an agent like that of the gluteus maximus in the lower portion, to serve as a fulcrum for those muscles which throw the fractured end forwards, and the knee consequently backwards, the chief cause of this difference? To me this appears plainly to be the cause. In the first case, the fracture is more thickly covered with muscle than in this; the muscles which attach to the fractured extremity of the lower portion, and are united to the pelvis, also depart from the bone nearer to a right angle than in this; still these could not make the differences which we see, while the other might, and probably does, with reference to position. The same remarks

which we applied to the first case apply to this also; it cannot be necessary, therefore, to repeat them. Our remarks, too, in reference to the application of mechanical principles through the various apparatus, apply equally in this as in the other case; nor will it be necessary to repeat them. We shall call your attention, however, to but one more form of fracture, and that, a fracture at the neck of the thigh-bone. And to avoid all physiological questions which might arise,—since it is only mechanical principles which are to be applied to surgery that I am attempting to discuss,—I will confine my remarks to a fracture out of the capsula ligament.

In a fracture at the neck of the bone, what do we observe? The limbs being at rest, and the patient on his back, the first thing which attracts the attention of the surgeon is, that one limb is shorter by some two or three inches than the one on the opposite side; the foot is also turned outwards, and perhaps the trochanter major may also appear somewhat prominent. These are the chief marks of difference which we notice on looking at the two limbs. And now, why so marked a difference between this and the other two cases? A greater difference in the fracture of any two limbs could not well appear; and it is the result merely of a lesion at this part of the bone rather than at another, which marks all the difference which we see. Is it not that by this fracture another and a different mechanical effect is allowed the muscles acting on the two portions of bone? May we not, therefore, expect that a different application of mechanical means would be required, in so marked a difference of the limb, to overcome this effect, and to restore it to its normal length and figure? Most certainly we may. In this instance the muscles of the first and second class only are concerned in producing the derangement in the line of the bone, the lower portion (which now includes the whole of the shaft and the trochanters) is thrown directly upwards, and the neck only is thrown from a normal line, and is also shortened, as one of the necessary effects of these mechanical laws, by the action of the muscles attached to the trochanter major and the pelvis. Now it must be manifest that we can more co-opt a fracture at the neck of the bone, without restoring it to its normal length, than we can one in the shaft without giving that its due length; and any apparatus which fails to do this, fails to fulfil all the indications which correct surgery requires in the case. I beg to call your attention, for a moment, to a particular arrangement between the pelvis and head of the bone, for the purpose of calling your attention to it at another time, and that is, that the head of the bone serves as a pivot on which, at the pelvis, turns all the movements of the body with the lower limbs, even the smallest motion which is made between them gives motion at this point. Now, from what has already been shown, I presume I shall be anticipated in my remarks in reference to position, for it must be apparent that the straight position, or one nearly allied to it, must be the one which the mechanical effect of which we have spoken requires that the means for restoring the normal length and figure may be correctly applied to the limb; and here the straight splint of Desault would seem to be well adapted. But how would it be with the neck?—what in that apparatus is to restore that to its normal length? Unfortunately, nothing; but, on the contrary, much which is calculated to shorten it still more. We will endeavour to show this fact. One point of traction is to operate from the perinaeum, by a band passed upward and outward on the anterior and posterior sides of the pelvis, to be made fast near the upper end of a broad splint lying on the outside of the limb; the other point of traction is to be at the foot, and is secured to the other end of the splint. Now, is it not plain, that just in proportion as we apply force to approximate the foot to the lower end of the splint, in order to lengthen the limb, that a portion of that force must operate at the top of the splint, to incline it towards the perinaeum, that being the point of resistance from the body which connects it with the upper end of the splint, by means of the band, and which is out of the line of the two extreme points to which force is applied? And, therefore, must not the upper surface of the splint operate to depress the hip, just in proportion to the angle at which the belt is made to operate from the splint? Hence, if we regard the length of the neck as of the least importance, or the wounding and irritating the muscles by the fractured extremities, this application of the splint cannot be right in surgery. Indeed, no one, under either arrangement which have been seen, tends to give length to the neck of the bone; on this account they are all alike defective; yet all do not actually depress the hip, but they may, and most of them do require, a position unsuited to the condition of the limb; and from two or more wrongs it is often

difficult to make a selection. We will not, however, detain you longer on the subject of fractures, but will proceed to examine into some of the modes in which mechanical principles are applied for reducing luxations.

In these, the first and great object which we generally have in view, is to overcome any resistance which the muscles opposing reduction may offer to it; that resistance is generally from the power which the muscles possess of approximating their points of attachment, when the head of the bone is dislodged from its articulating cavity. To overcome this resistance, extension and counter-extension have very generally, and very necessarily, been employed; there have, however, been various expedients resorted to for accomplishing this end, only two of which remain in general use at the present day: these are, physical force, by means of assistants, and mechanical, by the use of pulleys; both alike are employed for the purpose of making traction on the luxated limb. I am aware that the screw has also been employed, and at various periods of the world; but the objections to it are so grave and so numerous, that it has never been received into general favour; I may therefore leave that out of the account. As it regards the two methods remaining in use, of their effect, mechanically, on the luxated limb, they are precisely the same; for I cannot conceive a difference, where a given amount of force is employed, whether that force is applied through the pulleys, or through assistants, provided both are equally steady in their application, and the points of traction secured alike in both. What I would be understood to say is, that the mechanical operation of the two methods are alike on the luxated limb for all the purposes of reduction; one may command more power, and the other may be more gentle in its operations, still on these points I can see no difference between them, both being, as they may be, of equal power, or one may be more steady in its operation, and the other more ready of application; yet this does not affect the main principle, that both act mechanically alike on the limb, so that in discussing the principles of the one we also discuss those of the other. And what I would first call your attention to is, that they both operate from fixed points, over which the surgeon can have no control. Thus, if the line of extension happens to be the correct one, he does not desire it changed; but if it happens to be incorrect, the force must first be relaxed before he can change it. It is the effect of being thus confined to these fixed points which I wish to consider.

We will suppose a luxated femur, the head of the bone in the iliac fossa. The appearances of the limb we will not stop to notice; you are too familiar with them to render it necessary. One condition, however, which may exist, I beg leave to notice. In consequence of the oblique position which the head and neck occupy to the shaft of the bone, any force applied to the head from the other end of the shaft, and in a line with it, necessarily forces the head in some degree (while passing through muscle) to follow the obliquity of the neck, and not the line of the shaft, thus making an oblique track from the cotyloid cavity.

Suppose we apply the pulleys to reduce this luxated femur; the head and neck being forced obliquely into the muscular tissue, as not unfrequently happens; we have power constantly and steadily operating from fixed points, and before the direction of that force can be changed, we must relax it. Would not the head and neck, from their oblique position to the shaft, (and especially since the head is larger than the neck,) be likely to operate like a hook around a portion of muscle which lies directly below them; and before they could be disengaged, (the force operating in one line,) be likely to tear through the muscle or break the bone? The case is not chimerical; it has happened. But suppose, instead of the extending point being fixed, as in the case of the pulleys, it is left free, and subject to the command of the surgeon, while the force is steadily and constantly applied, would not the surgeon be much more likely to disengage the head by giving free motion to the limb, than he would by applying that force in one given line? Here, then, I conceive, is another error in the mode of applying mechanical principles to surgery.

I will detain you with but one more illustration. Suppose the case where the head of the bone is driven into the soft parts, and the neck is closely embraced by them,—as, for instance, in some cases of the head of the os humeri,—we must first disengage the head before we can even hope to succeed in reduction; suppose, also, we apply the pulleys; force is steadily and long continued, but owing to the firmness with which the neck is embraced, and the strength with which the muscles contract, it is not relieved from its confinement. Is it not plain, therefore, that should the extending point now be subject to the will of the surgeon to move at pleasure, while

the force is yet constant and steady, to give free motion to the limb would greatly aid him in reduction, and that, too, without increasing the power? These are all grave questions, which it is the duty of every surgeon to answer satisfactorily in his own mind.

Thus I have endeavoured to point out clearly wherein the laws of mechanics are violated in this every-day business of the surgeon, and in doing so, I beg you to consider that it has not been with joy, but with sorrow, that I have attempted it; for these evils in practice pervade the entire civilized world, and I can only rejoice that, peradventure, I may be the humble means of supplying the remedy. It was the conviction within me of the existence of the evils of which we have been speaking, that first prompted me to make the attempt.

At our next meeting, I will call your attention to the mechanical arrangement of the instrument, and commence showing its application to the various luxations and fractures.

ACCOUNT OF THE YELLOW FEVER ON BOARD THE "VOLAGE."

By RICHARD BIRTWHISTLE, Esq., Fellow of the Royal College of Surgeons of England, and Surgeon, Royal Navy.

THE following account of the yellow fever, as it prevailed on board of H. M. S. "Volage," may not be uninteresting to the readers of THE LANCET.

Her Majesty's Ship "Volage" was commissioned at Chatham, on the 2nd of August, 1841, and sailed for the West Indies on the 2nd of January, 1842, calling on her way at Madeira and Bermuda, and remaining some time at the latter place to refit. She anchored at Port Royal, Jamaica, on the 3rd of March, and remained there until the 26th of the following month; she then sailed for Santa Martha and Carthagena, on the coast of New Grenada, and returned to Port Royal on the 12th of May. On the 19th she again took her departure for Chagres, which she reached on the 23rd, and where she stopped eight days, revisiting afterwards Carthagena and Santa Martha. This cruise occupied nearly a month, during which the weather was exceedingly sultry and oppressive, and there were frequent heavy showers, with occasional thunder and lightning, the thermometer ranging from 76° to 87° , and its average height being 80° . I have thought it necessary to be thus particular as to her movements, in order that the position of the vessel may be known when the disease broke out.

In the months of March, April, and May, a few cases of fever occurred which were of a mild character, and yielded readily to the customary remedies. These, however, proved the precursors of an alarming outbreak of the yellow fever, which commenced on the 18th of May, and continued to spread, at first slowly, but afterwards rapidly and extensively, amongst the officers and ship's company.

Two cases having terminated fatally with yellow suffusion and black vomit, and having, on the 25th of June, (at Port Royal,) seventeen cases on the sick list, exclusive of four at sick quarters, I considered it incumbent on me to represent the same, by letter, to Captain Sir William Dickson, Bart., by whom it was forwarded to Commodore the Hon. H. D. Byng, and to state that in my opinion an immediate change to a cooler climate was not only advisable, for the recovery of those already seized, but absolutely necessary to arrest its further progress; on the receipt of which, he gave us orders to sail on the following morning for Halifax, Nova Scotia, proceeding *via* the Florida Channel.

Although the sea air, conjoined with the exhilaration of spirits arising from the knowledge of our going to a healthy place, occasioned a marked amendment amongst those cases which occurred before our departure from Jamaica, yet the disease advanced with increased force; and, contrary, I believe, to all experience, (excepting only in two instances, which happened to H. M. S. "Fort" and "Pilot,") numerous fresh cases were added daily to the sick-list, and continued to be so even for some time after our arrival at Halifax, and did not completely cease until "all hands" were landed on Navy Island. After maturely reflecting on the origin, progress, and termination of this dreadful malady in the "Volage," and weighing well everything which could in any way tend to produce or aggravate it, I must confess that it is difficult to come to a perfectly satisfactory conclusion; but it is, I think, evident that the primary cause was our lengthened stay at Chagres, Carthagena, and Santa Martha, where the fever first seriously presented itself, and where all the sources of malaria are most abundant; and that the manner in which it subsequently raged amongst the crew, first attacking the officers and ser-

vants residing in the steerage and after-part of the vessel, and thence proceeding to the adjoining mess of the marines, only one of whom escaped, and afterwards, forwards to the seamen, clearly indicate that in the vicinity of the pump-well there was some fatal miasma arising, which could not be, and was not removed until the thorough cleaning, drying, whitewashing, and fumigating, which she received at Halifax, all the stores and tanks being taken out for the purpose, and the holds being kept empty for nearly a fortnight. I had the gratification to find that the removal to the shore, and cutting off, for a time, all communication with the vessel, proved a most effectual remedy, inasmuch as from that period I had not a single new case, and the sick regained their strength in a rapid and surprising manner. The royal artillery lent us their tents, and the accommodations which they afforded were ample and excellent; the men seemed to enjoy the novelty of the scene, and the numerous comforts which surrounded them. I consider Navy Island to be admirably suited for the performance of quarantine.

It will be perceived that the fever had gone on unchecked for nearly three months, the latter cases, at Halifax, being as urgent and dangerous as those which took place at the beginning, and from its great severity, and almost unexampled duration, conjoined with the facts previously mentioned, it is, I think, demonstrated that the cause existed in the vessel herself; and this opinion is further confirmed by the circumstance, that two officers came on board to assist us, both of whom were taken ill within four days, and the same occurred to two others who were only on board an hour or two on a visit to some friends, having been exposed, of course, to the same cause which operated on our own men. No one, therefore, could join the ship with impunity, although I am satisfied that the whole of the sick might have been landed in any part without the slightest risk to the inhabitants.

As to the question which has been so much discussed, and upon which such discrepancy of opinion exists—I allude to whether this affection can be imparted from one person to another,—it will be observed, that I am a non-contagionist, but I am, at the same time, not prepared entirely to deny its communicability, especially situated as we were in the "Volage," with so many cases of a malignant character crowded into such a small space, and where the air, in spite of every precaution, was impure and offensive.

I will now briefly allude to the treatment which I found most efficacious, and this, I think, is the more requisite, because it is a disease on which medical men differ so widely as to its nature and cure; and it is only, therefore, by each practitioner giving the result of the means he has had recourse to, that we can arrive at anything like a satisfactory conclusion.

In the cases which were put on the sick-list after leaving Port Royal, the febrile excitement was not so great, but the symptoms were, if anything, more dangerous, from the low typhoid form which the fever in many cases assumed, rendering bleeding—which, prior to our reaching Jamaica, was largely required, and absolutely indispensable—admissible only in a few instances. It is not easy to account for this alteration of type, but the difference was most conspicuous, and I deem it a fact of much importance for surgeons to bear in mind, as it not only explains the conflicting views of medical writers relative to venesection, but teaches them the grand rule that no general plan of cure can be laid down; that remedies which are at one time most serviceable, are at another very injurious; and that on their own skill and judgment in adapting their means to the symptoms of each case, their success will wholly depend. I am nevertheless satisfied, that, although the lancet could not be used, the local abstraction of blood by leeches would have been exceedingly advantageous to some of the patients, but unfortunately leeches could not be procured at any price; and I would strongly recommend that a supply should be sent by every packet to the hospital at Port Royal, whence they could be drawn as wanted by the surgeons of the squadron.

In the cases where I had reason to suspect the presence of indigestible matter in the stomach, I did not hesitate to administer at the onset a mild emetic of the ipecacuanha powder, notwithstanding that such practice is not generally approved; and certainly I had no reason to regret doing so, as so far from increasing, it tended much to diminish (after the operation had ceased) the nausea and retching, which were frequently distressing premonitory symptoms. It was seldom that the vomiting lasted more than three or four hours, and did not again recur in the favourable cases; even in those which terminated fatally, the stomach has continued tranquil until within a few hours of dissolution, when black vomit

would come on, sometimes in a sudden and copious gush, which would be brought up with little or no effort, and at others in a small quantity, accompanied with severe straining and hiccough, which could not be arrested.

I have not been able to convince myself of the exact nature of the matter called black vomit, but as it was often preceded by, and nearly always attended with, hæmorrhage from the mouth and anus, I am induced from this and careful repeated examinations, to incline to the opinion that it is coagulated blood blended with the gastric juice and other fluids which may be contained in the stomach.

I gave a full trial to that powerful remedy, calomel, and have the highest opinion of its beneficial effect. My object was to affect the system slightly, as soon as possible, by giving it in large doses, in combination occasionally with the compound antimony powder, having found that, in the great majority of instances, the sufferer might be pronounced safe as soon as this took place, when, in fact, I have been equally surprised and delighted by the rapid subsidence of the urgent symptoms.

The disulphate of quinine was likewise freely given, and with a success so marked, that I feel justified in recommending it as an invaluable, and, indeed, essential adjunct. The only difficulty is to determine the precise time at which it ought to be had recourse to; and my own rule was not to employ it until I could discover the mercurial odour in the breath, and not, of course, until the febrile excitement was completely subdued. Its operation then was often like a charm. Some of the German and Spanish physicians at Havannah give the quinine at a very early period of the disease, as soon, in short, as they observe anything like a remission, and speak favourably of its operation when thus exhibited.

In the cases where thirst was a prominent symptom, or where there was much irritability of the stomach, the saline effervescing draughts were frequently administered, and were found eminently useful, and very grateful to the feelings of the patient. Counter-irritation by blisters to the nape of the neck and pit of the stomach was also extensively practised, with a very advantageous result.

I deem it necessary also to state, that in this disease (more than in any other) the strictest attention to diet is of the first importance, inasmuch as the slightest error or excess therein will sometimes produce sudden and most dangerous relapses, which may have a fatal termination in a few hours, even although convalescence may have been many days fully established. This was well illustrated at Halifax, where three men lost their lives by eating a small quantity of lobster which had been smuggled into the ship. They had been walking about the decks for above a month, labouring only under the debility which always succeeds this fever, from which they were slowly, but steadily recovering, when, having imprudently partaken of the above, (in spite of a strict warning against doing so,) the consequence was, that they were seized in two or three hours with hiccough, which was quickly followed by black vomit, and within twenty-four hours they were all dead. On board of H.M.S. Volage, there were 147 cases, and thirteen deaths, and on board of H.M.S. Romney, at Havannah, thirty-eight cases happened, with only two deaths, which, looking at all the circumstances, I cannot but regard as a small proportion.

Mr. Charles Morrison, the assistant surgeon, was severely attacked at the commencement, and was for a long time in a very dangerous condition. As soon, however, as he had partly regained his strength, he gave me every aid in his power, and proved himself a zealous and deserving officer. My esteemed, intelligent, and experienced friend, Dr. Gilbert King, deputy inspector of hospitals, has employed the spirits of turpentine in yellow fever, especially in the latter stage, and has found it to be very serviceable. He was the first, also, for suggesting a plan for purifying the ship's hold, by having iron tubes opening into the pump well, and along the bottom, leading to one or two main pipes, which are to pass through the galley fire to the upper deck, and thus, whenever this was lighted, the air within would become rarefied and ascend, and a constant current would be kept up from the lowest and foulest parts of the vessel. This plan, I think, worthy of general adoption.

In conclusion, I feel it due to Captain Sir William Dickson, Baronet, to express my grateful sense of his uniform kindness to me, and of the interest and anxiety which he invariably displayed for the welfare of my patients, and I have also much pleasure in bearing testimony to the fact, that every suggestion which I made was most promptly and efficiently executed.

Skipton-on Craven, Yorkshire, Dec. 9th, 1845.

ON THE TREATMENT OF PLACENTA PRÆVIA.

By J. J. TWEED, Jun., M.R.C.S. Eng., London.

As the question of treatment in cases of placenta prævia is still undecided, and the opinions of many of the most eminent accoucheurs at variance on the point, a case, illustrative of the safety of what may be called the "new practice," (although in reality not so,) cannot, I think, be otherwise than interesting at the present moment; especially when the importance of the subject is taken into consideration. Statistics have already shown the comparative merits of the two modes of treatment; still, it behoves every one, whatever the practice he adopts, to publish the result, successful or unsuccessful. Where the opportunities for observation occur (fortunately, we may say) so rarely, it is difficult for a man to form an opinion on his own experience alone; on these grounds, I venture to ask a space in your valuable journal for the publication of the following case:—

I was hastily summoned to attend a patient, Mrs. D—, aged twenty-two, residing in Union-street, in the seventh month of her second pregnancy, (she had a miscarriage, at the fourth month, a year ago,) on Sunday morning, Nov. 7th. On my arrival, I learned that labour pains had come on quite suddenly, about nine o'clock, (it was now half-past ten,) accompanied with profuse discharge, which was increased at each pain. She was in a sitting posture, countenance rather pallid, complained of being "faintish," with short pains recurring at intervals of three or four minutes. I immediately had her placed in bed, and on moving her, observed a quantity of coagulated blood on the carpet, over which she had been seated, and her clothes were also saturated. On examination per vaginam, the uterus was found high up, the os uteri dilated to about the size of a shilling, thick and rigid; passing the finger within the os, the placenta could be distinctly felt, attached immediately over it; each contraction of the uterus gave rise to a gush of blood. I immediately plugged the vagina. At the end of two hours, the plug being removed, the os uteri was found less rigid, thinner, and dilated to the size of a crown piece, each pain forcing the presenting portion of the placenta partly through; as far as the finger could reach, no adhesion of the placenta could be detected. The hæmorrhage was now much diminished; in fact, it had almost entirely ceased. Dr. Murphy, who now kindly saw the case with me, advised again the plugging of the vagina, and if hæmorrhage returned to any extent, to introduce the hand, and turn the child immediately. Two hours elapsed, at the expiration of which the plug and placenta were both expelled. No further hæmorrhage occurred; the head of the child, with one hand, partly protruded through the os uteri at each pain. I now allowed the labour to proceed naturally for about an hour; the pains then becoming rather inefficient, two doses of the secale cornutum were administered, and the birth of a still-born child took place, exactly an hour and a half after the expulsion of the placenta. The uterus contracted firmly, and the patient is doing well.

The mother had felt no motion of the child from the time the first gush of blood occurred. The presenting portion of the placenta was lacerated, and a considerable coagulum was observed at another portion of it. As the case will be brought before the Harveian Society by Dr. Murphy, where it will no doubt be fully discussed, it remains only for me to apologize for encroaching so much on your pages.

Gilbert-street, Grosvenor-square, Dec. 10th, 1845.

ON THE PASSAGE OF A NEEDLE THROUGH THE TISSUES OF THE BODY.

By EDMUND BOULT, Esq. Surgeon, Bath, late of the Bengal Medical Service.

CASES of the passage of sharp-pointed bodies (especially needles) through the solid tissues of the human body, are so well known and authenticated, that some apology seems almost necessary in laying the details of another before the profession; but the following sketch contains some peculiarities which may render it not altogether uninteresting nor un-instructive:—

In the summer of 1844 I was called to attend a lady, aged forty, unmarried, and of a neuro-sanguineous temperament, who was at that time suffering principally from vesical irritation. She had been a great martyr to illness during the greater portion of her life, and her attacks are principally ascribed to the passage of a needle through the tissues of her body.

It appears that when an infant in the arms, her nurse, by some accident, suffered a needle to be run into her shoulder, although this fact was not ascertained until confession was made some years afterwards.

Up to twelve years of age she had no symptoms leading to the supposition that a foreign body was concealed in the structures of her own; indeed, the only circumstances remarkable about her were, that the sequelæ of infantile diseases were more severe than usual, that her muscular power was not sufficient to enable her joints to bear the superincumbent weight; she wore iron supports to her ankles between the ages of three and four years.

At twelve years old she was sent to school, and soon afterwards weakness of the spine was very apparent: there was displacement of several vertebrae, and a growing out of the right shoulder. For this affection she was placed under the care of the late Mr. Cline, and assumed the recumbent posture for nearly two years and a half. She had also symptoms of, and was treated for, hip-joint disease. These affections she ultimately outgrew; but it is to be remarked that they were accompanied by violent spasmodic attacks, described to be in the bowels principally, but affecting the system generally, so much so as to produce a state of opisthotonos at times. She menstruated at the usual period, but with much irregularity subsequently.

These paroxysms of suffering appear to have recurred, with some degree of regularity, every other year, until the year 1832, at which time she was about twenty-eight years old, when, after excruciating pain, she passed, by the urethra, the pointed part of a darning-needle, about three-fourths of an inch in length. Her opinion is, that as intense pressure gave some relief to the severity of the pain, she violently grasped the parietes of the hypogastric region, and by this means the needle was broken.

As was to be expected, there was great local and constitutional disturbance, which, however, subsided for the time; but the attacks again recurred with much the same severity until the year 1836, (a period, it will be observed, of four years after the previous discharge of the first part of the needle,) when she was in the Island of Guernsey, and was attended by Dr. Hoskyns and Mr. Brock. At this time her sufferings appear to have been very great, and the uterus seemed to have become more engaged in the mischief, the irritation of which was characterized by intense pain in the back, and by sympathy of the mammae, which at several times discharged blood, (not vicariously, but sympathetically.) The bladder also was kept in a continual state of uneasiness, manifested by dysuria and occasional retention; but this attack was brought to a crisis by the formation of an abscess in the womb, which on breaking discharged a second or middle portion of the needle, about an inch in length. Dr. Hoskyns published an account of this case at this time, though I am unable to state in what journal.

After this she had several, though slighter attacks, recurring at irregular intervals until the year 1843, when she had a return of all her symptoms with great intensity, accompanied by some inflammatory action about the heart and lungs. She was now at Exeter, and under the excellent care of Mr. James of that city. Ultimately, another abscess formed in the uterus, but no foreign body was discharged. She had a long convalescence from this attack, and had only been well about six weeks, when on coming into Somersetshire in the summer of 1844, I was called to attend her.

The symptoms of vesical irritation already alluded to increased rapidly, and to these were superadded those of general spasm, (which might, indeed, be fairly called chorea,) with engorgement of all the viscera, such as pain in the region of the heart, difficulty of breathing, labouring pulse, pain in the right hypochondrium, and acute pain in the loins; tympanitic swelling of the abdomen, and other occasional symptoms, which might be classed generally under those usually denominated "hysterical," added to which was an obstinate retention of urine which required the regular introduction of the catheter, an operation of considerable difficulty at times, for when the point of the instrument was inserted into the mouth of the meatus, it would be spasmodically grasped, and would require much time and patience to insinuate it into the bladder; and I several times remarked, that after withdrawing the catheter, (when it had been passed freely, up to the upper fundus apparently, and a pint and a half or more of water had been removed,) the patient was suddenly seized with a desire to micturate, and a further half pint or more of urine was discharged. This circumstance, I think, must be accounted for, on the supposition that the bladder, probably become very capacious from long continued retention, was

spasmodically contracted, somewhat as the uterus is in the "hour-glass" contraction, and that on the water being removed from below, the spasm above gave way, and thus the secondary escape occurred.

These were the leading symptoms, though somewhat Protean in character and development. I need not dwell on the treatment, which was principally directed to meet the present emergency. I will merely add, that she was bled, (locally and generally;) anodynes and tonics were administered internally, with aperient medicines and purgative enemata; but the greatest amount of relief was experienced from local remedies, directed principally to allay irritation, such as suppositories of opium, in full proportions; veratrine rubbed into the loins; belladonna to the vulva; a pillow of hops placed beneath the loins, &c., each of which was eminently successful at the time, in procuring temporary alleviation of suffering; but considering the previous history of the case, I determined to await the issue, fully expecting the formation of another abscess, telling the patient, that as a portion of the needle was yet unaccounted for, it was but reasonable to suppose that it was the exciting cause of all this disturbance.

She had one or two partial recoveries, but at length, after more or less suffering for nearly six weeks, an abscess formed in the uterus, which discharged good pus, tinged with blood. Not considering it essential to the treatment, I did not make an examination to discover the precise seat of this abscess; but I apprehend it was not far from the cervix uteri.

I now requested that great care should be taken to examine all that came away, and by constant inspection and straining through muslin of both pus and urine, it is a most satisfactory solution to the uncertainty of the case, to be able to state, that the eye of the needle was discovered in the discharge from the abscess. The three pieces, passed during a period of twelve years, having been put together, form now one perfect "darning needle," only changed from what it may be supposed to have been originally, when it entered the infant's body forty years previously, by being somewhat blackened in colour.

My patient did not recover so rapidly as I anticipated: great uterine irritation continued, other abscesses formed, discharging unhealthy pus, and manifesting a disposition to become periodical, more particularly as the catamenia did not appear. However, by care and patience, with the application of leeches to the vagina, and the exhibition of the iodide of potash in a bitter infusion, followed by steel and quinine, these symptoms were gradually subdued, and the menses re-established; the patient regained a good state of health, and she now reasonably looks forward to a freedom from such frightful attacks of suffering as she for so many years underwent.

December 4th, 1845.

CONTRIBUTIONS TO THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF VENEREAL DISEASES.

By WILLIAM ACTON, Surgeon to the Islington Dispensary, and formerly Externe to the Venereal Hospitals of Paris.

Syphilitic affections of the scalp: period of occurrence after primary symptoms. SYMPTOMS—Alopecia, or falling of the hair; condition of hair and scalp. Case showing that alopecia may occur an unusually long time after infection; the disease rarely so severe as described by old authors; severe case occurring in the present day; growth of hair considered; alopecia does not usually occur in the later stages of syphilis; description of roseola lepra; psoriasis; microscopical examination of the scales; condylomata of head and neck; eczema; impetiginoides; gummata; nodes; tertiary ulcers. DIAGNOSIS—Of specific diseases in children and adults; case showing the difficulty of diagnosis; value of copper colour as a symptom; importance of concomitant disease; enlargement of cervical glands; dependence on patient's history; hints for putting questions.

I PROPOSE publishing, in the pages of THE LANCET, a series of short essays on such parts of venereal diseases as group themselves into natural divisions: this plan will allow me more fully to develop my views than I was enabled to do when treating these subjects in a systematic treatise, and the reader will more easily ascertain the modern opinions on the divisions in question, and be no longer compelled to turn to the chapters which treat separately of these matters. In the present essay I purpose treating

OF SYPHILITIC AFFECTIONS OF THE SCALP,

a group of diseases most important to the surgeon, whether considered in relation to their frequency, liability to relapse or the contradictory views entertained on their treatment by

practitioners who have had the most extensive opportunities of investigating them.

The earliest symptoms of syphilitic affections of the scalp usually consist in itching, attended by rheumatic pains, or the patient will complain of several distinct tender patches; on examination, no trace of eruption or affection can be detected, but if the patient has recently (say within six weeks or two months) suffered from chancre, or induration remains in the situation of the sore, the symptoms will not be confined to those above described, but will soon be followed by loss of hair.

Alopecia, as this symptom is called, commences very gradually. At first the hair becomes dry and crisp, loses its glossy appearance, breaks readily, and a surgeon will be told that the brush irritates the head, and that it is impossible to use a comb from the pain it produces. On examining the head, the hair will in many instances be found broken off close to the scalp, and patches here and there of partial baldness will be seen; in the most advanced stages it comes away with the bulb attached, and in considerable quantities. The surface of the head is not necessarily scurfy; and it is only in the later stages that pityriasis is troublesome. The colour of the scalp now begins to alter; various points become of a rosy hue, the more apparent, as the surface of the skin generally has a yellowish, unhealthy look. Slight febrile symptoms set in, attended frequently with spots of similar rosy colour on the abdomen. At this period the patient often complains of general rheumatic affection of the joints, with loss of appetite and debility. As stated above, this affection of the scalp usually occurs within six weeks or two months from the occurrence of primary symptoms. This, however, is only true when no mercury, or only a moderate quantity, has been given. I lately saw a gentleman who, four years ago, contracted syphilis, for which he took large quantities of mercury. He recovered slowly, and had no relapse for three years and a half; when suddenly his hair began to fall off, and secondary symptoms appeared (as he states) for the first time: He denied having ever had disease of a doubtful character since his first attack.

Alopecia, when it exists alone, or to a slight extent, may, and usually does, depend upon other causes than syphilis. Still the surgeon should bear in mind that it is a frequent sequela of the disease, and requires immediate attention, or the loss of the hair will be considerable, and its growth uncertain. We rarely meet in the present day with those large patches of the scalp completely denuded of hair, or observe the permanent loss of eyebrows or eyelashes, as described by the older writers. I, however, witnessed lately such an instance, in the wife of a soldier, in whom we were unable to check the disease for some time, aggravated as it was by poverty and destitution.

In private practice patients are very anxious to learn if the hair will grow again; their fears may be quieted by an assurance, that though we cannot at once stop the falling off of the hair, still that it will be lost in less and less quantities, and ultimately will grow as strong as before, provided we see the case in the commencement. It will be some time, however, before the hair will attain its usual gloss; and females must not expect it to grow rapidly, or ever to attain its former length.

I have been unable to decide upon the greater or less probability of a good head of hair remaining, after loss from its breaking off close to the scalp, or coming away with its bulb. In either case I have succeeded in securing the growth of the hair; and this might be expected, as we find superfluous hairs, removed, together with their bulb, by means of tweezers, will be reproduced: and physiologists believe that the matrix of the hair will reproduce the bulb. Müller states, that in animals (during the casting of their coats) "the bulbs of the old hair become pale; and by the side of each a small black globular body is formed, which is developed into the new hair. This is a very interesting fact; the matrix of the new hair is not the old pulp, but seems to be a new sprout, from the productive base of the follicle."

Before quitting the subject of alopecia, I may mention, that if the hair does not fall off at the commencement, we do not find it generally deciduous in the later stages of syphilitic complaints, and we may observe severe cases of secondary symptoms unattended with falling of the hair. In the next stage of the disease, we observe a papular affection of the scalp, which commences with little rose-coloured elevations of the skin, to which the patient's attention is directed by the itching of the part. We remark these papulae, called lichen, increase in number, those first formed cease to present any elevation, but slight pearly-white scales form on the apex;

these fall away, and are replaced by others, the hair becomes scurfy, and these spots, at first of the size of millet seeds, become as large as a fourpenny-piece, forming the affection called lepra; the whole surface may secrete these scales, or the centre may heal, and the circumference only present the abnormal secretion; this we call psoriasis. Usually, however, the scales are thickest in the centre, and, if the entire scale be carefully removed, this little pyramid will be seen composed of a series of superimposed scales, the undermost, in contact with the scalp, presenting a honeycombed appearance; when seen under the microscope, this mass appears to consist of laminae piled one upon another, their edges forming dark lines; there is nothing characteristic in their appearance; the skin, upon which the scale is placed, presents an appearance like that of a recently blistered surface, and secretes a very small quantity of thin, pellucid fluid; at other times it is quite dry, and surrounded with a white line caused by the detached healthy cuticle; this, by Bielt, has been considered a diagnostic sign of syphilitic eruptions, but it is not always present, and may be found in common lepra.

In particular situations, especially behind the ears, and in the folds of the neck of stout persons, and those inattentive to cleanliness, we may observe these spots, instead of becoming scaly, remain moist, and we find a raised soft papula, covered with a white, pulpy, tenacious secretion, like wash-leather, the oozing from which excoriates the surrounding parts; we call this condyloma, or mucous tubercle. Unless means are taken to check the disease, these scaly or tubercular eruptions will continue for an indefinite time, increasing on one part, and falling off on another. In some cases, we may witness the points of the papulae of lichen, at an advanced period, become filled with a yellow fluid, which dries up, forming a small crust; we call the affection impetigo. Instead of the point of the papula becoming thus affected, a surface as large as a sixpence will be observed, covered with vesicles, the contents of which, at first transparent, become yellow, coalesce, and a scab forms, from under which oozes a serous fluid, and on removing it, the skin is unhealthy and excoriated; this disease is called eczema impetiginodes. In still more advanced stages, we may meet with ulceration on these spots, which assumes a very intractable character, forming tertiary symptoms. At this period, we may find tumours as large as horse beans on the scalp, which at first are unattended with pain or redness; fluctuation may be detected in them, and if punctured, a thin, serous, straw-coloured fluid exudes; if left alone, they become painful and red, ulcerate, and exposure of the bone follows, producing those necrosed skulls to be seen in our museums, and happily seldom met with in practice in the present day.

Diagnosis.—Medical men, who have had large opportunities of witnessing affections of the skin, will, I think, agree with me, that in the infant and child, affections of the scalp are very common; but that in the adult we seldom meet with them. If a child be brought to you with any eruption, ten to one the head or scalp is affected in some form or other; if an adult consults you, and his body be covered with eruption, seldom do we expect to find any affection of the scalp. So much is this the case, that in treatises on the scalp we find descriptions of its diseases confined almost exclusively to those of infancy. This law, true of diseases of the skin generally, does not apply to syphilitic affections of the scalp. We meet with poor little shrivelled children, the offspring of infected mothers, with their bodies covered with scaly eruption, and their nates one mass of ichorous sores, their nostrils stuffed with discharges, and their eyes profusely secreting a thick yellow matter: the scalp, however, is usually free from disease. The adult, on the contrary, is seldom affected with secondary symptoms, without the scalp presenting some variety of syphilitic eruption. These facts, if acknowledged to be true, are of great practical importance in aiding us in the diagnosis of affections avowedly difficult, and their truth will, I think, be admitted by those conversant with these diseases. The surgeon, however, must not depend upon the appearance of the eruptions on the scalp alone, but be guided by concomitant symptoms, as the following case will show:—A young widow was sent to me by a medical man, who had treated her for some weeks. The head, which had been shaved, presented several spots of lepra; blotches of a similar character were sprinkled over the back and shoulders, in colour resembling those of syphilis; no sore throat, no condylomata, nor affection of the palms of the hands, could be detected, and from her answer to my inquiries, I fully believe she had never had primary symptoms. In the uncertainty of the diagnosis, I took the opinion of several surgeons, and we agreed that the disease was syphilitic. Mercury was given, and, notwithstanding

ing, common lepra broke out over the body, proving our diagnosis to have been incorrect. The treatment was altered, and the patient slowly recovered.

Authors on venereal diseases usually lay great stress on the colour of the eruption. M. Ricord, however, has shown how frequently this may deceive the practitioner; when the copper colour is present, it may assist the diagnosis, but the disease may be no less syphilitic when that tint is absent. In the commencement of true syphilitic affections, the general surface of the skin may present an earthy unhealthy colour, but the areola about the eruption may be, and will be, found generally rosy. As the eruption declines, it will (particularly if not treated) become darker coloured than in other affections, and present the appearance of boiled ham, as Fracastor, and, recently, Ricord, have observed. If mercury, however, has been used for the primary symptoms, or if iodide of potash has been employed, this discoloration does not occur, and we lose at once the supposed diagnostic mark of the specific disease. In many instances I have known practitioners hesitate in concluding an eruption to be syphilitic, on account of this absence of discoloration, apparently unaware of the effect of previous treatment in modifying tints. We should recollect, that in these affections of the scalp, distinctions of colour are far less visible than on the body, and must be looked for on those parts of the head uncovered with hair. Notwithstanding the exceptions just spoken of, great dependence may be placed on the colour, if conjoined with the other symptoms we are about to mention.

In public practice, and in cases of patients who have not been treated with any form of medicine, we usually find the cervical glands situated in the posterior cervical region swollen and enlarged; and M. Ricord has lately called the attention of the profession to this symptom, as a valuable diagnostic mark in secondary symptoms, on account of its universality. In forming a diagnosis, we should look for traces of the indurated primary sore, which may be often found months after the disease is supposed to be cured.

In private practice, when the primary symptoms have been treated with mercury, we must not expect to find induration, and much must depend on the history which the patient gives us; by the history, I mean the course and relation of one symptom to another, and the period at which they occur one after the other, or of their combination for some months previously. Practical surgeons place little confidence in patients' statements, particularly those of women, who generally have not observed, or purposely mislead, on the points of primary disease. Aware of this, the medical man, before notifying to the patient his suspicions, had better let him trace back the relapses, if any, noting well the intervening period, and the parts of the body on which the eruption appeared, particularly inquiring about the throat. Having, then, thus obtained the information, he has next to consider if it tallies with the usual course of syphilis, and with present symptoms. This mode of inquiry is far preferable to the usual plan of asking a patient (whom you suspect) if he or she has had primary symptoms.

Queen Ann street, Cavenish-square.

(To be continued.)

ANATOMY, PHYSIOLOGY, AND PHRENOLOGY.

By E. J. HYTCHE, Esq., Surgeon, Islington.

ALTHOUGH I do not doubt that the fairly-expressed paper of Mr. Marshall will elicit a reply from some phrenologist who is versed in cerebral anatomy, yet there are one or two points mooted in that communication to which I must crave liberty to reply. The statement of Leuret, that "the organ of destructiveness is larger in some herbivorous than in carnivorous animals, and that the wolf ought to be more submissive than the domestic dog," does not invalidate the conclusions of phrenology, even if his manipulation were correct. The phrenologist never compares the skull of a man with that of a dog, nor even the brain of a cat with that of a dog; but, guided by the light afforded by comparative anatomy, he compares species with species. The correctness of this mode of procedure is shown by the fact, that in man there are parts of the brain, the rudiments of which can alone be traced in certain species, and in others of which they are altogether absent. Such being the case, the impropriety of comparing animals in which there is no true analogy is obvious. Again, that difference in facial conformation, and in the anatomical structure of the head generally, which mere difference in habits rendered necessary, would at once serve to indicate the fact, that the localization of the faculties in different species

would vary; and hence, mental seats, which might be traced in one class, would be entirely erroneous if predicated of another. Following, then, the course so admirably pursued by Vimont, the phrenologist compares species with species; and he finds, more or less, a distinct system of organology pertaining to each. If Leuret had found that the largeness or smallness of the organ of destructiveness in two individuals of the same species, and in the same condition, offered no index to the power of the feeling, then, indeed, he would have shown the fallacy of the phrenological doctrine; as it is, he merely restates a fact, which the phrenologist was the first to report, and which he believes to offer no obstacle to the application of the science.

I must confess that I felt startled at the assertion of Mr. Marshall, that the "phrenological view of the function of the cerebellum is unsupported by physiology, and by pathology." It does appear to me, that the ascertained facts that the cerebellum is considerably less proportionally developed in the child than in the adult—that, at the age of puberty, its growth is rapid, and the intensity of the amative feeling correspondingly progressive—that in the female it is much less proportionally developed than in the male head, and the passion less manifest, together with the many cases of diseased cerebella, combined with morbid manifestation, which have appeared in the medical journals presents irrefragable evidence in favour of the localization of that organ. Mr. Marshall has not, however, supported his assertion by any fact; and the value of the objection of Leuret, that he found the "weight of the cerebellum much greater in geldings than in either stallions or mares," will depend on the question, whether the brains compared were of equal or unequal size; in other words, whether the stallion was of less dimension than the gelding.

Again, the statement of Lelut, as cited by Mr. Marshall, that he "found, on an average, in examining 100 brains of idiots and imbeciles, that the posterior and not the anterior part of the head was the one which had suffered most diminution," may be correct, and yet phrenology would remain unaffected. It has been found by Voisin and others, that the idiotic is generally a small head; that, though a large head may be in a state of idiocy, yet that no male adult head under thirteen inches is capable of healthy mental elimination. The cineritious substance is also found of much less thickness and consistence in the idiotic than in the fully developed brain. It is scarcely necessary to add, that there are two kinds of idiocy—the one intellectual, and the other affective; the one connected with defective intelligence, the other with feeble animal energy. If, then, the cases cited by Lelut were those of animal idiocy, his facts illustrate and confirm, rather than overthrow, the conclusions of phrenology.

And here the fundamental principle whereby phrenology has been substantiated, may be stated—it is simply a deduction from matured observation of the brain, or of the forms which have been impressed upon the cranium by the cerebral mass. In pursuing his observations, Gall carried out the Baconian mode of philosophizing: for he observed, and not till he had observed hundreds of cases did he declare his deductions to be sound. Take for example his first phrenological observation, that which pertains to the organ of language. He observed, that those of his schoolfellows who excelled in the acquirement of language possessed prominent eyes; the same phenomena were observed at the university where he studied; and after these observations had been continued for years with the same result, he concluded that the relation was not accidental, but that an intimate connexion subsisted between the portion of brain which is situate over the super-orbital plate, and the power of verbal memory. This principle he never abandoned; but observation, and not the assumption of fitness, indicated the seat of the mental faculties. The question, then, is, if this train of observation be fallacious, wherein does the fallacy consist? Gall took nothing for granted, and arrived at no opinion without years of untiring research. If, for example, he had stated that the appreciation of hues was assigned to the portion of brain immediately over the middle of the superciliary ridge, but deduced the opinion from the observation of one fact only, then, indeed, his dogma would have been worthless; for the connexion might have been accidental, and the deduction overthrown by a larger array of facts. But the case of Dalton is but one of innumerable cases wherein deficiency of the power of discriminating colours has been found concomitant with a feeble endowment of the organ.

It has indeed been stated by Mr. Marshall, that the knowledge of phrenologists respecting the cerebral convolutions is "too incomplete to enable them to assign precise limits to their assumed cerebral organs, or to identify equivalent parts

of the brain in different cases.²⁹ It is true that the cerebral organs have not been dissected nor developed, nor does the phrenologist profess to possess the power. The manner in which the brain acts, whether considered as a whole, or as a congeries of organs, is at present occult; for though electricity may be the prime mover, the fact has yet to be proved. The organs may be so distinct, that when our knowledge of the cerebral structure is enlarged, the organs may be developed by a skilful manipulator; or it may be that the undulations consequent on the flow of blood to a specific part of the brain may suffice for the performance of its appropriate function. What do we know of cerebral action, save the fact derived by Cooper and others from observation of fractured skulls, that when the mind is inactive, the brain is quiescent, but that in connexion with mentalization; there is cerebral excitement. It may be, then, that there is partial as well as general excitement, though the motion can only be submitted as a supposition. After all, the fact that the organs have not been dissected, does not disprove their existence; anatomists had dissected the nerves for years before it was shown that the nerves of motion and sensation were distinct. The only question is, have we, irrespective of anatomy, sufficient evidence to warrant the assertion that the brain is a congeries of organs?

In addition to the evidence which is derivable from an observation of the connexion which subsists between mental quality and cerebral endowment, other proofs might be submitted which partake of a physiological character. I might detail the cases which have fallen under my own notice, wherein there has been a morbid manifestation of some faculty, accompanied by acute pain in the region of brain assigned as its seat. Yet, inasmuch as such cases do admit of error, seeing that the precise locality—especially in affections of the organ of language—may be mistaken, I shall merely submit two or three cases wherein structural alteration has been found concomitant with morbid mentalization.

Dr. Balfour relates the case of a man who laboured under religious mania; every curse levelled at a sinner in Holy Writ he applied to himself, and his views of futurity were fearful. After failing in one attempt, he succeeded in poisoning himself. His head was examined, and the right organ of veneration—one of the chief ingredients in the religious sentiment—was found to be in a state of chronic inflammation. The membranes covering the organ also presented every sign of disease. Dr. Silliman, of America, attests the case of the late Sir Robert Liston. He had been remarkable for kindness of demeanour; but subsequently his manners experienced a striking change, without any apparent cause. In lieu of that benevolence of spirit whereby he had been characterized, he became hasty and passionate, and his language violent, if not frantic, in the extreme. It may be mentioned that his intellectual faculties were unaltered. On the dissection of his brain, the frontal lobe was found unimpaired; but the organs of language and combativeness were found to be diseased.

Cases like these present such forcible proofs that, whether the organs are ever to be dissected or not, they are really distinct, that to adduce other evidence is unnecessary. All the phrenologists ask is, presuming these cases to be reported correctly, wherein does the fallacy consist of thinking that the disease of the cerebral organ and the morbid mentalization bore the relation of cause and effect? Far be it from us to ask our opponents to follow, implicitly, the doctrines of Gall and Spurzheim, and believe because they assert. If their doctrines will not bear the test of a fair examination—not the objections which arise amidst book-study, but those which are found on an appeal to nature—then let the science fall; for if phrenology be against facts, it loses its sole title to respect. The same field is open to the antagonist as to the believer; and we claim an adherence to phrenology, not because Gall and Spurzheim believed, but because God has inscribed its truth on the forehead of man!

Hemingford Cottages, Islington, Dec. 2nd, 1845.

ON THE ATOMIC THEORY AND ELECTRIC CONDUCTION.

By G. P. T. HILL, Esq., Filey.

HAVING lately had the pleasure of perusing the fourth lecture of Liebig on "Organic Chemistry," as published in your journal of April 14th, 1844, my attention was forcibly drawn to the remarks of Dr. Faraday, closely following it, in which, assuming the truth of the atomic theory, he would represent the space between the ultimate atoms as the true medium of electric conduction.

The following objections to this hypothesis I should be

obliged by your publication in *THE LANCET*, if you consider them worthy a space in so valuable a journal:—

I. Water is a conductor of electricity, but if a compound salt, or a portion of sulphuric acid, &c., be added to it, its conducting power is materially improved, though at the same time its density is also increased. If space be essential to conduction, we ought to expect a corresponding diminution of this power, but the reverse happening, it is clear that this faculty does not depend on the existence of space between the atoms of a body.

II. A rod of metal is a conductor, a similar rod of glass a non-conductor. But space is in both these substances continuous throughout the mass, therefore in the one case it exhibits properties entirely different from the other. Neither can its conducting or non-conducting power be ascribed, in the one case to its union with a metal, or in the other to its union with glass, for it is inconceivable that there can exist any difference in the space between the atoms of glass and that between those of metal. The conduction by bodies is therefore a peculiar force solely resident in themselves, which force is not possessed by all.

III. Some bodies become conductors when heated. This cannot be attributed to the increase of space between their atoms, but may be easily accounted for by considering the close connexion that subsists between the particles of heat and those of electricity, and the one may thus be said to render a substance susceptible of the other.

IV. Potassium is a conductor. Its oxide is a non-conductor. The latter has also a greater specific gravity than the former. This affords no argument for the necessity of space for conduction, for we may surely ascribe its non-conducting power to the change of properties induced by the union of the metal with oxygen. This view is of course applicable to the compounds of sodium &c. with oxygen.

Filey, Dec. 6th, 1845.

FACTS AND ARGUMENTS IN SUPPORT OF "THE HUMANE SYSTEM OF NON-RESTRAINT IN THE TREATMENT OF THE INSANE."

By WILLIAM SMITH, Esq., late House Surgeon to the Lincoln Lunatic Asylum, and to the County Hospital at Lincoln.

ALTHOUGH the principle of non-restraint may now be considered as firmly established, and the practice formally adopted in some of the largest and best regulated asylums in the kingdom, still the principle is faintly contested by many superintendents of public asylums, and not a few of the proprietors of the licensed houses.

That insane persons still suffer from the baneful effects of instrumental restraint, the following graphic description, from the official report of the Commissioners in Lunacy to the Lord Chancellor, will abundantly demonstrate:—

"At the asylum of West Auckland, first visited on the 5th of December, 1842, there were thirteen males and sixteen females; each sex had one sitting-room, with windows that did not admit of any prospect from them, and the violent and quiet, and the dirty and clean, were shut up together; there was only one small walled yard, and when the one sex was in it, the other was locked up. One of the male patients said that they were made so tender by their confinement that their health was destroyed. There were two small grass closes belonging to the house, but they appeared to be little used for the employment of the males. In the small, cheerless day-room of the males, with only one unglazed window, five men were restrained by leg-locks, called hobbles, and two were wearing, in addition, iron handcuffs, and fetters from the wrist to the ankle; they were all tranquil. The reason assigned for this coercion was, that without it they would escape. One powerful young man, who had broken his fetters, was heavily ironed, and another was leg-locked and handcuffed, who was under medical treatment, and in a weak state. One woman was leg-locked by day and chained to her bed at night; chains were fastened to the floors in many places, and to many of the bedsteads. The males throughout the house slept two in one bed."

"I have seen one secured in a dark and loathsome shed, lying extended upon straw, (for the space did not admit of his standing erect,) in a state of filth that I dare not describe; a second was fettered and manacled, and basking in the public street, exposed to the rude gaze of the thoughtless passers by; a third I have seen led about the streets, and even to church, in the restraint of a strait-waistcoat; a fourth" (I copy from a letter now before me, of a justice of one of the Welsh counties) died some time ago, in the most deplorable state, having been for about fifteen years chained."

During the period of my house-surgeoncy at Lincoln, and since that period, I have embraced every opportunity of making myself practically acquainted with the management of the insane. With this view, I have, within the last six years, visited many of the largest and best regulated asylums in the kingdom, including those of Hanwell, Lancaster, Northampton, the Royal Hospital of Bethlem, St. Luke's, the Surrey Pauper Asylum, Dr. Warburton's at Bethnal-green; Mr. Mott's at Haydock Lodge, near Liverpool; the West Riding of Yorkshire, Bedford, Chester, Leicester, Nottingham, Hull, and East Riding of Yorkshire and others. Some of these establishments I have examined most minutely, and especially with reference to the important subject of instrumental restraint. As a general principle, I have found the patients more orderly, cheerful, and cleanly, as regards their personal appearance, where no restraint, or a very small amount, was employed; whereas, on the contrary, in those establishments where restraint was largely employed, there was a great neglect of personal cleanliness; the patients exhibited a sullen and ferocious demeanour, and there appeared to be a great want of kind and conciliating treatment on the part of the attendants. And I will here lay it down as a general principle, that in any asylum where the attendants can have immediate recourse to coercive measures, they will invariably be found to give themselves little trouble in attempting to conciliate their patients. I am fully aware of the difficulties which may arise in carrying out the humane system of non-restraint, but I feel confident that the system will succeed wherever it may be introduced, as I believe it to be based upon the soundest principles, and eminently conducive to the restoration of the mind.

I will now quote some remarks from the official reports of the Lincoln Asylum, bearing upon the subject of restraint. "That the non-restraint system is founded on the soundest principles, and eminently conducive, by the feeling which it creates, to produce a mild demeanour towards the patients, and to place a lunatic asylum, in its spirit, tone, and general economy, on the footing of an hospital.

"It is quite obvious, that when powerful patients of strong passions are not tied up, the attendants will be incomparably more likely to treat them with respect and forbearance, and to avoid irritating them.

"Restraint rapidly weakens and depresses the vital powers of its unhappy victim, who frequently sinks into that revolting condition which almost invariably provokes a disposition towards ill usage in ill-disposed attendants.

"The arguments used in favour of instrumental restraint are equally cogent against the most valuable improvements in medicine, and would justify the continuation of those dreadful drastic and kill-or-cure medicines, which have long been exploded by enlightened and humane practitioners, and superseded by others more mild, more safe, more efficient, and more in harmony with the natural habit and physiology of man.

"Irritation is, perhaps frequently, and perhaps generally, the direct exciting cause of lunacy, and any attempt at cure which involves a system of irritation must exaggerate the complaint; and above all, that bodily confinement which prevents the patient from getting rid, by the free motion of the limbs, of his accumulated excitability, engendering a state of mind, morose, rancorous, ferocious, and deadly, as was too clearly proved by the frightful scenes of assassination and outrage which habitually occurred at Bedlam and elsewhere, when restraints of the most dreadful accumulation and power which human ingenuity could devise were in constant and general use, morning, noon, and night, often for twenty years in succession, or for a whole life. Such cases are now extremely rare, and are always most frequent where coercion is most general and severe. Even within the last two years, of two patients left together, both under restraint, one was destroyed by the other, at the York Asylum."

Here we have a frightful, but too true, picture of the state of things at Old Bedlam and elsewhere, under the old system, when restraint-chairs, heavy iron-hobbles, and other abominable contrivances, were thought necessary. Let us now turn to the present improved state of Bethlem, as shown by their recent official report.

"Personal restraint has been reduced to one-tenth of what it was six years ago; and it is most gratifying to be able to state, that it has been reduced, during this year, to one-half of what it was in 1843. It is almost unnecessary to say, that restraint has diminished just as the means of occupation and amusement have been increased, and that without such means and appliances it would be injudicious to attempt to dispense with mechanical restraint.

"Experience has, however, shown, and every year confirms not only the wisdom of a totally different system, but that

restraint is a highly exciting cause of suicide; and the fact, that no untoward circumstance has occurred in Bethlem with so large a number of dangerous patients, while mechanical restraint has not been used for two patients a week, is a most striking illustration of the advantage of this system; and the committee have the authority of the resident officers to state, that nothing has occurred to shake their confidence in the advantages of the system which they superintend.

"The state of some of the patients on admission frequently requires the exercise of great caution and gentleness. The exasperation and excitement then so frequently exhibited is often the result of the violent measures which the relatives and friends of the lunatics have unfortunately adopted, from erroneous notions of the necessity of personal coercion, whilst the patients remain at home, or when brought to the hospital. The two following cases occurring during the year, are now noticed, for the purpose of showing, practically, the danger and inutility of such treatment, although many other instances have occurred in which patients were brought for admission in tight strait-waistcoats, and some bound with cords, in so severe a manner, that their wrists, arms, and legs, were bruised and excoriated, but who, having been immediately released on admission to the hospital, ultimately recovered, without being ever again subjected to bodily restraint. The first case alluded to was that of a male patient brought for admission in a very violent and excited state, having, in addition to a strait-waistcoat, his arms bound with cords, his wrists secured by a belt, and his legs confined with strong webbing. In extenuation of such severe measures, his relative, who accompanied him, assured the steward that this restraint was absolutely necessary, 'as he was very difficult to manage, and that it had even required as many as six men to place him under coercion.'

"The first thing done, on admission, was to release the patient from all restraint; and although, as might be expected, he remained for some days in a highly excited state, so as to require the constant watching of one, and sometimes two attendants, no personal coercion was afterwards used during the whole time he remained under treatment. In a few days, symptoms of an inflammatory affection of the chest appeared, from the effects of which, combined with great cerebral excitement, he died in a fortnight after admission. A post-mortem examination of the body proved that the breast-bone and one rib were fractured; the interior of the chest was also found much affected, in consequence of the irritation which the broken bones had produced on the lining membrane; and it can hardly be doubted that these severe injuries occurred in the struggles which took place when so much restraint was imposed.

"The other case was that of a patient, referred to in the tables as one of the students, brought to the hospital in a high state of excitement, closely pinioned with cords, which had so injured his arms as to cause grave apprehensions of erysipelas supervening. This patient, as in the previous case, was at once released, and has not been subjected to any restraint since."

I observe, with much pleasure, that the committee of Bethlem have sanctioned the admission of pupils; the only thing to be regretted is the small number admitted. Dr. Conolly, of Hanwell, in his valuable clinical lectures, now in course of publication in *THE LANCET*, has stated that no bad effects have followed the introduction of pupils at Hanwell, but, on the contrary, that rather a beneficial result has been produced; the old and unfounded prejudice, that the insane were injuriously excited by the presence of strangers, is now almost exploded. Dr. Charlesworth, the senior physician of the Lincoln Asylum, whose exertions towards ameliorating the condition of the insane are well known, has for many years entertained an opinion "that insane patients are very rarely indeed excited by inspection." With this opinion I most cordially agree, and I have had ample opportunities of testing its correctness while accompanying large parties of visitors through the wards of the Lincoln Asylum.

However many or valuable the improvements which may be introduced into any asylum, much will always depend upon the personal attention of the resident medical officer to the patients, "and upon his insisting and actually seeing (for in no other way can he know) that they habitually receive the same care from the attendants, whose inclination, it must be remembered, would naturally lead them to the confinement of the patients, to save themselves from trouble." Here, I will observe, is a very strong argument in favour of asylums containing not more than 250 patients. How is it possible for any individual at the head of a large asylum to pay three or four visits daily to every ward, and observe the conduct of the

attendants towards the patients? The thing is morally impossible in an asylum like Hanwell; and what appears to me the crowning inconsistency, is, the recent appointment of a military governor, who reigns paramount, and "has the power of suspending, not only the servants, but even the medical officers and matron of the asylum."

The plain truth is, Hanwell is four times larger than any asylum ought to be, and the visiting justices would do well to pause ere they make any additions to an establishment already much too extensive. I would suggest to them the propriety of building a new asylum for the reception of recent and curable cases; and the present asylum might be appropriated to the use of the chronic and incurable patients. The Commissioners in Lunacy have very justly observed, that the arrangements necessary for an asylum containing only incurable patients would not be required on so costly a scale.

In conclusion, I will beg to express my conviction, after nearly six years' experience in the treatment of insanity, (three of them spent in the active duties of house-surgeon to the Lincoln asylum,) "that in a properly constructed asylum, with efficient and well-disposed attendants, the security, cleanliness, and personal comforts of the patients may be properly cared for, without any recourse to mechanical restraint or seclusion, and with fewer troublesome consequences than if restraint or seclusion be employed."

December, 1845.

MEDICAL JURISPRUDENCE.

RUPTURE OF THE STOMACH IN A BOY.

By J. STEWART ALLEN, Esq., Resident Surgeon to the St. Marylebone Infirmary.

ON Thursday, the 11th inst., an inquest was held at the St. Marylebone Infirmary, before Mr. Wakley, M.P., on the body of a boy named James Geogehan, aged 10 years. The boy had been an inmate of the workhouse for upwards of eight years, during which time he had been frequently ailing, but on the Sunday previous to his death he had appeared in his usual health. On Sunday night, about twelve o'clock, the nurse of the school heard him moaning in bed, and afterwards going to the water-closet. She rose and questioned him. He complained of extreme pain over the abdomen, which was much enlarged. He was brought over to the Infirmary about a quarter before one o'clock on Monday morning. When admitted, he was in a state of collapse, countenance sunk, extremities cold, and pulse not perceptible at the wrist; he had an increasing desire to vomit, but could bring nothing up; the abdomen was greatly distended, and very tense. Warmth was applied over the body, mustard sinapisms, turpentine fomentations, &c., and stimulants were administered internally, but without effect; he gradually sank, and died at half-past three o'clock on the same morning, about four hours (as well as could be ascertained) after his first complaining of pain.

The following were the post-mortem appearances:—The abdomen was enormously distended, the false ribs being pushed outwards, quite altering the natural shape of the body; the lungs were healthy; the pericardium so intimately adhering to the heart that it could not be separated. On opening the abdomen, a rush of fetid air took place; the stomach was found collapsed, much enlarged, and stretching across the abdomen; the small intestines were also much distended with air and semi-digested food. On raising the stomach, a rupture was found to have taken place at its cardiac extremity, through which a portion of the contents had escaped into the abdomen; the stomach still contained about a pint of pulpy semi-digested food. On removing the contents, the mucous membrane was found to be soft, and presented a mottled appearance; the pyloric extremity was much thickened, and firmly contracted, inclosing in its folds two small pieces of potato: so close was the contraction, that when the stomach was filled with water, it would not permit a drop to pass. The cæcum was contracted, and throughout, the calibre of the large intestines was very small, in some places not being wider than a common quill; there were portions of the large intestine, each about an inch and a half in length, of a dull reddish colour; there was considerable congestion of the veins on the surface of the brain, but in other respects that organ was healthy. This case is remarkable as one of spontaneous rupture without ulceration; but it should be remarked that the boy had for some years suffered from deficient nutrition; he generally ate largely, but seemed to derive little benefit from his food. The stomach has since been examined with the microscope. The

white spots which gave the mucous membrane a mottled appearance, were found to be mucous follicles much enlarged, and distended with their natural secretion; the mucous membrane was soft, and loaded with fluid. These were the only morbid appearances that could be detected in the coats of the stomach.

St. Marylebone Infirmary, New Road, Dec. 15th, 1845.

REVIEWS.

Confessions of a Water-Patient; in a letter to W. Harrison Ainsworth, Esq. By Sir E. BULWER LYTTON, Bart. London: Henry Colburn, 1845. pp. 98.

WHY these pages should be called *Confessions*, and why the author should come upon his readers "ghostlike," and like a "ghost return to silence" at the finale, does not appear from the premises, more particularly as he would seem to be in that state of rude, jovial health, which must be quite annoying to the delicate and *recherché* counterpart of "Pelham." It seems that Sir Bulwer Lytton has been imbibing immense draughts, not at the Castalian spring, but at the pumps of Malvern, Petersham, and Boppard; this is deemed so important, that he must needs make Mr. Harrison Ainsworth and the world his confidants in the matter.

It is safe, from his own descriptions, and the results of his external and internal water-drenching, to diagnose that, for some years, the literary baronet has been hypochondriacal, hipped, in fact, and that hydropathy is his last hobby. There is so much hypochondriacism in every word of his detail, that we are under some apprehension for the reality of the recovery he sits himself down to boast of. The book is indeed as green and bilious as its outside cover.

"At this time (January, 1844) I was thoroughly shattered. The least attempt at exercise exhausted me. The nerves gave way at the most ordinary excitement. A chronic irritation of that vast surface we call the mucous membrane, which had defied for years all medical skill, rendered me continually liable to acute attacks, which, from their repetition, and the increased feebleness of my frame, might at any time be fatal. Though free from any organic disease of the heart, its action was morbidly restless and painful. My sleep was without refreshment. At morning I rose more weary than I laid down to rest."

Our readers will recognise the picture.

This before the water treatment—afterward there comes a wondrous change. Upon the ingurgitation of a few gallons from "the diamond spring," he has to tell of "the rise from a sleep sound as childhood's—the impatient rush into the open air, while the sun was fresh, and the birds first sang—the sense of an unwonted strength in every limb and nerve, which made so light of the steep ascent to the holy spring—the delicious sparkle of that morning draught—the green terrace on the brow of the mountain, with the rich landscape wide and far below—the breeze that would have been once so keen and biting, now but exhilarating the blood, and lifting the spirits into religious joy; and this keen sentiment of present pleasure rounded by a hope sanctioned by all I felt in myself, and nearly all that I witnessed in others, that that very present was but the step, the threshold, into an unknown and delightful region of health and vigour." Verily, there must be other forms of intoxication than the alcoholic, and this must have been Sir Edward's first fit of water-drunkenness.

The same mawkish and maudlin strain prevails throughout. It is thought no blasphemy to write, by implication, of the tin and zinc utensils for the sitzbad and the wannenbad, as so many "Bethesda pools." Our author is the Angel troubling the Hygeian fount, and most lavishly are his boons dispensed. Water is your only true elixir, the one archæus, and "drink deep, or taste not," is the motto.

To men who have by incessant mental labour brought on "prostration of the whole system," he promises, that they shall "return at once to the careless spirits of the boy in his first holiday!" To the middle-aged and old, he assures "in

the later period of life, so far as freedom from suffering and the calm enjoyment of physical being are concerned, a second—a younger youth! To “the robust healthy man, only a little knocked down by his city cares or his town pleasures,” he offers “after his second week,” “pure taste, iron muscles, exuberant spirits, the overflowing sense of life!” To the “tender mother, coddling, and physicking, and preserving from every breath of air, and swaddling in flannels her pallid little ones,” he says, “I long to pounce upon the callow brood, * * * * with what rosy faces and robust limbs I promise they shall return. Alas! I promise and preach in vain; the family apothecary is against me, and the progeny are doomed to rhubarb and the rickets.” Alas! say we, for so much benevolence run to waste. Yet this writer thinks himself moderate, and even has a word of censure for the “dreams and absurdities” of those who say cold water cures everything, and he himself gives us a list, for which we must be grateful, of the only maladies in which he believes “it can be positively mischievous.” These are, “when the pulse scarcely beats—when the vital sense is extremely low—when the inanition of the frame forbids the necessary reaction;—in cholera, and certain disorders of the chest and bronchia; otherwise at all ages from the infant to the octogenarian, it is equally applicable, and, in most acute cases, equally innocent.” *Mirabile dictu!* After this, the fashionable novelist has only to found a new sect of dogmatics.

We are truly sorry to see a man of such varied talents and undoubted probity so much the dupe of a system of quackery. Of old, in him, if in any man, there were signs of the mind being too energetic for the body—of the sword being too keen for the scabbard. No one can read these pages, and suspect such a thing now. His cold-water Helicon has sadly diluted the philosopher.

If we look on hydropathy as a medical schism in this country, it becomes ridiculously absurd. Take the triplet, hydropathy, homeopathy, and magnetism, throw in the other minor pigny of the day, chronothermalism, and there are not men nor talent enough among the medical professors of all to make one decent sect, even *in petto*. And who and what are these men? Why, chiefly of the “uneasy” class,—those whose knowledge of medicine and disease has not been perceived by the profession or the public, and who, from weak-mindedness, or mingled motives, springing from wounded vanity, love of notoriety, and desire of gain, throw themselves into the arms of the enemies of medicine. If there be a few grains of gold in any of these systems! or sciences! as they are respectively called, the men now engaged upon them are the ones to cover them up with sand and mud, so as to hide them for generations from the careful and honest searchers after truth.

The pecuniary harvest reaped by the hydropaths has passed its zenith, leaving but stray ears for the gleaners. One hears occasionally of an establishment broken up, and of the disappearance of its proprietor; or one sees an advertisement offering one for sale, with spacious grounds, salubrious air, plentiful supply of the purest water, &c., that must prove a fortune to any capitalist willing to purchase it, the present proprietor having, of course, undertaken it, in the first instance, not from mercenary, but benevolent motives, to prove to the world the inestimable blessings of the system, and being anxious, now that this has been established, and the thing is growing lucrative, kindly to give up the hopeful concern to some other fortunate individual! This seems the present phase of hydropathy.

Nearly three years ago the public were told by Captain Claridge that—

“A Hydropathic Society was formed at the rooms of the Society of Arts, Adelphi, which came to the following resolutions:—

“1st. To make inquiries and collect authentic information on the past, present, and future proceedings of Vincent Priessnitz, at Graefenberg, in Silesia, in Austria, with reference to the cure of diseases by the various applications of cold water,

suggested and reported to be practised there by that individual; and with reference to the subject of hydropathy generally.

“2nd. To publish the result of the inquiries made by the Society, and

“*Lastly*.—If the system be found worthy of public notice, to promote its adoption as a matter of humanity.”

“The first of these resolutions has been carried out by the Society, and the members of the Council are preparing to publish the result of their inquiries.”

The concoctors of such resolutions were worthy to be called the Council! Mark their extreme anxiety about the hydropathic geography,—their dubiety of the whole thing, implied in the words, “suggested and reported to be practised there by that individual.” Of course, such astute and profound philosophers could not take common report, or Capt. Claridge’s word and book for the fact of there being such a place as Graefenberg, and such an “individual” as Priessnitz. They have been equally wary and prudent in “preparing to publish the results of their inquiries.” Three years have nigh gone, and, probably, three more may pass before the oracles have made up their minds. We fancy that before this Father Mathew has found out his mistake in shaking hands with quackery, and publicly dubbing the aquatic captain “a benefactor of the human race.”

After a while, when a few more speculators have been swamped in the cold-water trade, we shall probably see some of the few fortunate medical hydropaths attempting to march back to the legitimate ranks of the profession, gorged with their ill-gotten wealth, to sneer again at the practice of medicine, and laugh at those who have honourably preferred poverty to professional treason. They will find it a more difficult matter than they imagine.

We could undeceive the latest dupe on many of the points which to him seem clear and open as the day. He says—“I declare upon my honour that I never witnessed one dangerous symptom produced by the water-cure, whether at Dr. Wilson’s or the other hydropathic institutions which I afterwards visited.”

We suppose the bad cases were hidden from his eyes, for Sir Edward Bulwer Lytton has been at Boppard, and Mr. Herbert Mayo, himself a hydropath, could see nothing but death and mal-praxis at that “magnificent establishment.”

Speaking of the few diseases in which he is willing to admit that water fails, he enumerates “tubercular consumption,” and adds, “as may be expected, in this stage of that melancholy disease, the water-cure utterly fails to restore.” Now it is fit he should know that tubercular consumption is not a stage of a malady, but the disease, and the entire disease, itself. We should not bandy words with him on a medical point, but that we suppose many sufferers from that hopeful, though generally hopeless, disease, will believe themselves not yet arrived at the “tubercular” stage, and be induced to try the water-humbug, and be miserably deceived.

The literary patient says, very naively, “the spirits of hydropathists are astounding.” A word in his ear: we have known those professing this form of quackery, and actually named in his “green book,” who did not depend entirely upon water for their *astounding spirits*. We have known the instance where the hydropath, after dining with his dupes, habitually, but secretly, withdrew to his bottle, and rejoined his patients in excellent spirits, of course; where the same thing was done by others of the managers, so that the matter was no secret, and the patients were the laughing-stock of the servants of the establishment.

Combined with the laudation of water is the utter rout of drugs and allopathic doctors for ordinary cases. With respect to the eulogium of water, we suppose he never heard of Currie, or of the high reputation his name and practice have always obtained in the profession. Let him read Currie, and we suspect he will not be so ready to swear by Priessnitz, Claridge, and Wilson, as the world’s deliverers. Of drugs and

their presumed mischief another word in his ear. We have known one of the herd he has been innocently puffing, and whose name he has given, who wrote a book upon hydropathy, and condemned drugs as poisons and so forth. Sending his book to a friend, he wrote, "Of course, I don't mean all that I have said about drugs and medicines, but it is necessary to abuse them to gratify the public, who favour hydropathy." This man, we dare aver, has had many a sleeve-laugh at Sir Edward's book and the simple public.

Thomas Hood's sick duck was a bird of penetration and sound orthodoxy. He went to a hydropathic dispensary, and after suiting himself to a sitzbad, and finding it refreshing, took an all-over-head-bad and came up to the surface. He raised himself, clapped his wings, and was expected to shout "Priessnitz for ever!" but instead of this he only cried "quack! quack! quack!"

Sir Edward Bulwer Lytton goes to the hydropathic bagnios, and coming back into the highways and byways, tells his tale, and cries out, like an ancient Greek, "O merchant! O trader! O man of business! * * * O brothers! O afflicted ones, I bid you farewell. I wish you one of the most blessed friendships man ever made—the familiar intimacy with—WATER."

CHEMISTRY, PHARMACY, AND MATERIA MEDICA.

ON THE ACTION OF PRUSSIC ACID, THE CYANIDES, ALKALINE CHLORIDES, BROMIDES AND IODIDES, ON MERCURIAL COMPOUNDS, ESPECIALLY ON THE PROTOCHLORIDE OF MERCURY. By Dr. E. RIEGEL.

SEVERAL cases have recently occurred in which the internal use of the protochloride of mercury with dilute prussic acid has been accompanied by highly injurious consequences. This arises from the prussic acid decomposing the protochloride of mercury, and forming percyanide of mercury and hydrochloric acid, with separation of metallic mercury. Scheele, and subsequently Soubeiran and Reginbean, observed the decomposition of calomel by bitter almond water, and that on mixing prussic acid with protochloride of mercury, percyanide of mercury was constantly found. By mixing 100 grains of calomel with twenty-five ounces of cherry-laurel water, Béranger obtained ninety grains of undecomposed calomel, five grains of cyanide of mercury, and five grains of metallic mercury. Béranger has, however, not stated what became of the hydrochloric acid which was formed in his experiments. According to Mialhe, on pouring an excess of prussic acid upon protochloride of mercury, there is formed, first, percyanide of mercury, muriatic acid, and metallic mercury; as soon, however, as this reaction is over, muriatic acid and percyanide of mercury act so upon each other that perchloride of mercury and hydrocyanic acid result; however, this decomposition is only partial. A little ammonia and formic acid occur as accessory products. Æther readily extracts the prussic acid and corrosive sublimate, and leaves undissolved the cyanide of mercury.

The behaviour of prussic acid towards the protiodide and protobromide of mercury, as well as to the protosalts of mercury, is analogous to its action on calomel. Corrosive sublimate is also decomposed by prussic acid, a certain amount of cyanide of mercury is formed, and a corresponding quantity of hydrochloric acid. In some recent experiments with cherry-laurel water, Béranger observed, indeed, the formation of cyanide of mercury, but was unable to detect the formation of perchloride of mercury and hydrochloric acid, as iodide of potassium produced no precipitate in the water digested with calomel. This phenomenon is explained by the fact that the chlorine which is set free by the decomposition of the chloride, combines, entirely or nearly so, with the benzoyle, forming chloride of benzoyle. On evaporation of cherry-laurel water which has been digested with calomel, there is obtained, besides crystallized cyanide of mercury, a yellow, oily fluid, soluble in water, but not in æther, with a strong odour of oil of bitter almonds and a sharp, burning taste; it becomes hard on drying, and resembles gum-arabic. Mixed with pure lime, and exposed to a red heat in a glass tube, decomposition occurs, dense suffocating vapours are given off, resembling those of benzoic acid, and the chlorine combines

with the lime; the reaction of the cherry-laurel water, therefore, should be distinguished from that of pure prussic acid.

When six ounces of cherry-laurel water of the Prussian Pharmacopœia are poured over one ounce of calomel, immediate decomposition ensues, the formation of metallic mercury being at once perceptible. If the mixture is digested at the ordinary temperature for eight days, and the liquid filtered from the grey sediment, the solution exhibits no essential change with reference to its original odour; it possesses a metallic taste and faintly reddens blue litmus-paper. Hydrosulphuret of ammonia produces in it a black precipitate; iodide of potassium, a yellowish-white one, which soon becomes dirty red, but finally assumes a beautiful scarlet red; nitrate of silver, a white precipitate insoluble in nitric acid; lime water and caustic potash produce no change. When the liquid is evaporated, it loses its original odour and acquires one similar to that of balsam of Peru. A crystalline powder separates, and at the bottom of the vessel a yellowish oily substance.

When a mixture of calomel and cherry-laurel water in the above proportions is digested for five or six hours between 176° and 194°, being frequently agitated, the reaction appears to be far more energetic, the protochloride of mercury becomes black, and the filtered liquid possesses intense metallic taste, strongly reddens blue litmus-paper, and no longer blackens calomel. It yields with hydrosulphuret of ammonia an abundant black precipitate, with iodide of potassium a white one, which soon becomes yellowish, and finally scarlet, and with nitrate of silver a precipitate insoluble in nitric acid. A slip of copper immersed in it becomes immediately coated with a film of mercury. When the liquid is diluted, it is rendered turbid, and finally exhibits some yellow oily globules. On cooling, two distinct layers are perceptible, an upper aqueous one, and an under oily one, of the colour of cinnamon oil. By evaporating the former, a residue is obtained, consisting of percyanide of mercury, perchloride of mercury, chloride of ammonium and benzoic acid, as well as some muriatic acid.

The oily substance is of a yellow colour, bears a great resemblance to oil of cinnamon, and has the odour of the hydruet of benzoyle; it boils at about 250°, when a colourless fluid of somewhat less specific gravity passes over, which solidifies on cooling, and is a compound of hydruet of benzoyle and perchloride of mercury. The unrectified fluid undergoes no apparent change at low temperatures; it dissolves in every proportion in æther, in thirty parts of water and ten parts of alcohol; it was found impossible to deprive this body of the perchloride of mercury by treatment with water or chloride of sodium; but the whole of the corrosive sublimate may be removed by repeated mixing with a solution of chloride of ammonium, when the substance appears to become only somewhat specifically lighter. Hydrocyanic acid could not be detected in it.

This oily body is not formed when a solution of percyanide or perchloride of mercury in cherry-laurel water is evaporated; it is, however, obtained when a corresponding quantity of hydrochloric acid is added to solution of the percyanide. The presence of hydrochloric acid appears to cause the formation of this body, which is independent of the action of the cherry-laurel water upon calomel, for it is only produced upon evaporation and at a certain concentration of the liquid. When, instead of evaporating this, it is saturated with chloride of sodium and treated with æther, the latter leaves, on evaporation, oil of bitter almonds, which contains some hydrochloric acid.

On treating calomel with dilute prussic acid, phenomena analogous to the above occurred, with the exception that no formation of the oily body resulted even on evaporation. Bromide and iodide of mercury behave precisely like calomel. The action of the alkaline chlorides upon the protochloride of mercury constitutes an exactly similar phenomenon. According to Mialhe, calomel in the presence of chloride of ammonium, potassium, or of sodium and pure water, is converted partially into perchloride of mercury with separation of some pure metal; the protiodide of mercury likewise passes under the same circumstances into periodide. According to the experiments of Cattanel di Moma, calomel in contact with chloride of ammonium, or common salt, at 104°–118° undergoes no change; but corrosive sublimate is formed at 212°. Larroque arrived at the same results in his experiments. The latter thinks that the protochloride of mercury cannot be converted into the perchloride without the separation of metallic mercury. Mialhe attributes the formation of perchloride solely to its affinities for the alkaline protochlorides. The formation of the perchloride is less when the air is excluded than when it is omitted. The alkaline protochlorides

form, in the presence of calomel and atmospheric air, three times as much corrosive sublimate as without air, since at the ordinary temperature calomel is capable of absorbing a certain quantity of air, as was shown by Guibourt; at a higher temperature the absorption is greater, and it is likewise hastened by the presence of the alkaline chloride. Each equivalent of peroxide of mercury formed by this absorption of oxygen yields, by double decomposition with the alkaline protochloride, one equivalent perchloride and one equivalent alkaline oxide. It is remarkable that the perchloride is not decomposed by the alkali. Mialhe explains this from the great affinity between the perchloride and the alkaline chlorides; at least magnesia precipitates corrosive sublimate alone, but not in combination with an alkaline protochloride; whence it follows that the alkaline solution of protochloride decomposes calomel into corrosive sublimate with excess of air, without the liberation of metallic mercury. According to this the chlorides of the alkalis convert the calomel in the cold partially into perchloride without separation of metallic mercury; but on the application of heat, corrosive sublimate is formed and metallic mercury set free.

Since the perchloride of mercury occurs in the above mixture only in combination with alkaline oxide, or as basic perchloride, æther, according to Mialhe, does not remove anything from it. Larroque, on the contrary, asserts, that when a mixture of one part calomel, one of an alkaline protochloride, and forty-two parts water, are kept boiling for some time, the perchloride can be detected in the filtered liquid by iodide of potassium, protochloride of tin, and sulphuretted hydrogen; when chloride of ammonium is employed, the application of heat is not even necessary to give rise to the production of perchloride, which may be extracted by æther.

Selmi found that calomel in contact with animal albumen was partially converted into corrosive sublimate, not only when the reaction was alkaline, but even in the presence of some free acetic acid. If four grains of chloride of sodium are dissolved in three drachms of albumen, and shaken for fifteen minutes with three grains of calomel, metallic mercury is formed; while ten grains of chloride of sodium, dissolved in two drachms of water, give no reaction with three grains of calomel. Chloride of ammonium acts more powerfully under the same circumstances than chloride of sodium, about as $\frac{3}{4}$. According to Grimelli, the albumen itself, from the sulphur it contains, acts on the calomel, on which account the albumen of eggs which have been sat on exhibits a stronger reaction than that of fresh eggs.

When one part of calomel is mixed with two parts of an alkaline chloride and ten parts water at the ordinary temperature, no perceptible reaction occurs. After digestion for several days, the protochloride of mercury becomes somewhat grey, and most so when chloride of ammonium was employed. The quantity of perchloride of mercury remaining on evaporation is, however, very inconsiderable. On heating a mixture of an alkaline chloride with calomel and water, the sediment becomes of a dark-grey colour, arising from the separation of metallic mercury, and the presence of perchloride of mercury may very readily be detected in the filtered liquid. On evaporating the liquid, and treating the residue with æther, the perchloride formed is extracted. When calomel is shaken for ten or fifteen minutes with the chloride of an alkali and albumen, the separation of metallic mercury and formation of corrosive sublimate is immediately perceptible.

The alkaline bromides and iodides have likewise a decomposing action on calomel; it is entirely decomposed by an excess of alkaline protiodide, especially on the application of heat; the mixture becomes grey, yellowish-red, melts and becomes brownish-black; metallic mercury and periodide of mercury sublime in consequence of the decomposition of the protiodide in the presence of alkaline protiodides. The residue is whitish, entirely soluble in water, and consists of alkaline protochloride and alkaline protiodide. The alkaline and other soluble protiodides, as those of ammonium, magnesium, iron, and zinc, decompose calomel, which at the moment of contact assumes a greyish-green colour, that on trituration of the mass becomes dark green. Under the influence of light, the mixture acquires a yellowish, and finally red colour; at the same time globules of metallic mercury are observed, protiodide of mercury and alkaline protochloride being formed. On treating the protiodide or protobromide of mercury with a chloride of the alkalis in the presence of water, no apparent change of the protobromide or protiodide appeared to occur at the ordinary temperature; but if the mixture is exposed to the temperature of 212° , some periodide or perbromide is dissolved in the liquid.—*Journ. für Prakt. Pharm.*, x. p. 8.

BRITISH MEDICAL JOURNALS.

THE last number of the *Guy's Hospital Reports* contains an interesting account of two cases of extra-uterine foetation, by Dr. OLDHAM, which we have not yet had room to notice. The first is a case of tubal pregnancy; the second, one in which the development of the ovum appears to have taken place at the origin of the right Fallopian tube, at the expense of the substance of the uterus itself. Dr. Oldham's account of the first case is very complete and circumstantial, which renders it doubly valuable. It is as follows:—

"CASE 1.—Mrs. K—, aged thirty-one, residing in St. Mary Axe, is of delicate make, but has usually enjoyed good health. About a year after marriage she was pregnant with her first child, when she suffered from fistula, which was divided by Mr. J. Smith, her medical attendant, and she perfectly recovered. Two days after her confinement there was much pain at the lower belly, for which she was leeches and fomented; but she got up favourably, and nursed her child. An interval of seven years has elapsed between this her first pregnancy and the present time, during which she has been sterile; but her health has been good, and she has menstruated regularly.

"Towards the end of June, 1844, she supposed herself again to have conceived, and the symptoms of pregnancy gradually developed themselves; so that, at the end of September, she thought herself advanced twelve or thirteen weeks in gestation. At this time symptoms of abortion came on: she had some hæmorrhage; much pelvic weight and uneasiness; pressure on the bladder; and occasional bearing-down pains; but these subsided under the treatment adopted by Mr. Smith.

"On the 7th of October, 1844, ten days since miscarriage was feared, she had been to the water-closet about noon—having previously over-exerted herself by walking—when she felt something give way, which was succeeded by intense abdominal pain and syncope. She was at once put to bed; and when Mr. Smith saw her he found the pain in the abdomen very severe, and that she was very faint and feeble. He gave her brandy and laudanum, and applied a mustard cataplasm over the abdomen. At his suggestion I was sent for; and when I visited her, I found her in a state of collapse, hardly able to articulate, with a blanched face, scarcely perceptible pulse, but suffering very severe abdominal pain. The abdomen was tympanitic; very slight pressure was sufficient to rouse her from her depressed state, and she cried out with the intense pain it occasioned. The principal seat of pain was not near the pelvis, but on the right side, about the margin of the liver. Brandy, ammonia, opium, and morphia, in full doses, were given internally, while hot fomentations of conium, with a sprinkling of turpentine, and a large plaster of the liniment. hydrarg., were the chief local applications. She never materially rallied, and died on the following day, twenty-four hours from the accession of pain.

"Mr. Smith and myself examined the body. On opening the abdomen, which was covered with a good layer of fat, a quantity of gas escaped. There was a moderate quantity (about three-quarters of a pint) of reddish serum, and a large mass of coagulum at the lower part and left side of the abdomen, and some just beneath the liver. We emptied at least two pounds of this clotted blood. The bleeding had evidently arisen from an extra-uterine foetation in the right Fallopian tube. The liver and abdominal viscera were pale and exsanguine, the intestines distended with air, and there were some few old adhesions between the omentum and the head of the colon on the right side—a place where she had frequently felt pain. The uterus and appendages were removed for further examination.

"The bulk of the womb was nearly as great as at four months' gestation. When in situ, it was raised above the brim of the pelvis, and it was uniformly and equally enlarged. The posterior wall was more prominent and bulging than the anterior; but the whole body was not so globular as a pregnant womb. The os was open, its lips large, and covered with crypts, which were tense with the accumulated mucus within them. There was a plug of mucus within the cervix, and its canal was large, as in pregnancy, and the openings of the crypts well marked. On cutting open and turning back the posterior wall, the cavity appeared of corresponding size to the general increase of the body. Its mucous membrane was raised into a very rich highly-developed deciduous membrane, the bloodvessels of which, when it was first exposed, were

naturally and fully injected, showing its great vascularity. The growth of the membrane was so exuberant as to occasion its being thrown into folds, to accommodate it to the size of the cavity. It was between three and four lines in depth, and was tubular, the openings of the tubes appearing as small holes upon the surface of the membrane. This cribriform aspect of the membrane was more marked at the union of the walls of the uterus, when the membrane was put on the stretch. The tubular structure was not formed into cup-like sacs; but if a portion of it was detached from the uterus, air readily passed from the openings on the inner surface to those made by unfolding it from the womb. The openings of the Fallopian tubes were closed; but that at the cervix was free, the altered membrane stopping short, and thinning off at this part. The walls of the uterus were thick, and the arteries and veins developed as in pregnancy.

"The appendages on both sides were covered more or less with false membranes. On the right side there were bands stretched between the uterus and tube, and between the tube and the ovary, some of which are seen from the posterior part. It was this tube, which was dilated at its distal extremity into a large sac, which contained a fœtus and its membranes. There were two inches of the tube at the uterine end which were not taken up into the sac, the canal of which was very small, and that nearest the sac was apparently strictured. The tube was here surrounded by false membrane, which was wound round it like a ligature. The sac itself, which was the size of an orange, was composed of the dilated end of the tube, which had become highly vascular. Several very large veins coursed over it, and had been torn quite through where the tube had given way. The sac was thrown behind the ovary, which was partially concealed by false membrane. The seat of rupture was near the lower part of the sac, from which protruded a large coagulum, at one corner of which was seen a small portion of the transparent membranes. The ovum had not escaped. On opening the sac, whose walls were very thin, it was found to contain a fœtus, of between three and four months' development, enveloped by its membranes. The umbilical cord was thin, the arteries were tortuous, and they separated before they arrived at the chorion. By breaking off in different directions, the arteries were enabled to enter the chorion at different parts, and so diffused and extended the placenta. The tufts were very numerous, and were stretched over, and adhered to, the greater part of the distended tube. Between the wall of the tube and the placenta was a coherent membrane, which seemed to act as a medium of connexion between the two: its structure could not be made out. A large quantity of extravasated blood was diffused through the placenta and within the sac. The right ovary was enlarged; and on being opened, a corpus luteum was seen. Its plicated yellow matter was beautifully marked, and a central cavity, only partially obliterated, was apparent. The left Fallopian tube was enveloped by false membrane, a band of which stretched over the fimbriated extremity, rendering it almost impervious. The ovary on this side was healthy."

The following observations by Dr. Oldham are deserving of attention:—

"The causes which have been assigned for misplaced gestation are very numerous and various; but, in my opinion, the two cases which have been related indicate the particular cause which is most frequently in operation. I refer to the existence of false membranes, which, either by girdling the tube itself, or by fixing different parts of it, form a partial or complete stricture of its canal, or embarrass and restrain its movements, impeding it in its office as a conducting tube for the ovum. The development of the ovum without the womb is due, therefore, in these instances, to a mechanical error. It must have struck every one who is in the habit of making post-mortem examinations, how frequently these membranes are found about the internal organs of generation. Sometimes they are so abundant, and so completely envelop the uterus and its appendages, that sterility is the necessary result. This is the case generally with women who have led abandoned lives, and is evidently caused from too frequent sexual excitement. But very often they leave the passage of the tube open enough to permit the transmission of the semen; and the evil consequences are felt only either during or immediately after the escape of the ovum. A most important practical point to be noticed is, that the peritoneal inflammation which attends their formation produces but few symptoms compared with peritonitis in other parts of the abdomen. I have frequently found these false membranes in women whose history has not indicated any known attack of

peritonitis; and I feel sure that they are produced in the course of illnesses, where the pain about the pelvic region is not a prominent feature. In the first case, the false membranes were no doubt formed about the tubes and ovaries after the first labour: they were not sufficient completely to obliterate the passage of the tubes, or to spoil the relation of their fimbriated extremities to the ovaries; but their presence diminished the chance of pregnancy, and caused, I suspect, the seven years' sterility which followed the first labour. I have known cases where, a few days after marriage, there has been pain and uneasiness on one or both sides of the pelvis, which has effectually been relieved by aperients, with hot narcotic fomentations and opiates; but sterility has followed; and I believe it to have been produced by the formation of these membranes around and about the uterine appendages. It is a matter of importance to bear this in mind, in reference to that class of puerperal diseases which are likely to produce them; and I have been in the habit of watching carefully those lingering traces of inflammatory action about the pelvis, which so often follow tedious labours or abortions, with the direct object of preventing them. The occasional use of leeches, and the application of the mercury liniment over the lower abdomen, or the ammonia and mercury plaster, with strict adherence to rest, and a careful diet, will do much to effect this purpose."

STRANGULATION OF A TESTICLE RETAINED WITHIN THE ABDOMEN.

Mr. W. BAKER, M.R.C.V.S., of Sudbury, says that the following case of strangulated testicle occurred in November last, at Shimpling, near Sudbury. I was requested to attend the horse, but when I arrived he had just died, and the owner desired me to institute a post-mortem examination, in order to ascertain the cause of death. Upon opening the abdomen, (the same appearances being presented as in a former case recorded by me,) the viscera generally were healthy, but a pendulous testicle was found in the iliac region, black and stinking from strangulation, the cord being tightly twisted. The peritonæum in contact with these parts was inflamed, but the cord, above the twisted portion, was in no way affected. I have since ascertained that the horse had evinced continuous pain for about five days prior to his death. When well, he was anxious after mares, and had covered several, and was supposed to have got one foal. The other testicle was removed, by the usual mode of castration, when he was two years old. He was eight when he died.

On this case, Mr. SPOONER, President of the Veterinary Medical Association, remarks, that the history, from the circumstance to which it refers being very unusual, becomes one of the highest interest. "Rigs," or horses that have been deprived of but one testicle by the castrator, are common enough, and such animals I have known to live and work well for years; but it has occurred to Mr. Baker, in two cases of "rig" horses, to find a testicle in the abdomen in a state of gangrene, consequent on the cord becoming twisted. The possibility of such a consequence teaches us that there is danger in the non-descent of the testicle into the scrotum, particularly if left as a pendulous viscus in the abdominal cavity; and should we, in practice, meet with the like cases, it would, I think, be our duty to advise our employers to part with such animals; for a circumstance which has happened twice may occur again. I, however, cannot recall to my memory any similar cases to the two recorded by Mr. Baker. Their history tells us but little of the symptoms, which, doubtless, resembled colic and peritonitis; although it is probable other indications were also present, which might be considered diagnostic in their nature. The position of the testicle should not be lost sight of, as in many horses, termed rigs, the remaining gland is to be found impacted within the inguinal canal, and considerably less than its normal size; and in such cases, the same danger of the twisting of the cord is not to be apprehended. The loss of substance of the gland, when in this situation, or within the abdomen, does not deprive it of function; and it is important to remember that a rig is fully capable of impregnating a mare. Instances of foals, the sires of which were rigs, are well authenticated, although Sir Astley Cooper was of opinion, that unless the testicle descended, its use in propagation was destroyed. That celebrated surgeon, however, confined his remarks to the human subject; and the late Professor Coleman contended against the inference being applicable to the horse, basing his deductions on facts.

THE LANCET.

LONDON: SATURDAY, JANUARY 3, 1846.

It is with public bodies, as with individuals; they who respect themselves, are respected by others, and there can be little doubt that the present status of the medical faculty depends to a very considerable extent on the general want of self-respect.

There is no esprit, no ethos, no æsthetic feeling in the profession, and this is a grave injury and misfortune. Our forms, our honorary distinctions, are greatly too much matter of mere routine; our life is outward, not inward; we are like a body without a soul. Our state is one of such intense and perpetual progress, that we have no time to bestow a glance of respect on the past, or attend to those professional moralities which are of equal avail with wealth and science in ensuring the respect of the world.

The gold-headed cane is withdrawn from circulation, and locked up in a corner of the College of Physicians. This is a trifling matter, but it is useful as an emblem of the absence of all medical souvenirs.

At Rome, after the lapse of twenty centuries, the traveller still turns aside to the vineyard on the Esquiline Mount, to view the ruined temple of Minerva Medica mouldering under the slow hand of natural decay alone; but with us, after little more than a century and a half, the old Physicians' Hall in Warwick-lane, the building of Sir Christopher Wren, apparently an architectural copy of the Roman ruin, the place hallowed by the steps of our greatest men, is given up to desecration, and in our day has been turned into shambles. The gilded pile surmounting the dome is the trade emblem of a brazier, who occupies the upper part of the edifice, the tablets for inscription are used for butchers' signs, and the niches are turned into *cabinets d'aisance*. The place should have been raised to the ground rather than suffered to stand thus, reflecting ridicule upon the profession. If it was actually necessary to remove to Pall Mall, the old college should have remained dedicate to some professional purpose. When the elders of a profession—who, above all others, are bound to cherish its hereditary associations—act thus, is it surprising that the students and younger members should be accused of disorder and disaffection to their calling?

The same spirit would move the halls of the Temple and Lincoln's Inn to the West-end, and take St. Paul's and the archiepiscopal palace at Lambeth to Hyde-park. The same spirit works in other directions, but not to such a mischievous extent as in medicine. SHAKESPEARE'S curse keeps his bones, but the mulberry-tree at Stratford was soon cut up; recently, some reverend Goth has taken the sun-dial of NEWTON, his handiwork when a boy, from the wall of the manor-house at Woolthorpe, and presented it to the Royal Society, where, instead of being cuffed for the sacrilege, he was complimented and caressed by the noble president.*

Within the precincts of the new College of Physicians, there is little show of professional respect or reverent feeling: the vestibule contains no sign of the purposes to which the

* Two solar dials remained—the most perfect was removed for presentation to the Royal Society, but the imperfect one will now bear the greatest value.

building is devoted; the rooms must be peered into before the spirit of the place becomes at all apparent. But it will scarcely be believed that the statue of HARVEY, the illustrious ornament and benefactor of the college, is set up in a lonely attic, entered some sixteen times a year for the lectures which are annually delivered. The whole place is melancholy to contemplate: there are books without readers, pictures and statues without admirers, and reliques without devotees.

At the College of Surgeons, everything is equally censurable. You first pass through the empty hall, and then up the bare staircase: if you turn to the right, into the noble library, you see under the lofty ceiling a row of pictures hung so high, that a portrait might almost be mistaken for a landscape, and the visitor gives up in despair the attempt to make out who or what they are: if your steps are to the left, and into the council-room, there is a collection of busts on scagliola columns, and several pictures; but there are only twelve regular council days in the course of the year, and at other times the doors are shut on members of the college, and the shutters are generally closed upon the statues and the portraits. More than this, the busts are all covered, except on these rare occasions, by a contrivance somewhat between a night-cap and a pillow-case. When we last entered the room they were all hooded but one, the exception being his Majesty George the Third; and we were told that the statue of Sir Astley Cooper, coming from Chantry's studio without a cover, the old king's envelop was borrowed for the new comer, that the spic-and-span new marble might be preserved from soil, and thus the monarch was left bare-headed amidst his subjects.

The question naturally arises, what are the uses of statues or pictures? In strictly private rooms or galleries, the taste of the owner is all that has to be gratified. He may value them as objects of art and vertu, as family heir-looms, or merely as so much ornamental furniture. But public collections of portraits, whether in stone or on canvas, have a very different and a far higher purpose. They should be so disposed as to do honour to the great and virtuous dead whom they commemorate, and be in the sight and recollection of the living, for their example and encouragement in the labours that yet remain to be done. They speak a noble language to the ear that can hear. The man is insensate who can stand in the presence of a bust or portrait of a great man, without feeling something of the same self-respect as when allowed to associate with living genius. The Greeks, who well knew the uses of art, placed the statues of their heroes and demi-gods in public sites, and in the courts and porches of their halls and temples.

The College of Surgeons hold in trust the reliquæ of their famous men, for the benefit of the present and coming generations. Do they honour them, and serve the living, by making them fulfil any of the purposes to which we have alluded? No! In that council-chamber their effigies are arranged and preserved in precisely the same mean spirit as that which should animate the dining-room of a mere vulgar man of wealth, where statues and paintings are covered up, at all times, save when the master enters. More care, in fact, is taken to preserve the frosted silvery surface of the marble, and the varnish and gilding of the pictures, than to cherish the memories and diffuse the fame of the men they represent.

The statues are merely so much furniture, and are covered up in the self-same manner as the wooden chairs and the fire-screens, an equal value, an equal importance, set upon each. If there be (as doubtless there are) men of genius or commanding talent among the members of the College, anxious to distinguish themselves in the advance of their profession, what a brilliant apotheosis is this for them to toil and struggle after.

In such a spirit they keep their marbles encased, and their pictures hung up out of view, while an acre of vacant wall deforms their lofty staircase; they set JOHN HUNTER's bust on a mean, paltry, wooden pillar, badly painted to imitate marble, while SIR EVERARD HOME, who committed murder and arson upon the memory of his relative, is well mounted in the room above; they place the magnificent picture by SIR JOSHUA REYNOLDS in a darkened room, in the shade of a pillar, instead of allowing it to ornament the museum, that creation which was more HUNTER's real life than was his mere physical existence.

And the answer to all this is, that the head of a statue once met the loss of a marble curl at the hand of some curious meddler, that the members or visitors of the College, and particularly the students at the time of their examination, sometimes commit mischievous injuries. The same form of argument has been used to exclude the public from national collections of art or curiosity; but it is one which has long since been abandoned. It is found, that persons who are not trusted in such matters are not trustworthy, but where trust is reposed, honourable conduct generally ensues. If trust were placed in the honour of students, such barbarisms as are mentioned by the authorities would never be committed; at all events, it is preposterous to level such a charge against the members of the College.

Apothecaries Hall must not be forgotten while treating of the causes which vulgarize the profession. Of its professional interior, no one, save the officers of the society, can know much; the associations of the licentiates are all comprised in a very vivid remembrance of the funking-room, so called, and the length for pacing from end to end; and a vague recollection of the room in which the examinations are conducted: none ever think of revisiting either. To the public its principal feature is the ample counter, across which a circulation of coppers one way, and rhubarb the other, continually goes on. This is the popular idea of medicine—an idea to which the chemists are far more indebted than are the members of the profession, for they daily reap the fruit. Such an institution can confer no honour on what should be a liberal and learned faculty.

The commencement of the present article, and its burthen throughout, may be repeated at its close. We are not honoured because we do not honour ourselves, and the conduct of the governing bodies is, on many points, such as to lower the profession in the eyes of its members and before the public.

The following admirable "Address" will be read with feelings of extreme satisfaction by the professional public. From it the LAWLESS COMMITTEE may learn the estimation in which they are now held by the country practitioners. The perfidious course which they have pursued has brought upon them a just punishment.

SHROPSHIRE AND NORTH WALES MEDICAL AND SURGICAL ASSOCIATION.

To the Members of the Shropshire and North Wales Medical and Surgical Association.

GENTLEMEN,—At a meeting of your Committee, held at the Lion Inn, Shrewsbury, on Wednesday, Dec. 3rd, 1845, the questions contained in the Address of the London Committee of the Associated Fellows and Members of the Royal College of Surgeons of England were severally considered, together with certain proposed alterations in the College of Surgeons, to be applied for, if approved of, in a Supplemental Charter. The opinions entertained by your Committee on these points, they submit for your perusal preparatory to their being finally discussed at a public meeting.

In taking a retrospective glance at the occurrences of the past session, your Committee refers, with feelings of the liveliest pleasure, to the meeting of the Association, which was held in Shrewsbury, on the 4th of June last, not merely on account of the numbers who attended, at great personal inconvenience, from distant parts of this county and North Wales, but more especially on account of the marked unanimity and tone of decision which characterized it. The indignation of all present on that occasion, at Sir James Graham's third bill, and their determination to oppose it, were manifested in the strongest and most unequivocal manner, and resolutions were passed, having the following objects—viz.,

To effect an amicable adjustment of the differences which had arisen between the members and the Council of the College of Surgeons.

To prevent the incorporation of the members in an inferior Institution.

To establish such an intimate connexion between the members and the Royal College of Surgeons, and obtain such alterations in that time-honoured Institution, as would impart to it greater influence, security, and efficiency.

To procure for the public and the profession some protection against the practice of unqualified persons; and to effect such a combination with the adjoining counties as would secure their cordial co-operation.

During the last five months, your Committee have been actively engaged in carrying out these important resolutions, and they cannot omit the opportunity now afforded them of bearing testimony to the zeal and ability which their kind chairman, Dr. Henry Johnson, has manifested in furthering the views and wishes of his professional brethren, conduct which cannot be too highly appreciated, or too gratefully acknowledged.

Your Committee have now the pleasing task of directing your attention to the excellent Address of the London Committee of the Associated Surgeons of England. This Address is admirably drawn up, and well deserving of the attentive perusal of all who feel an interest in Medical Reform. The *Times*, in reviewing it, says—"It is a remarkably temperate document, and it places the views of the Committee most fairly before the profession. The grand aim of the Committee is one which we cannot but commend, that of inducing the fellows and members, instead of voluntarily separating themselves from the College, to make a strenuous effort to obtain for the members their just influence in that Institution, a consummation which the Committee regard as preferable to the establishment of a third College, as recommended by the Committee of the National Association."

It is truly stated in the Address of the London Committee, that "no determined and hearty effort has ever yet been made to obtain enfranchisement in the College, and that the Committee of the National Association had evidently no wish to succeed in the feeble attempt they were induced to institute." This allegation is confirmed by the best possible testimony, that of one of the Council of the College, Mr. Guthrie, who in his letter of June last, to the Secretaries of the National As-

sociation, says, that "instead of asking the Council of the College to make such reasonable concessions as would have led to an amicable adjustment of the differences which had taken place between the Council and the Members, the Committee of the National Association called upon the Council of the College to do what they knew the Council of the College, as men deeply interested in the character and welfare of the profession of surgery, could not do," and that he, Mr. Guthrie, "was inclined to apprehend, that in making such an application to the Council of the College of Surgeons, the Committee of the National Association neither expected nor scarcely desired it should be complied with."

In the ranks of the National Association, at one time, were to be found a great number of English surgeons, men whose feelings had been outraged, and their attachment alienated from their own College by the unjust and insulting conduct of a self-elected and irresponsible Council. This numerous and influential class joined the National Association on the faith that a combined and strenuous effort would be made for their enfranchisement in the College of Surgeons; and that, in the event *only* of that attempt failing, as a last resource, a demand would be made for a new College, *co-ordinate with, and entirely independent of*, the College of Surgeons; and had the Committee of the National Association acted up to their professions, had they been more consistent and less compromising, they would have had the confidence and support of, at least, nine-tenths of the profession, and Medical Reform would, ere this, have been a settled question. On the contrary, the indifference with which they have looked on, whilst the influence and dignity of the profession were being nibbled away by each successive measure, their servility, their exceeding duplicity, and the effrontery with which they continue to appeal to the support of those they have injured and betrayed, have, at length, excited one universal feeling of dissatisfaction and disgust.

On referring to their Transactions, we find the Committee, in an Address, dated August 13th, and published August 14th, just five days after the issuing of Sir James Graham's fourth Bill, carefully avoiding any notice of the contents of that Bill, which was at that moment within their reach, if not actually before their eyes, and deliberately stating, "That if the arrangements were carried out *bonâ fide*, the measure is a good one;" and in a subsequent article, dated Oct. 29th,—i. e., eleven weeks afterwards, passing the following contradictory resolution:—"That the present Government Bill has a direct tendency to lower the status of the general practitioners in medicine, surgery, and midwifery, and to constitute them an inferior class; and it is the deliberate opinion of this Committee, that, in its present shape, it ought to be met by the most strenuous opposition of the General Practitioners of the Kingdom."

This resolution your Committee hail with satisfaction, as confirmatory of the correctness of those views which have always been advocated by your Association. As such a change has taken place in their opinions on the Bill, your Committee are not without hope that the good sense of the National Association, comprising, as it does, so many honourable men, will not only so far coerce their misguided Committee, as to prevent their consenting to any charter of incorporation which it might be derogatory to the profession to accept, but will cause them to retrace their steps, and to reflect seriously both on the impropriety of separating the English surgeon from his own College, and the mischievous tendency of a multiplication of grades and corporate institutions in a profession in which *one* education and *one* title should serve for all.

On this point, your Committee cannot help alluding to the recent and enlightened decision of the Medical Congress in Paris, against the maintenance of grades in the profession, and which, they trust, will be cordially responded to by the British surgeons and physicians. In France, only two classes of prac-

tioners are to be found—viz., the Doctors in Medicine, and the Doctors in Surgery, who are similarly educated and equal in rank, and an inferior class—the *officiers de santé*. The Congress have decided that the latter body ought to be abolished.

Previous to calling your attention to the plan of Medical Reform suggested in the Address of the London Committee, it is important that you should consider one or two circumstances that must have great influence in connexion with it—viz., the constitution of the Council of Health, and future legal protection to the medical and surgical practitioner.

The Council of Health, according to the fourth Bill, would be elected exclusively by the Crown, whereas, in the first three of Sir James Graham's Bills it was fairly arranged that one half should be chosen by the Government, and the other half by the profession,—which is now to be denied any voice in this important election. Is it expedient—is it just, your Committee would ask, that a body of men, so elected, should be entrusted with such extensive power and influence, should be permitted to scrutinize and regulate all the affairs of our profession, and yet, in the exercise of its varied and important functions, be subjected to no control, save that of the Secretary of State? Does not history clearly show that the exercise of such unlimited power, whether in small or great societies, fetters the energies of the human mind, and keeps it stationary, and thereby tends to retard the progress of education and of science, and ultimately to extinguish amongst the mass even the desire for intellectual advancement! But your Committee have no fear that so outrageous a proposal will be tamely submitted to by the British surgeons and physicians,—so complete a death-blow to the dignity and independence of the profession, and to that representative principle which it has so long and so anxiously contended for.

On the all-important subject of legislative protection to the profession, your Committee are of opinion that the fellows and members of the Royal College of Surgeons and all other legally qualified practitioners, should have the right of recovering their reasonable charges for their respective services; and that all unlicensed practitioners, whether chemists, druggists, or others, should be restrained from attending patients, or performing any surgical operations whatever; but in justice to this deserving class of men who are setting so good an example in their endeavours to advance their status, your Committee think it but right that every semblance of trade should be done away with in the medical profession, and that the keeping of retail drug-shops by medical men (a practice so common in London and so degrading to the profession) should be especially prohibited. Your Committee consider that a summary proceeding before the local magistrates would afford the best protection against illegal practice.

The Address of the London Committee of Associated Surgeons points to a plan of Medical Reform, at once simple and satisfactory, more conservative as respects the College of Surgeons, and which obviates completely the necessity for a third College. It proposes to make the College of Surgeons the head and home of the general practitioner,—to connect more closely than heretofore the members with the College by the grant of corporate rights and privileges, and to arrange that the examinations of the future candidate for the membership should, both in medicine and surgery, be conducted by examiners appointed by the Council of the College.

For a reform of this kind, so essential to the prosperity, if not the existence, of the College of Surgeons, so conducive to the interests of the public, of the profession, and of science, let us contend with the utmost energy and perseverance.

Whatever differences of opinion exist on other points connected with Medical Reform, there is one great, one most important principle, upon which all parties in the profession are happily agreed—viz., the justice and advantage of adopt-

ing the representative system,—that principle of self-government—that boasted privilege of Englishmen, which is now recognised in nearly every institution throughout the kingdom.

In the present day, not only have the chemists and druggists and the veterinary surgeons the right of voting for their governing bodies, but, by the Municipal Reform Act, this boon has been conferred on the poorest rate-payer in England. Surely, therefore, the demand for enfranchisement in their own College, which has so long and so earnestly been made by the members of so enlightened and useful a profession as ours, ought not to be rejected as uncalled for and unreasonable.

To whom, your Committee would here inquire, is the College of Surgeons indebted for its present affluence and prosperity? To the Council only, or the members? By whom have the yearly funds, which supported it, been contributed? By whom, long before the Charter of 1843, was it raised to that proud eminence, as a scientific institution, which had procured for it a more than European reputation? Was it not by those illustrious members, Harvey, Hunter, Astley Cooper, and a host of others, whose names we now honour? Shall we then suffer ourselves any longer to be spurned from our own College, and treated as aliens by a self-elected few? No; on the contrary, we will continue to struggle manfully and unceasingly for our enfranchisement,—for that privilege which we regard as essential to the independence and the influence of the profession, remembering that “union is strength,” that we are fighting, not for ourselves only, but for those who are to succeed us, and supported by the conviction, that as our cause is the cause of reason and of justice, it must, therefore, ultimately triumph.

With respect to the Charter furtively obtained by the Council of the College in 1843, and the capricious manner in which its provisions have been carried out, the opinion of your Committee is still in accordance with that which has been so emphatically expressed by the surgeons of Shropshire and North Wales at their public meetings, to the effect that a more unjust measure never was devised, nor one more calculated to promote dissatisfaction, jealousy, and discord; inasmuch as under its sanction distinctions have been invidiously conferred on a small minority, and, in many cases, without reference either to age, scientific eminence, or services; in fact, very frequently upon no intelligible principle whatever. For so grievous a wrong the only atonement that can now be made is the admission to the fellowship, under proper restrictions, of all those members who passed the College prior to the Charter of 1843.

After due deliberation on these and other grievances which affect the profession at the present time, after weighing well the interrogatories propounded in the address of the London Committee of Associated Surgeons, and following out as closely as possible, if not exactly, the plan of Reform there laid down, your Committee have drawn up the following condensed summary of alterations to form a part of any Supplemental Charter that may hereafter be obtained in the College of Surgeons:—

“Every member, after ten years’ possession of his diploma, and being in actual practice and of good character, to be allowed to vote in the election of the Council.”

“Those who were members previous to the grant of the last Charter, to be made fellows in rotation so soon as they shall have been members ten years, on producing testimonials of good character from at least three fellows in the county in which they reside, or have lately resided, and on condition that they shall neither retail drugs, nor make the remuneration for their services dependent on the amount of medicine furnished to their patients.”

“Future members, as well as those who have passed since the Charter of 1843, to be elected fellows by examination

only, or as the reward of merit, at the discretion of the Council.”

“The Council to be augmented, one half to be elected from the fellows practising Surgery only, and residing in London, the other half from the fellows generally, whether practising Surgery only, or Midwifery, or being in general practice, and residing either in London or the Country; but no fellow to be eligible to the Council who dispenses his own medicine.”

“The Meetings of the Council to be open to the fellows.”

“The Council to appoint an examining Board in Midwifery from amongst the members of the Council and the fellows of the College.”

“The Council to appoint a conjoint Medical and Surgical Board, not more than one half to consist of members of the Council, the duty of such Board being to examine candidates for the membership, in all those sciences a knowledge of which may be considered necessary to the formation of a competent Medical and Surgical practitioner.”

“No candidate to be allowed to present himself for examination at the College until he shall have gone through a curriculum of five years’ study, comprising three years of Hospital practice.”

“These examinations to be open to the members and Fellows of the College.”

The foregoing suggestions will, at the first meeting of the Association, which your Committee intends convening early in the ensuing month, claim the serious consideration of the members; at present they may, in approximation, be taken as answers to the interrogatories forwarded by the Committee of the London Surgeons, and serve as data for drawing more closely together those friends who in various places entertain opinions of a similar nature. They comprise in brief, amendments in the re-modelling of the College of Surgeons which, if introduced into a Supplemental Charter, would go far to allay those heart-burnings which have been occasioned by the insulting injustice of the Council, and which, if regarded in a proper light, might, even now, obviate the separation of the Surgeon in general practice from the College with which (in name at least) he has hitherto been associated, might prevent his being degraded by enrolment in an inferior Institution, and might attach him tenfold, by participation of corporate rights, to that Institution which he has voluntarily entered, and the honour and integrity of which he is anxious to uphold.

The time has now arrived, when it becomes the duty of the members of the College of Surgeons to know their *real position*, to ascertain the sentiments of the Council, and to bring the matter to an issue. The moment is especially favourable, the entire Profession is against the Bill, and, your Committee suspect, would be equally so against the Charter of the New College, were the secret conclave to let it see the light.

A requisition is in course of signature for a meeting in Middlesex, and preparations are being made for the same in several other Counties. Your Committee anticipate that these Meetings will be vigorously followed up elsewhere, and they sincerely hope that such meeting will result in the Delegates being instructed to require an ultimatum from the Council of the College. A refusal, much as it is otherwise to be regretted, would place the profession in a position to demand from the Legislature, by one unanimous voice, the institution of a free and independent College, and would lay on the heads of the Council alone the responsibility of the disavowance of the members of an Institution which has been principally supported by their contributions, and its fame not a little upheld throughout the provinces, and throughout the world by their respectability and attainments.

By order of the Committee.

W. P. BROOKES, }
SAML. WOOD, } Hon. Secs.

Shrewsbury, Dec. 26th, 1845.

HOSPITAL REPORTS.

UNIVERSITY COLLEGE HOSPITAL.

CASE OF TUBERCULAR MENINGITIS.—TUBERCLES IN THE LUNGS.—
INTESTINES.—BRONCHIAL AND MESENTERIC GLANDS.—POST-MOR-
TEM EXAMINATION.

CLINICAL REMARKS BY DR. TAYLOR.

(Reported by H. Bencroft, Esq. M.R.C.S.E., Physicians' Assistant.)

FREDERICK C—, aged twenty-one, admitted, under Dr. Taylor, on Wednesday, November 26, 1845. Rather tall than otherwise; of moderate conformation, melancholic temperament, and dark complexion. Had lived as shopman at a tallow-chandler's for the last eleven months. Had lived well, but not intemperately. Resides at Rebecca-court, Wells-street, a very close and confined place. Was born, and has lived all his life, in London. No hereditary predisposition can be discovered. His father, however, has been subject to epileptic fits. From the half conscious state in which the patient himself is, but a very limited account of his previous history can be obtained. His general health has been good all his life. His master says that he has, on two or three occasions since he entered his service, observed something odd in his manner. About a month since he had a slight cold in his chest, but this did not last long. Ten days since he began to complain of pain in his head; for this he took some opening medicine, without any relief. Five days since he got very wet, and on that same evening his head became much worse,—so bad, indeed, as to prevent him from going to his work next day. He took no medicine, and continued to get worse daily. Yesterday application was made to the St. Mary-le-bone Dispensary; and in consequence of this he was last evening visited by Dr. Hare, who ordered some leeches to be applied to his temples, and gave him some opening medicine, which operated freely. To-day he was admitted into the hospital. On admission, skin dry; heat of body generally not increased; the scalp is, however, considerably hotter than natural; skin of a dusky colour; no eruption on the surface of the body. He lies in bed with his legs drawn up, and occasionally tosses himself about rather violently; is in a dull state, but can be roused, and then answers a few questions; says that he has been ill a fortnight, and has much pain in the head, most behind; is occasionally delirious; expression of countenance heavy and stupid; pupils contracted; pulse 84—hard, full, and bounding; heart's sounds and impulse natural; tongue dry, and covered with a thick brown fur; no fulness, and but very little tenderness of the abdomen; the urine contains no albumen; he is able to get out of bed to stool, and to pass his water; was seen by Dr. Quain, who ordered him to be cupped on the nape of the neck to sixteen ounces; to take five grains of calomel, and ten grains of the compound extract of colocynth, immediately, with a dose of house-medicine in the morning; and to have his head shaved, and cold water applied to it.

Nov. 27.—Is much the same; pulse 96—rather small; pupils contracted; head hotter than natural; the bowels have not been opened; tongue dry, and covered with a thick brown fur; ordered to repeat the pills immediately, and the house-medicine in two hours' time; to have three grains of calomel every four hours; the head to be shaved, and the cold water lotion continued.

28.—Eyes nearly closed; expression of countenance very heavy and stupid; pupils contracted; mouth covered with sordes; tongue dry and black; head hotter than natural; he picks the bed-clothes; pulse 72—rather irregular; he gets up to pass his motions; is observed to rise up in bed, and turn towards the left side; a blister was ordered to be applied to the nape of the neck.

30.—Much the same; pulse 112; bowels freely open; he passes both his urine and motions into the bed.

Dec. 1.—He is quite insensible; right pupil dilated; mouth still dry, and the tongue is covered with a thick black fur; pulse 140—small and weak; resonance under both clavicles less than usual. From this time he continued to sink, and died at seven p.m.

Post-mortem examination of the body eighteen hours after death. —Both membranes of the brain over the anterior part of the hemispheres thickened and opaque. Some serum at the base of the brain, also a small quantity in each lateral ventricle. A number of opaque white granular spots in the pia mater, over the anterior lobes only; some effusion of lymph in the membranes between the cerebrum and the cerebellum; some red softening in the substance of the crus below the part called nates and testes, and in the processus cerebelli ad testes; the side of the crus cerebri and pons Varolii a good

deal inflamed. Brain generally pale and soft; weight, three pounds six ounces. Chest: no adhesions of either pleura. Right lung: weight, sixteen ounces; some opaque yellow tubercles, of about the size of peas, in its upper lobe; also some less opaque milary tubercles, and some few spots of pulmonary hæmorrhage; a good deal of semi-transparent tuberculous deposit in the upper part of the lower lobe. Left lung: weight, fourteen ounces; some parts of its surface puckered, and there are more tubercles in its upper lobe than in that of the right lung; they are, however, mostly granular and semi-transparent. Heart healthy; weight, eight ounces. In the colon there is some redness; and under the mucous membrane are some opaque white spots resembling those in the pia mater, also in the ilium. Liver healthy; weight, two pounds thirteen ounces. Spleen soft and mottled. Kidneys healthy. The granular matter found in the membranes of the brain is seen under the microscope to be composed of nucleated cells, which are found mixed up with the delicate cellular tissue of the pia mater.

Clinical Remarks.—This case we shall find to be a highly interesting one. It belongs to a class of not very common occurrence, and which, on that account, when met with, demand our most attentive consideration. In consequence of the semi-comatose state in which the patient was, on admission, it was not possible to obtain any information from him, the history of the case being entirely furnished by his master and his relations. His health had always been good; his master had lately, however, on two or three occasions, noticed something odd in his manner. Ten days before his admission, he began to complain of pain in his head, and five days afterwards, in consequence of getting wet, this became much increased, indeed so much worse as to make him keep his bed. He was seen by Dr. Hare, who ordered some leeches to be applied to the temples and gave him some purgative medicine. Dr. Hare informed us, that when he saw the patient the pupils were both dilated. On admission, the pulse was 84, full and bounding; he was only partially sensible; tongue dry and covered with a brown fur; countenance dull and heavy, with a good deal of stupor; occasional delirium; no paralysis; pupils contracted. At first, what difficulty there was about the case consisted in distinguishing between typhus fever and inflammation within the head. With regard to the expression of the countenance, we often find it very dull and heavy in typhus; but never to so great an extent, nor of so stupid and idiotic a character as it was observed to be in this case. The pupils were contracted. This we very seldom, if, indeed, we ever find them in cases of genuine typhus. The headach was very intense. In the first place, we never find so much pain in the head in fever as was present here; and in the second, when we do find it to any extent, it is almost always accompanied by pains in the back and limbs, which were absent here. Moreover, the very small degree of prostration of strength present, the patient being able to toss himself about, and even to get out of bed to stool and to pass his urine; the absence of any abdominal symptoms, the bowels being obstinately constipated, with but very little tenderness of the abdomen, and there being no eruption on the surface of the body, although, supposing that it had been fever, sufficient time had elapsed for its appearance;—all seemed to forbid the suspicion that the disease was typhus. Dr. Taylor did not see the patient until the day after his admission into the hospital. He then considered the case to be one of inflammation within the head, and it seems most probable that this view of the case was taken by the house physician on the preceding evening, for he was then ordered to be cupped on the nape of the neck to sixteen ounces, and some calomel and colocynth was given him, which most certainly would not have been the treatment adopted, had it been supposed that there was any fever present. His head was also shaved, and cold water applied to it. The symptoms were not materially relieved by the treatment. After the cupping, the pulse rose a little, and became smaller. The tongue and mouth were observed to be black, and covered with sordes. The pulse afterwards became small, tardy, and rather irregular. The patient took calomel from the first, and at a later period of the case, a blister was applied to the nape of the neck. Two or three days before the patient's death, he became quite insensible. The right pupil became dilated, the left remaining contracted. On the day of his death, he had retention of urine, but previous to this he was able to pass both his stools and urine naturally. He died on the sixteenth day after the commencement of the disease. On inspecting the body after death, the arachnoid was found thickened and opaque over the anterior part of both hemispheres, and it was matted together with the pia mater. The latter was more injected than we usually find it,

and contained several small opaque white spots, of about the size of a pin's head. These are the appearances described as being observed in post-mortem examinations of the bodies of those patients who have died from tubercular meningitis, and examination with the microscope tended to confirm this view. The granules were only observed in the thickened portions of the membranes. The pia mater by the side of the crus cerebri was very vascular. The surface of the crus bore marks of inflammation, and this had here extended into the cerebral substance. Just below the corpora quadrigemina was a small portion, of about the size of an almond, made up of red chocolate-coloured dots, and having the appearance of spots of hæmorrhage. There was a good deal of fluid in both lateral ventricles, also at the base of the brain. The general opinion in cases of this kind is, that the tuberculous granules have existed for some time, at all events prior to the occurrence of the recent acute inflammation, which causes the death of the patient. This opinion Dr. Taylor regards as the correct one, and it is generally strengthened, as it was in this case, by the presence of tubercles in the lungs and in other parts of the body. These cases are analogous with acute hydrocephalus in children. This is always meningitis, and is most commonly associated with tubercles. During life there was no symptom by which it was at all possible to determine the tuberculous nature of the disease. The vomiting which we occasionally find accompanying it, and which is looked upon by some as an important symptom, was absent in this case. In most cases we find the pupils dilated, but here, until a very short time before the patient's death, they were both contracted, and equally so. Most probably the inflammation had extended from the membranes to the substance of the brain, and it will be interesting to observe that the inflamed portion was near to the corpora quadrigemina. These bodies, we know, are intimately connected with vision. When they are entirely destroyed, either by disease or experiment, permanent blindness and immobility of the pupil is the consequence, the pupil being then dilated. When, however, there is only a partial injury of them, loss of vision ensues, without the mobility of the pupil being effected. When it is only on one side that the injury is inflicted, then its effects are only observed on the opposite side of the body to that on which the corpus quadrigemina is injured. In this case, in the first stage of the inflammation, the irritation near these bodies might possibly have given rise to increased mobility of the pupil, thereby causing contraction; and subsequently, when the inflammation extended more into the substance of the brain, the dilatation may have taken place as a result of the destruction of the function of these bodies. The fact of one pupil being dilated in the latter stage, whilst the other remained contracted, may be accounted for by supposing that the disease affected one of these bodies more than the other, the one most affected being on the left side. The dilatation of both pupils in the very commencement of the disease, as noticed by Dr. Hare before the patient was admitted into the hospital, was most probably the first effect of the pressure of the fluid within the head. It has been observed, in experiments made upon the lower animals by Majendie and Desmoulins, that when one of these bodies is destroyed or seriously injured, the animal has a tendency to turn on its axis towards that side on which the injured body is situated; and in connexion with this we may remark, that this patient was observed to get up frequently in the bed, and to turn towards his left side. Tubercles were found in both lungs: some opaque, others semi-transparent; more abundant in the left lung than in the right; also seated principally in the upper part of each lung. Both these facts are generally observed in cases of phthisis. In almost all cases of tubercular meningitis we find tubercles in the lungs. In fact, according to Louis, whenever, after the age of fifteen, tubercles are found in any organ in the body, they exist also in the lungs. This remark, however, will not hold good with regard to children, for in them we often find tubercles in one organ of the body only. The pleuræ were healthy, but there was a quantity of tuberculous deposit in the bronchial glands, also under the mucous membrane of the lungs and small intestines, and in the mesenteric glands. The disease was essentially a tuberculous one, affecting the system at large, the morbid matter being found in a great many organs of the body. With regard to the causes of the affection, what led to the tuberculous diathesis it is very difficult to determine. Hereditary predisposition is doubtless a common cause for it, but in this case it was not possible to ascertain that this existed. The cause of the recent attack was, however, more obvious, as it seems to have appeared immediately after the exposure to wet and cold, the patient having, for

some time previously, complained of pain in his head. In forming a prognosis of such a case as this, it would be highly important to be enabled, if possible, by any means to distinguish between this disease and simple meningitis; the importance of this distinction depending upon the fact, that tubercular meningitis is perhaps always fatal, whilst the simple form of the disease is not so by any means. Guersent, who is physician to the children's hospital in Paris, and has consequently seen a good deal of these affections, says that one of the most important means of distinguishing between the two, is the presence of previous symptoms in the head and other parts of the body in one case, and the absence of them in the other. Our diagnosis might also be much assisted by the presence or absence of the signs of tuberculous disease in the lungs. In a case of the kind in the hospital last year, the attack was, as in this case, observed to follow exposure to wet and cold, and death took place on the fifteenth day of the disease; in this case on the sixteenth. Tubercles, also, were found in the lungs. So that we find many points of resemblance between the two.

CASE OF HÆMATURIA AND ALBUMINURIA.

ROBERT —, aged forty, admitted on Friday, Nov. 14, 1845, a stout man, of lymphatic temperament and fair complexion; has been a gardener, and exposed to wet and cold all his life; he never drinks any fermented liquors, and has always been very temperate; has always had sufficient clothing, but frequently gets wet; a native of Ireland, but for the last twenty years has lived in the neighbourhood of London. No hereditary predisposition can be discovered. The only time that he ever remembers being laid up was with gonorrhœa and weakened testicle, fifteen years since. During the whole of last week he was engaged in very hard work, pulling up trees.

Yesterday week, (the 6th of November,) he first began to observe that his urine was bloody,—the blood was mixed equally in the urine; micturition was painful, and during the passing of his urine he had a sensation of scalding in the urethra, and was unable to retain it as long as usual; he also had a soreness and smarting pain in the region of the right kidney, extending downwards to the right hip. He was very thirsty; took no medicine, and continued to get worse.

On Saturday last, (the 8th,) he began to vomit some green fluid, which had a bitter taste. He took two opening pills. These, however, did not operate, and on the same evening he was visited by a medical man, who sent him some medicine, which he took without deriving any benefit from it. The sickness has continued up to the present time, as have also all the other symptoms, gradually becoming worse. The urine is a little paler, he thinks, than it was at first.

Present state: skin dry, its temperature not increased; he is weaker and thinner than he was before the attack; he sleeps badly; does not hear as well as he did, and seems rather dull and stupid; pulse, fifty-four, soft and full; tongue furred; appetite deficient; thirst great; he always feels sick, and after eating anything he vomits a quantity of matter which has a very bitter taste; for the last three days his bowels have not been open; there is some pain and tenderness in the right lumbar region; this is very severe, and shoots downwards towards the right hip; it is increased by lying down. There is a little pain in the left lumbar region; micturition painful, but unattended with any scalding; he passes water very frequently, and but very little at a time. He was ordered to take four drops of the dilute hydrocyanic acid, in an ordinary saline draught, three times a day; and in the evening, three drops of creasote in a little water; to be followed, in five minutes, by five grains of calomel, and ten grains of the compound extract of colocyath.

Nov. 17th.—Urine thick; the quantity of blood in it not large, it being of a smooth brown tint, and but a moderate quantity of blood globules being seen under the microscope; its specific gravity 1015; it contains about one-fifth of its bulk of albumen; a little pain on pressing the right lumbar region; pulse sixty; there is a little œdema of the feet. He was ordered to be cupped on the loins to ten ounces; to omit the medicine, and to take, three times a day, three drops of creasote, in mucilage and camphor mixture. In consequence of the bowels not being open, he was ordered to repeat the calomel and colocyath extract.

18th.—The bowels freely open; pain and sinking in the lumbar region much less than yesterday.

19th.—Pulse 52, tender, but regular; nothing morbid in the heart's sounds or impulse; respiration feebler than natural all over the chest; the vomiting still continues, but not

quite so bad as it was ; to increase the dose of creasote to four drops.

20th.—Vomiting less, he not having been sick since he took the increased dose of creasote ; pulse 60 ; urine less highly-coloured than it was ; and there is no increased frequency of micturition.

21st.—Urine still paler ; pulse 48 ; ordered to take the creasote when necessary only, and the following powder every night :—powdered jalap, fifteen grains, bitartrate of potash, half an ounce, powdered ginger, five grains.

22nd.—Is improving ; has been purged freely.

24th.—The urine of a pale-smoke brown tint ; very little œdema of the legs now ; has had a slight return of vomiting.

25th.—The colour of the urine slightly darker than yesterday ; it still contains some blood globules, as seen under the microscope—these, however, are much less numerous than they were on admission ; the urine contains about one-fourth of its bulk of albumen ; its specific gravity is 1.010 ; is only purged twice daily. Ordered to continue the powders every night, increasing the dose of jalap to one scruple.

26th.—He has very little sickness, and no pain ; has had three watery evacuations to-day ; intellect not as dull as it was ; appetite improving. To have fish daily.

Dec. 1st.—The urine has now a very pale-brown tint, and very few blood globules are seen under the microscope ; he feels better in every respect. To have full diet.

6th.—Still better ; the vomiting has ceased ; he has no pain anywhere ; there is still a very small quantity of blood in the urine ; but the albumen is persistent, and the low specific gravity still remains ; his intellect is much clearer than it was ; and the œdema of the feet is entirely gone. To be discharged this day.

Clinical Remarks.—This is one of those diseases which are very common amongst the lower orders, and have lately attracted a good deal of attention. Unfortunately, our treatment of them has not hitherto proved very successful. We could not at first decide for certain what the disease really was, and whether the blood came from the kidneys or the bladder, as it was only by the previous history of the patient, and the general symptoms of the case, that any accurate decision could be arrived at. It was, however, suspected from the first, that there was some renal disease present, and that the blood came from the kidneys ; for although the albumen in the urine might be caused by the presence of blood alone, still its specific gravity was lower than natural, and we know that, when blood is added to healthy urine, it has the effect of raising it. The general symptoms present tended to strengthen the suspicion that the kidneys were the subject of granular degeneration. These symptoms were—the vomiting ; œdema of the feet ; slow pulse ; dulness of the intellect ; with pain and tenderness in the lumbar region. Subsequently, however, when the quantity of blood in the urine became less, as evidenced by its fainter colour, and the blood globules being seen under the microscope to be less numerous than formerly, the albumen being persistent, and the specific gravity still lower than at first, there remained no doubt of the real nature of the disease. With regard to its causes, we must suppose that the kidneys had been in an unhealthy state for some time ; and the cause of this we shall find in the nature of the patient's occupation, he being a gardener, and consequently much exposed to changes of temperature, frequently also getting wet. He was not a drinker—on the contrary, had always been very temperate. The recent attack of hæmaturia was most probably brought on by the laborious nature of the patient's occupation for some little time immediately preceding the illness, he having been engaged in pulling up trees ; and it was whilst he was thus engaged that he first perceived the blood in his urine. At first he took some hydrocyanic acid for the vomiting, which, however, did not relieve it. This was then omitted, and some creasote substituted for it. This we often find to succeed in checking vomiting in cases in which the acid has failed, and here, after continuing it for some little time, the vomiting entirely ceased. The pain in the loins was relieved by cupping ; and some purgatives were afterwards given him ; after these had acted freely, the œdema of the feet disappeared. On his discharge there was scarcely a trace of blood in the urine, but the albumen and low specific gravity still remained ; and as this was ascertained to depend upon a generally incurable organic disease of the kidney, it was not deemed advisable to retain the patient any longer in the hospital.

THE DOUBLE CHARGE FOR VACCINATION.

To the Editor of THE LANCET.

SIR,—The following decision has lately been communicated to the Board of Guardians of the Brentford Union :—

"1. The public vaccinator of a Union should enter in his register only those cases which he vaccinates under his contract with the Board of Guardians, and not the cases of his private patients.

"2. If the parties whose children are vaccinated apply to the vaccinator in his public capacity, he will be entitled to charge the usual fee to the Board of Guardians ; first entering the case in his register. If they apply to him as a private medical practitioner, he must look to the parties themselves for payment, and not to the Board of Guardians."

Whether this view of the matter be correct or not, there can be no doubt, that, for the present, it must be a law to all who vaccinate under the Act, and it may be a point of conscience with the more scrupulous, whether they ought not to return into the Union funds all such fees as they have taken upon a principle thus pronounced to be erroneous. At the same time, a few remarks naturally suggest themselves.

In the Brentford Union, and probably in some other unions, every practitioner who desires it is made a vaccinating officer, so that, in all cases but those of the district medical officers, and the medical attendants of clubs and dispensaries, the parties vaccinated are uniformly "private patients," and are in the habit of paying (or promising payment) for other medical services. Is this to exclude them from the register ? or are only those to be entered and charged for who go to the vaccinator and request vaccination under the Act ? In either case, the Act would be a dead letter. Those who pay willingly for other medical services will often refuse to pay for vaccination ; and so general is the antipathy, or apathy, towards vaccination, among the most numerous—that is, among the poorest classes, that, as the Brentford memorial expresses it, there is "a necessity of in general attending at the homes of the patients, and often of using argument and persuasion to procure consent to the operation." Of this necessity the commissioners have long been aware ; for, in their circular to the metropolitan Boards of Guardians, dated 29th Jan., 1844, they "suggest that the several vaccinators be instructed to visit the houses of the poorer classes, when they have reason to believe that there are any children unvaccinated, and to urge upon the parents of such children the expediency of the operation being performed forthwith." And yet, nothing of all this is provided for in the contract. Thus it seems that, with respect to the poor, the commissioners require more from the vaccinating officer than he has agreed to do.

But how stands it as to the rich ; as to those who are both able and willing to give a fee for vaccination ? If they are not to be on the register, of what value is that record in medical statistics ? Of less than none ; for its existence in so imperfect a state would only lead to false conclusions, which, had it not existed at all, would never have been ventured on. But if the children of the monied classes are to be registered, as there is no option to the vaccinator of declining the public fee, it appears that the parents are unfairly benefited, by having a valuable office performed for them at a miserable under-charge, while the medical man is deprived of an adequate remuneration from those well able and even willing to afford it.

The remedy seems obvious. In those cases where there is an inability or unwillingness on the part of the patient to give a private fee, the public should pay, both for the operation and for the registration ; and two and sixpence would no doubt be viewed by the profession in general as a sufficient remuneration for both.

In the case of patients where neither means nor inclination to pay should be wanting, a smaller public fee, as of one shilling, might be allowed for the important public service of registration ; it being left to the medical man and his patient to adjust the private payment between themselves.

I remain, Sir, your obedient servant,

Brentford, Dec. 17th, 1845.

VACCINATOR.

MR. PHILBRICK AND THE REST OF THE KIDDERMINSTER PENNY-CLUB DOCTORS.

MR. PHILBRICK has addressed another letter to us, in which, after complaining of a late intrusion into his house, by Mr. Brighton, of Kinver, he affirms—"I said *then* what I say *now*, that if my statements be proved incorrect, I will retract them, and apologize to him, (Mr. B.) I have since fully inquired into them, and beg most explicitly to reiterate them. His own letter is the best proof of the correctness of my state-

ments: should any other be wanting, I have the names of his collectors at Cookley, as well as of some of his members; and these, not, as he states, among the poor, for whom 'he found it necessary to adopt arrangements,' but among persons in the receipt of 70l. or 80l. per annum."

Mr. Philbrick replies also to the other correspondents, whose observations were called forth by his letter of the 27th October last, (*LANCET*, Nov. 15, p. 541.) He joins Dr. Roden, "in condemning fully the principle of penny clubs" (probably including his own), but he adds—

"I refer him (Dr. R.) to the printer for the number of prospectuses which he printed, and you, sir, to the enclosed copy, for the names &c. of his collectors; and dare him to deny the fact of his canvassing, urged on him as it was by Mr. Taylor, at the medical meeting held at Mr. Taylor's house, in September. For his information, I can state I was absent 200 miles from home four weeks and five days ensuing from August 25th."

In the course of his answer to Mr. Taylor, Mr. Philbrick refers to a medical meeting which took place at Kidderminster in October, and having named four gentlemen who were present on that occasion besides Mr. Taylor and himself, he adds—

"I have the verbal assurance of the two former, and I now hold in my hand written certificates from the other two of these gentlemen, as to the fact of my having offered to Mr. Taylor, *unconditionally*, together to give up our penny clubs, attesting also that it was *my repeated offer to him*, not *his to me*, and that he *as often refused*."

Mr. Philbrick proposes to submit "a public investigation of all the facts he has stated, before any six or twelve medical men of the neighbourhood who may be induced to take it up;" and such a tribunal we should conceive the best fitted to judge of the matters stated. At all events, we cannot afford any more space in *THE LANCET* for the continuation of the controversy.

THREE CHILDREN AT A BIRTH.—EXPULSION OF TWO ENTIRE OVA.

To the Editor of *THE LANCET*.

SIR,—I have taken the liberty of forwarding to you the enclosed notice, thinking you might consider it worthy a place in your valuable journal, feeling, at the same time, that what may appear interesting to me, a first year's student, might not be so to others more experienced.

I am, Sir, your obedient servant,
HENRY HOOPER, Student, Guy's Hospital.

Mary A—, aged thirty, fourth pregnancy; labour commenced with rigors, and was completed in three hours. The first child was expelled with vertex presentation, afterwards its placenta, next the entire ovum, and then another entire ovum. The three children were males, and all born alive. There was but little hæmorrhage, and the woman is doing well.

The residence of the patient is at No. 50, Gravel-lane, Christ-church, Blackfriars.

THE ROYAL VETERINARY COLLEGE.

THE LECTURERS AND THE STUDENTS.

To the Editor of *THE LANCET*.

SIR,—Knowing that many readers of your valuable journal are members of the veterinary profession, to which of late years medical men have in several cases taken much interest,—especially the author of the "Anatomist's Vade Mecum," Mr. Erasmus Wilson,—and many have become the appointed examiners for the veterinary diploma, &c., I am anxious that the following lines may be inserted in your next publication, so that they may attract the attention of the governors, and those in authority at the college, and be the means of an alteration being made in the present arrangements respecting the lectures, in order to gain the able and efficient services of Mr. Mayhew to a greater extent, so that the council may allow Mr. Mayhew to lecture in the theatre, as is the case in medical schools.

Being a parent of a student now at the college, from what I have heard it appears that to me it has been customary for the demonstrator to give morning lectures in the dissecting-room, a place considered by all to be totally unfit for such a purpose; and Mr. Mayhew, having the interests of the students at heart, states that he asked Professor Spooner, some time during last session, if he might have the use of the theatre, at a stated time, for lecturing in, the students and the demonstrator having experienced great inconvenience, owing to the inaptness of the dissecting-room for the delivery of lectures.

The above request Mr. Mayhew was induced to consider was acceded to by Professor Spooner for the object entreated, but I am sorry to say, the students have had cause to experience that the announcement concerning Mr. Mayhew's delivering lectures as heretofore would be discontinued, has been too fully verified. The consequence was, that, the students becoming impatient, a petition was drawn up by one of the students, (without the knowledge of Mr. Mayhew,) and laid before Professor Spooner, on the table in the theatre, it having previously been signed by the majority of the students—indeed, all those that had an opportunity, and were apprized of its contents, readily appended their signatures to it. The petition was to the following effect:—That the students might be favoured this year with a continuance of Mr. Mayhew's lectures, and that the place for hearing them might be adapted for such an object—the theatre being the most proper place, as in human schools. The following day Professor Spooner replied to it, and stated at considerable length his disapprobation of the system pursued by Mr. Mayhew last year, in teaching the class physiology, Professor Spooner supposing that the minutæ of physiology were not required by the students, and that it did not lay in his jurisdiction to allow Mr. Mayhew to lecture in the theatre. Both of these assertions were *not* hailed (as might be supposed) with any approbation by the students. In the first place, they were of opinion that a lecturer on anatomy should also blend physiology with the former—indeed, these two subjects should go hand in hand together. Lastly, that Professor Spooner was kind enough to say, during the first week of the present session, that if the students at any time wished to have the use of the theatre for assembling together and discussing professional subjects, it would be at their service; but it appears that the applications of the students for the theatre, as the place for Mr. Mayhew to lecture, cannot be complied with by Professor Spooner. That part of the college, I imagine, is too sacred for Mr. Mayhew's use. If Professor Spooner has the power of granting the use of the theatre to the students, ergo, I contend that the able demonstrator's lectures, from which they will derive more benefit, should first be considered by Professor Spooner. The fact is, that Mr. Mayhew being a clever and rising man in the profession, the professors are jealous of his abilities. Thus, jealousy has blighted the instruction of the students this session. Nevertheless, the spirit of the students is not daunted, for it is their intention, in order that they may avail themselves of Mr. Mayhew's instruction, to hire a room for lecturing. The college, therefore, will be like a "kingdom divided against itself," and consequently cannot stand long. It certainly seems plausible to me that the students will be doing their duty by making these arrangements, as there is no other alternative. Professor Spooner has stated that he never promised Mr. Mayhew the use of the theatre. All that I have now to add is a remark or two, that, if men make promises, they are in honour bound to perform them; but when they grant a thing which they have no right to do, then they should endeavour by all means to see that those promises are carried into effect, or else not make them. It is generally understood that Mr. Mayhew is willing to lecture, provided he is allowed to meet the pupils in the theatre.

I have the honour to be, sir,

Your obedient servant,

The Royal Veterinary College, Dec. 1845.

M.R.C.V.S.L.

SEA-SICKNESS.

To the Editor of *THE LANCET*.

SIR,—Will you allow me to call the attention of your intelligent correspondent, "X," to the following short extract from a work on "Spasm, Languor, Palsy, &c.," by Dr. Wilson, of St. George's Hospital, as bearing upon the subject of sea-sickness, which he so ably discusses.

I am, Sir, your obedient Servant,

XX.

Dec. 31st, 1845.

"As the principal stays and binders of the human frame, the abdominal muscles are employed unceasingly in supporting weight, and resisting pressure from all that is lodged within the chest and belly. By their thoracic attachment, they directly influence the business of the chest, under all circumstances of disease. Beneath the diaphragm, should they fail in their supporting power, the functions are no longer healthy or complete. Let any one suddenly withdraw the support given by his hand to the lower part of the abdomen in his own person, and by the sense of what falls within he exactly measures the degree and extent of the internal pressure. Sea-sickness, there is reason to believe, is in

this way occasioned, by want of tonic resistance in the abdominal muscles to the passive weight of the collected viscera, suddenly disturbed in their respective positions, and gravitating with the motion of the vessel. By continual practice in this duty of ready adjustment to a varying centre, the seaman learns to command his stomach, while he "finds his legs."—pp. 122, 123.

NEWS OF THE WEEK.

POISONING BY SENNA TEA.—*To the Editor.*—Sir: The communication of Dr. George Smith, (in *THE LANCET* of this day,) on the effect of taraxacum, would, perhaps, lead to the partial abandonment of a valuable remedy. Believing the instance which he has adduced of its deleterious effect to be either a mere coincidence, or, at most, the consequence of pure idiosyncrasy, I beg leave to state an aggravated case of injury from one of the most innocent drugs of the Pharmacopœia. The children of Mr. P— were, for the third time, attacked with symptoms like the poisoning from laurel berries. Universal swelling, livid lips, and the most aggravated dyspnoea, threatened imminent danger: they all, however, recovered. It was now ascertained to arise from senna tea. The previous attacks had been attributed to the disorder which dictated the use of the infusion, and they had been much milder. Whatever doubts remained, were removed by an incredulous grandmother, who again gave one of the children the same drug, and the consequences excited great alarm and real danger. Examples like this show the necessity of extreme caution in drawing inferences from a single case.—I am, Sir, your obedient servant,
London, Nov. 8th.

A. L. WIGAN.

A SCALE OF MEDICAL FEES.—*To the Editor.*—Sir: It appears to me that the two following propositions have been either entirely overlooked, or not sufficiently discussed, in reviewing the provisions of any new Medical Bill that may be passed. 1st. Whether there should not be an effort made to procure, for regularly qualified medical men, a graduated scale of fees, similar to what is at present chargeable by solicitors, with a taxing officer, to whom, in all cases of dispute, an appeal would lie. 2nd. Whether any advantage, and what, has accrued to the profession from writing prescriptions in Latin, and having all drugs so labelled. Should you feel disposed to notice these matters, I must anticipate a defence often urged for continuing the latter practice—namely, the statement of Pliny, "Minus credunt quæ ad suam salutem pertinent si intelligunt." Our neighbours in France disprove the saying, that "mystery gives confidence."—Yours obediently,
Dec. 10th, 1845. HIRUDO.

* * *THE LANCET* never publishes prescriptions in Latin, considering the practice of writing them in a dead language to be quackish.

ST. GEORGE'S HOSPITAL, Dec. 19th, 1845.—At a Special Court held this day, Dr. PAGE was elected physician, vice Dr. Macleod, resigned, and Dr. BENICE JONES, assistant physician, vice Dr. Page.

A Professorship of Phrenology has been appointed in the Andersonian University of Glasgow. Dr. William Weir has been elected to the chair, and the justly celebrated Mr. G. Combe has consented to deliver the introductory address, on Wednesday next, the 7th of January.

THE PHARMACEUTICAL SOCIETY.—A conversazione of this important Society was held at the private residence of Mr. Savory, the President, on Wednesday evening last. It was splendidly attended, many visitors of great scientific distinction being present. Many subjects of interest and scientific importance were introduced to the notice of the assembly. At the conclusion of the evening, all were warm in their praise and admiration of the hospitality and gentlemanly bearing of the host.

MANCHESTER.—DR. W. B. CARPENTER having been recently engaged to deliver a series of lectures at the Royal Institution, Manchester, on the Microscope and its Revelations, was invited, by a privately formed class of resident medical practitioners, to deliver, during his stay among them, a demonstrative course on the Physiological Applications of the Microscope; in compliance with which invitation, Dr. Carpenter gave ten lectures, illustrated by numerous drawings and microscopic demonstrations, in the Lecture Theatre of

the Medical School, commencing December 2nd, 1845, and terminating on the 23rd of the same month. The information which was afforded, comprised nearly all the recent advances made in physiological science by aid of the microscope, more especially in regard to the modern doctrines concerning cell development. Altogether, the lecturer acquitted himself in a manner most creditable to his own reputation, and to the highest satisfaction of his auditors, evinced most honourably to Dr. Carpenter by the unanimous adoption of the following resolution, which was moved by Mr. Turner, surgeon to the Manchester Royal Infirmary, and lecturer on Anatomy and Physiology, seconded by Mr. Ransome, also surgeon to the Infirmary, and lecturer on Surgery:—"That the present class, consisting of upwards of thirty physicians and surgeons, resident in Manchester and its vicinity, do hereby record their warmest approbation of the admirable manner in which Dr. W. B. Carpenter, of London, has just delivered to them a course of lectures on the Physiological Applications of the Microscope; and that Mr. Noble, as the gentleman who took upon himself the arrangements for the constitution of this class, be requested to furnish Dr. Carpenter with a copy of this resolution, as a merited testimony, on their part, of his distinguished talents as a physiologist, and of his efficiency as a lecturer."

APOTHECARIES' HALL, LONDON.

NAMES of gentlemen who obtained certificates of qualification to practise as apothecaries, on Wednesday, 24th Dec., 1845:—John Growse, Hadleigh, Suffolk; Thomas Goldesbrough, Stockwell, Bath; William Richard Bridges, Bristol.

CORRESPONDENTS.

In order to obviate errors of the press, it is always best for the prescriptions to be written in English.

The "Hospital Reports" from the London Hospital have been received, and shall be published.

Mr. Samuel Fenwick.—The communication has been received, and will be published next week.

Delta R.—Medical Students are admitted at both places.

M. A. would certainly not be enabled to register under any Medical Bill which might pass the Legislature. He had better forthwith obtain a licence from Apothecaries' Hall, or a diploma from one of the Medical or Surgical Colleges.

An Enemy to Humbug had better at once make the affair public, and give to his stupid relatives the notice he has suggested in his letter. We did not believe that Lancashire sustained such fools.

We thank Mr. Ayton for his note; the lash shall not be spared.

Communications have been received from Mr. Horatio G. Day, Dr. Collier, a Fellow of the Medico-Chirurgical Society, Charles Holmes, Mr. P. A. Brady, Dr. Maitland, (Windsor,) Mr. J. Bishop, Mr. O. Royle, Mr. W. Anderson, Mr. C. Wilkinson, Bower Harrison, Esq., Dr. Davis, F.R.S., A Surgeon, (west of the Royal Exchange,) M. S., (St. George's Hospital.)

ERRATUM.—In our last number, p. 699, 2nd column, for "direction of the face," read "direction of the force."

TEETH, No. 13, OLD BURLINGTON STREET.

MR. MOGGRIDGE, from Messrs. Parkinson, still continues to SUPPLY THE LOSS OF TEETH, from one to a complete set, upon his unrivalled system of self-adhesion, which has stood the test of public opinion, and procured him such universal approbation in many thousand cases. Under the immediate patronage of the Royal family and principal nobility, and recommended by numerous physicians and surgeons as the most ingenious system of supplying Artificial Teeth hitherto invented. They are so contrived as to adapt themselves to the most tender gums, or remaining stumps, without causing the least pain, thereby rendering the operation of extracting or filling unnecessary. They are also so fixed as to fasten loose teeth, by forming a gum, where the natural one has shrunk from the use of calomel or other causes, without the aid of wires, and, above all, are so firm in the month, and fixed with that attention to nature as to astonish the most sceptical. Indeed, so confident is Mr. Moggridge of perfect success in every case, that he gives written guarantees not to be paid unless they answer in every way as the natural teeth. He also begs to invite those who cannot undergo a painful operation, to inspect his painless, yet effective system, having numerous whole and partial sets in all stages of progress in this and the usual principle, fitted on gold, with spiral springs, either of which is equally applicable to natural, as to his celebrated mineral teeth, which possess the advantage of retaining their colour, and resisting decay for an unlimited period, and are made in every variety of natural form and colour, defying detection by the closest observer. Mr. Moggridge will be happy to afford every facility for consultation, without charge. Mr. Moggridge will be at all times most happy to receive communications from the Faculty, and begs to assure them that they shall ever find him ready and willing to observe professional etiquette in the fullest acceptance of the term.

Stopping, Clearing, Extracting, and all Operations as usual. Attendance from 9 till 5.—13, Old Burlington-street, Bond-street.

A COURSE OF FIVE LECTURES

ON

FRACTURES AND DISLOCATIONS:

EXPLAINING

NEW MODES OF TREATMENT, FOUNDED ON ANATOMY
AND PHYSIOLOGY, AND THE LAWS
OF MECHANICS.

By GEORGE O. JARVIS, M.D.

SURGEON TO THE FREE-STONE QUARRY, PORTLAND, CONNECTICUT,
ETC. ETC.

UNITED STATES,

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,
London, November, 1845, and sent to THE LANCET by the Lecturer.

Illustrated by Engravings.

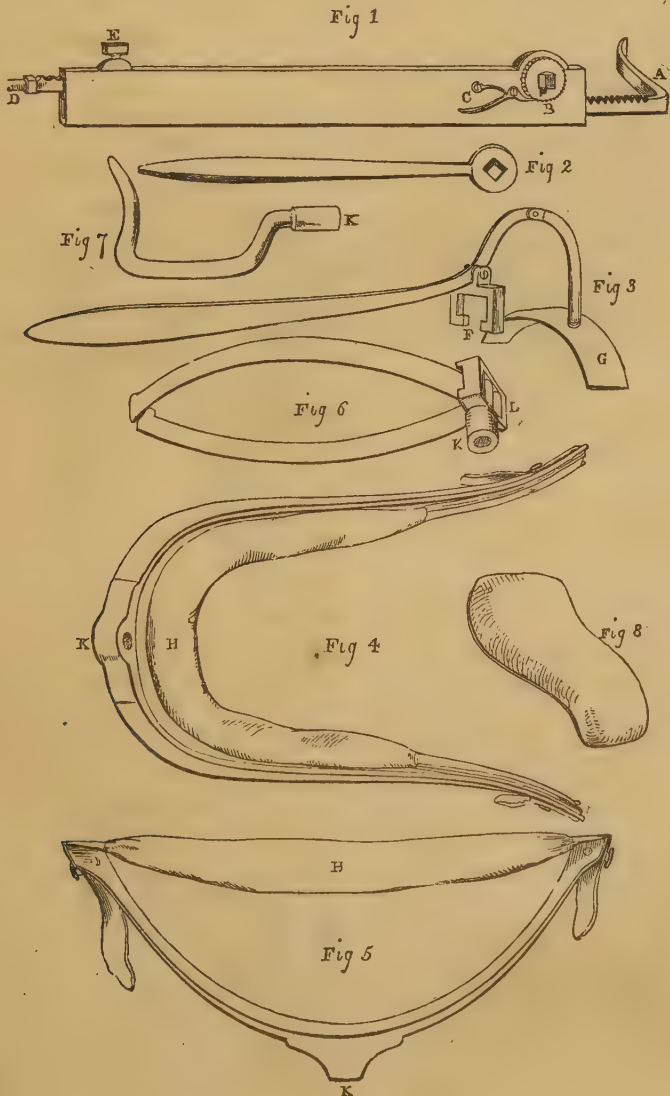
Division of the muscles of the thigh into classes—Mechanical actions of those muscles in fractures of the bone—Usual violation of the laws of mechanics in the treatment of such fractures—Necessary attention to fixed points in applying force to reduce luxations.

At our last lecture, we endeavoured to show wherein mechanical principles were often violated or neglected in attempting to apply them in the treatment of fractures and dislocations. It will be our endeavour now to show in what manner

they are to be applied to be conformed to the principles of surgery in the treatment of these injuries. In showing this, I am to avail myself of the use of the instrument which I now show you; and that you may readily comprehend the various modes in which it is applied, and the manner in which it operates, allow me to explain its mechanical arrangement. But let me first, however, lay down the indications which it is intended to fulfil, which are—

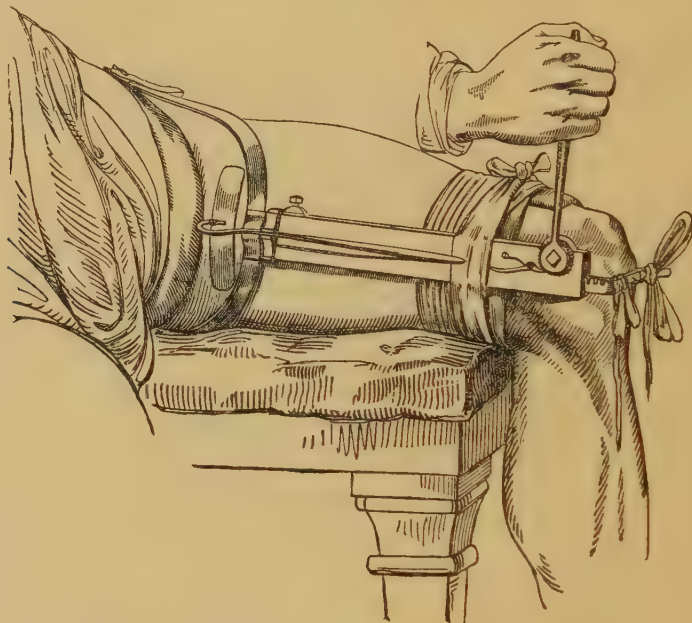
1. To establish a line of extension between any two given points of the body.
2. To furnish an extending force which is unlimited in principle, yet easily calculated, and which is perfectly subject to the will of the operator.
3. To be able to combine with the simple extending force a lever of the first or second order, according to the exigency of the case, to act transversely to the line of extension, yet without in any way interfering with it, subject, in like manner, to the will of the operator.
4. To fulfil all these indications without in any way interfering with the mobility of the limb.
5. To enable the operator to apply the force, whether direct or transverse, either rapidly or slowly, and to retain it on the limb during his pleasure.

These indications, we conceive, may be fulfilled in the following manner:—A brass box or case (fig. 1) contains a rack-bar A, and a pinion-wheel within the case, the teeth of which match into those of the rack-bar, the pinion-wheel within being at one end of the brass case; the brass case is about



thirteen inches long, and is divided in the centre lengthwise, so as to form two ways, one for the rack-bar, which is always the extending bar, and the other for the counter-extending bar, D, which may be drawn out and fastened by a small screw, E, at any desirable point. On the surface of the brass case, and on the same shaft with the pinion-wheel, is a ratchet-wheel, B, with a catch, C, corresponding to the teeth of the ratchet-wheel; the shaft of these wheels terminating in a square heel, to which the lever (fig. 2) is applied. On the end of the counter-extending bar is received, according to the case to be treated, one of the four forks, the thigh fork, (fig. 4,) the shoulder fork, (fig. 5,) the jointed fork, (fig. 6,) or the elbow fork, (fig. 7); these are each received on the end of the counter-extending bar by their sockets, K, K, K, K, and each in its turn, according to the case to be treated, is used as the counter-extending point of the instrument; while the end of the rack-bar, which is turned at a right angle with the part which is received into the case, is always the extending point of the instrument. There is also a side lever, (fig. 3,) which is used to apply force transversely to the line of extension, as in dislocations of the hip; the socket F is slipped on the end of the brass case at D, and when the thigh-fork, (fig. 4,) is received by its socket K on the end of the counter-extending bar D, the plate G passes between the thigh-fork and the roll H, hanging loosely between the arms of the fork. To these belong several belts, straps, &c., which are for taking hold of the limb, securing the instrument, &c.; but as you will readily understand their use, in applying the instrument,—and since the requisite instructions are always furnished by the manufacturers, Mr. Weiss and Son, No. 62, Strand, Lon-

don,—I will not take up your time in a description. Thus we have explained the several parts of the instrument. We will now apply it as to the four dislocations of the femur generally noticed by writers on luxations—viz., upward and outward on the dorsum of the ilium, backward into the ischiatic notch, forward and a little upward on the pubes, and under Poupart's ligament, and downwards and inwards into the foramen ovale; and if in all these positions of the limb we are able to apply the instrument so as to have any amount of power available which we require, and in whatever direction, too, that we need, and at the same time leave the limb just as free for motion as it was without the instrument attached to it, then do we not only have all the indications so far fulfilled, which are required of the instrument, but we also show in what manner mechanical force may be applied to a dislocated femur, without the extending point being fixed, as we found it to be at our last lecture, in using the pulleys, or with assistants, and against both of which we found weighty objections to lie. We will now apply it as to a dislocation upward and outward, the head of the bone resting on the dorsum ilii. We will first apply the belt around the thigh, immediately above the knee, with a loop lying on each side of the limb, and armed with strong cords; the instrument being arranged as before described, with the thigh-fork and side lever attached, and the roll suspended between the arms of the fork. We will now apply the instrument to the inside of the thigh, the roll pressing firmly against the perinæum, observing first to lay some soft substance between the roll and the skin, to prevent friction on the skin by the roll when we move the limb, such as wash-leather or cotton-flannel. Tie the cords closely around the



foot of the rack, which have previously been passed through the loops, one arm of the fork having passed on each side of the pelvis, upward and outward to the top of the ilium; let a strap, crossing the top of the ilium, pass around each arm of the fork, the strap having a buckle to it; let it make fast the arms in this position; and to press the instrument close to the inside of the thigh, let a thick bolster of cloth be laid under the strap crossing the ilium; tie a strap or handkerchief around the instrument and limb close to the knee; apply the lever and rack extension. Do you now wish to move the limb, to disengage the head of the bone from the gluteus minimus muscle into which it has been driven, while all of the power which you have applied is retained without the most trifling variation? you have the same liberty now to move the limb, which you possessed before the instrument was applied to it. Do you wish to throw the head of the bone from the dorsum of the ilium, while an assistant rotates the thigh on its own axis? the side lever is at your command, nor does it in the least affect the line of extension. Do you wish to apply force rapidly? describe one circle with the hand at the end of the lever, and you have near four inches of extension. Do you wish to relax all power instantly? apply your finger and press the catch which holds the ratchet-wheel, and quick as

thought the force is gone. Do you wish to relax it slowly? with one hand take hold of the lever, with the thumb of the other raise the catch from the ratchet-wheel, and so long as the hand is obedient to the laws of voluntary motion, so long will the power be subject to the will of the surgeon. Thus we have any amount of power which we desire; it can be applied in the most gentle and steady manner, or with the rapidity of voluntary motion; it can be relaxed instantly or slowly, and retained during the pleasure of the surgeon; nor can the unruly movement of the patient in the least affect the line of extension, or change the relative position of the limb, while they are both entirely subject to the will of the surgeon.

We will now apply the instrument as in a dislocation into the ischiatic notch. The instrument is applied in every respect as before, except that the arms of the fork stand more backward, and the limb nearer to a right angle with the body, that the head of the bone may be drawn towards the acetabulum. Here we have occasion to use the side lever early, to lift the head of the bone from the sacro-sciatic notch as the extending force is applied to bring it forwards from that deep depression to the acetabulum. Here, too, we have the same power, the same liberty to move the limb during extension, the same facilities for applying or relaxing either rapidly or slowly,

any amount of power which the surgeon shall choose to employ.

We will next apply the instrument as to a dislocation of the head of the bone on the os pubis under Poupart's ligament; and here we shall have occasion to use a lever of another order, that in which the body to be moved lies between the fulcrum and the moving power, while we shall also have the services of the same levers which we have already used if we require them. Now let it be observed, that the head of the bone is in its new position, out of the line of the upper third of the ilium, and the inside of the knee, some two or three inches; it lies above a transverse line passing through both acetabula about one inch. Let us apply the instrument in the same manner that we did, before, only observing to place a bolster of cloth under the strap crossing the ilium, sufficiently thick to firmly press the instrument against the inside of the thigh. It may here be observed, that the greatest amount of force to reduce this dislocation is generally required to operate transversely to the body, yet, of force to restore the normal length of the limb much will doubtless be required. Now suppose, while we are applying the extending force, we also gently, yet firmly, carry the instrument and limb outward. The instrument itself now becomes a lever; the strap passed around the arms of the fork, and crossing the dorsum of the ilium, now becomes the fulcrum; the head of the bone the body to be moved, and the surgeon gently applies his own force to the end of the lever as the moving power, while he at the same time can apply the lever to the shaft of the pinion-wheel to make extension; and should he require the aid, also, of the side lever, he could add to that already applied five times the amount. It will be here observed, that the very mode of applying power transversely to incline the head of the bone to the acetabulum, depends on the freedom from that restraint which the pulleys uniformly impose. Thus have we sufficiently shown the application of the instrument to this dislocation.

We have but one more in which to call your attention in luxation of the hip, and that one when the head of the bone is lodged in the foramen ovale; and here we require an entire change in the application of power, and, of course, in the direction of the instrument. Here the head of the bone lies below the acetabulum, and, consequently, we require force in the line of the limb for no other purpose than to allow the head of the bone to pass over the cotyloid portion of the ischium; but here, too, allow me to observe, in all the cases which I have seen, the rectus femoris and the adductor muscles were remarkably tense; indeed, I can hardly conceive how it could be otherwise, there being no muscle whose direct tendency is to throw the head of the bone outward to its normal position; it is therefore plain, that the greatest amount of force is required in a direction transverse to the shaft of the bone, and this force must be applied on the inside of the thigh. It will readily be perceived, therefore, if we increase the tension of the adductor muscles,—it being transversely through those that we are to act on the head of the bone by the force applied,—that it will be with the greatest difficulty that the force reaches that head so as to be likely to move it from its present position, especially since it is often, in those cases, I doubt not, that the head is driven through muscular tissue in its passage to the foramen; and it is the firmness with which the neck is embraced by the tissues around it, when the injury becomes one of long standing, which frequently so resists our efforts at reduction; and to increase the tension of the adductor muscles by extension must increase the difficulty. To apply force, therefore, transversely, relaxing the rectus femoris and adductor muscles to the utmost limit which may be consistent with the condition of other muscles, and to move the limb freely, allow the head of the bone to glide over that portion of the ischium which separates it from the cotyloid cavity more readily than to apply force in an opposite direction, with all the advantages of moving the limb. We will therefore apply the instrument transversely; and in doing it, let me observe, that here the force is applied in the same manner that it is by the pulleys, when used for this luxation, as may readily be seen by consulting that excellent work on Practical Surgery, by Mr. Ferguson. Nor does the power here applied possess any advantages over the same power applied by the pulleys in the case under consideration, except that in this the power is not so likely to be disturbed by the unruly movements of the patient. Nor, indeed, is the force so liable to vary during the operation. In all other respects, then, as far as I have yet been able to discover, for reducing this luxation, they may be regarded alike; yet, in these respects, in a grave luxation, those advantages are many times of no small importance. In this dislocation, instead of using the thigh fork, we now remove it

from the instrument, and apply the elbow-fork, (fig. 7,) by its socket, K, to the end, D, of the counter-extending bar. Apply a broad belt, or strap, with a buckle at one end, around the body, so as to make the ilium of the injured side the resisting point, the instrument lying flat and crossing the sacrum; let the broad belt be buckled round the fork, over the uninjured side, pass another strap round the upper part of the thigh of the injured limb, and under the broad strap at the groin; tie the strap passing round the thigh to the foot of the rack-bar; let both straps be tied to the instrument at the respective sides of the body; to prevent them from slipping from the instrument, let padding be laid between the instrument and the body, and between the straps and the body; now, by the lever we throw out the rack-bar, and consequently the head of the bone, while we are able to move the limb in any direction.

FOREIGN DEPARTMENT.

M. RICORD ON THE TREATMENT OF THE SECONDARY AND TERTIARY FORM OF SYPHILIS.

(Continued from p. 283 of the last volume.)

Pharmaceutical Preparations of Mercury.—Which are the mercurial preparations that ought to be preferred? Clinically speaking, mercury acts the more *mercurially* the nearer it is to the crude state. In giving, therefore, a mercurial compound in a syphilitic disease, we must recollect that the mercury is the element the action of which we wish to obtain. This action, however, must not be obtained too rapidly, and it is the more rapid the more purely metallic the substance is. The most desirable preparation is that which holds the medium between the metal in a crude state and the more easily soluble compounds. The proto-iodide of mercury is the preparation which I generally prefer for general treatment, as it appears best to fulfil the indications mentioned. It neither produces a local caustic action nor too rapid salivation. Sometimes it occasions the serous diarrhoea of which we have spoken, but never those gastric pinching pains which occasionally follow the long-continued employment of the bichloride in solution. If its administration is suspended, the effects also cease with extreme rapidity; indeed, it is more to this mercurial preparation than to any other that we may apply the aphorism—*"Sublatâ causâ, tollitur effectus."* Notwithstanding the theory of M. Mialhe, in accordance with which hydrargyric preparations ought to act the more efficaciously the more soluble they are, and the more easily they are reduced into the state of bichloride, we seldom use the bichloride, the bi-iodide, or the cyanide. We do not reject them, for they sometimes constitute valuable remedies, but reserve them for patients who are refractory to the action of other mercurial preparations.

In a pharmaceutical point of view, soluble preparations should be given in a liquid state, whilst insoluble preparations must be given in the form of pills. In the latter case, however, the various elements of the pill must be combined in such a manner that it may easily melt when arrived in the digestive visæ. In order to arrive at this result, we combine the inspissated juice of the lettuce and extract of conium with the iodide of mercury in the following proportions:—Iodide of mercury, one grain; inspissated juice of lettuce, one grain; extract of conium, two grains.

Mercury may be employed in frictions of the skin, in different states: soluble, as when the bichloride is used; or insoluble, as when mercurial or calomel ointment is rubbed in. Good results have been obtained by the use of baths containing corrosive sublimate, but in exceptional cases. Mercury may also be introduced into the economy by means of the respiratory organs, in which case cinnabar is used. Lastly, there is a peculiar mode of administering mercury, to which the name of "Method of St. Ildelfonse" has been applied. It consists in the use of drawers smeared with mercurial ointment. It is not necessary to say much to prove how ridiculous is such a system of treatment as a general rule. It rests, however, on a true principle—the possibility of acting mercurially by the skin, on the economy. We have, indeed, known mercurial plaster, applied over a considerable surface, promptly produce salivation, when all other methods had failed.

We have stated, that although acting therapeutically, mercury may produce certain accidents peculiar to itself. These pathological accidents must be corrected whenever they manifest themselves. With some persons the skin is so irritable, that they neither bear mercurial frictions, baths, nor fumigations. When this is the case, and it is deemed necessary to resort to these means, the irritating influence of the mercury must be modified by combining with its use

emollients, such as starch, gelatinous, or bran baths. But it is more especially when mercury is administered internally, that its action requires modifying and correcting. As we have stated, we prefer, generally speaking, the proto-iodide of mercury. Although a mild preparation, some persons cannot take the smallest dose alone, without being seized with diarrhoea. When this unfavourable predisposition exists, a more or less considerable quantity of opium must be added. Opium is an excellent corrector, and is the substance specially indicated in all cases in which mercury acts too rapidly or too locally on the digestive tube. Some authors have asserted that opium is an impediment to the specific action of mercury, a statement which we believe to be clinically untrue. So little is this the case, that their joint administration gives rise to the disappearance of syphilitic symptoms, even more rapidly than that of mercury alone, because the opium enables the mercury to be borne, and to exercise its specific influence. There is an enormous difference between mercury given alone, and acting as a purgative, or giving rise to intestinal salivation, and mercury given with that dose of opium which ensures its being tolerated.

With some patients, instead of occasioning diarrhoea, mercury gives rise to constipation, concentrating the intestinal vitality on the superior portion of the digestive canal. If the mercurial preparation contains opium, as is generally the case with our formulae, we suppress it, lest the action of the mercury should fly to the mouth and occasion salivation. Should the constipation still persist, a slight laxative ought to be given.

Antiphlogistic treatment has been lauded as a means of assisting the action of a mercurial treatment, or even of replacing its specific action. Such a doctrine can only lead to deplorable results. Syphilis, in poisoning the economy, exercises its deleterious influence on the blood, the composition of which it modifies, reducing the number of the globules. This is now an undeniable fact. Bleeding acts precisely in the same way, by diminishing the globules; whereas one of the most important conditions for the due efficacy of a treatment is, that it should not produce the same lesions as the disease. There is, however, now, no difference of opinion on the subject; it is generally admitted, that unless there be an absolute necessity, owing to the presence of accidental phlegmasia, bleeding ought to be severely proscribed in the treatment of constitutional syphilis.

What ought to be the regimen of patients undergoing a mercurial treatment? The same reasoning applies here as in the treatment of primary accidents. During the treatment of constitutional syphilis all stimulants should be avoided, solid as well as fluid. The diet ought to be simple, and modified according to the general state of health of the individual. Generally speaking, however, the diet of patients labouring under constitutional syphilis ought to be sooner strengthening than debilitating. Syphilis weakens, deteriorates, and destroys the organization. A mild, strengthening regimen, therefore, as a general rule, must be the basis of our treatment. In these diseases, other hygienic conditions, such as residence, &c., should not be overlooked. The rules laid down for the general treatment of scorbutic and scrofulous patients apply equally to that of the syphilitic: cold and damp are equally prejudicial to them. They should neither expose themselves unnecessarily to the influence of these depressing causes, nor should they remain closed up in a room, protected from the influence of the external air.

(To be continued.)

ON THE TREATMENT OF CHRONIC DISEASES OF THE SKIN.

By THOMAS HUNT, Esq. of Herne Bay, M.R.C.S.

THE nosology of cutaneous affections has been enriched by the contributions of Willan, Rayer, Wilson, and other modern writers; but the fruits of their labours have scarcely yet appeared in the important field of therapeutics. If the question be asked,—Do modern practitioners better know how to treat the more intractable forms of skin disease than did Willan and his predecessors, the answer, if correct, would at least reveal a very humbling truth. All the respectable writers on the skin agree in describing some of these complaints as “refractory,” “obstinate,” “notoriously rebellious to all modes of treatment,” and “so unmanageable as to deserve to be considered incurable.” These concessions, true or untrue, are discredit to our art; and it is hoped that the following practical remarks may at least pave the way for the removal of this opprobrium. And of this the writer

is the more sanguine, because he has no new or untried principles to propound, no novel remedies to propose. He only solicits a more careful observance of facts, and a more studious attention to established principles, in the treatment of cutaneous diseases, feeling assured that a marked improvement in practice, and a consequent diminution of human suffering in some of its most aggravated forms, would result.

A simple, but arbitrary arrangement of the chronic morbid affections of the skin, relating rather to their incidental condition than to their nosological locale, will serve to illustrate the principles to which allusion has been made.

I. All skin diseases are either attended with inflammatory fever, or not. This is the first question in determining their treatment. The distinction has been noticed by writers, but it is by far too frequently undervalued, and sometimes entirely overlooked in practice.

I propose, in the present paper, to consider, in the first instance, the treatment of the febrile form of chronic skin disease.

When a person presents himself for the cure of some chronic ailment of this sort, the first inquiry we have to make is, not whether the eruption be scaly, or pustular, or papular, but, has he fever? Do the well-known signs of pyrexia exist? The case may be one of lepra, psoriasis, eczema, acne, lichen, prurigo, or purpura; all these diseases, widely as some of them differ from others in their primary forms, may, and do occasionally co-exist with, if they do not originate from, a febrile condition of the system. And this must be corrected, and its return prevented by precautionary measures, before the disease can be said to be cured.

In adapting to the case in hand our depletory measures and cooling regimen, we must not overlook the circumstance that we have to deal primarily with an inflammatory disease, extending, in some cases, over a large surface of skin plentifully supplied with bloodvessels, which exhale, when in health, probably as much fluid as any serous membrane in the body, and exposed to an atmosphere which becomes an irritant in disease. In cases where, complicated with well-marked pyrexia, we find extensive inflammatory action, with a sense of burning, smarting, or itching in the affected portions of the skin, a quick, full, or hard pulse, and a plethoric habit, the blood taken from the arm will generally be found both cupped and buffy. Here a second or third bleeding may be resorted to at intervals of a week or ten days, and leeches should be applied occasionally to the red margins of the more recently affected portions. The patient must be kept on low diet, taking active aperients twice or thrice a week, with salines and antimonials in the interim, to the extent necessary for checking the vascular action without racking the stomach, an organ which it is important to keep in tune during the treatment of skin disease. This system must be followed up until the smarting and itching is in a great degree relieved, and the quiet pulse and tranquil nights suggest a different mode of treatment. The more inveterate cases of psoriasis, eczema, &c., generally require, in the first instance, this kind of management, which not only relieves the patient of much of the annoyance and suffering connected with local disease, but materially improves his general health. In the milder cases, general bleeding is rarely necessary, but the application of leeches can seldom be dispensed with if the habit of the patient be full. In asthenic cases a low diet alone will often reduce the febrile action and keep the disease at bay, which will nevertheless return whenever the patient indulges in wine, unless it be prevented by alterative treatment. In cases where the inflammatory type prevails, in spite of decisive treatment, a slight mercurial course is not inadmissible, but it is rarely required in the pyrexial forms of skin disease. Dr. Elliotson relates a case in which the colchicum effected a cure, doubtless by its power over the heart's action.

This system of cure is not adapted to all cases of *prima facie* inflammation of the skin. All the essential conditions of local inflammation, heat, pain, redness, and swelling, may possibly exist in the skin of a patient who requires tonic treatment and a generous diet; and it is difficult to point out any single symptom on which a decision can be founded in doubtful cases. The pulse is the best guide. When the skin is quickly susceptible, and predisposed to morbid action, mistaken treatment soon becomes manifest in the altered appearance of the disease. Ecthyma, a pustular eruption belonging especially to the abodes of poverty and want, has been known to take the place of lepra, when the latter disease has been treated by low diet after the subsidence of the febrile action; and supervening purpura will sometimes tell a similar and perhaps a sadder tale.

A common source of failure in the treatment of all chronic

diseases is the habit, on the part of the practitioner, of neglecting to watch the operation of remedies, acute cases naturally presenting more urgent claims on his time. Daily attention is necessary where inflammatory fever is present; for the permanent restoration of many of these cases by alterative tonics, will much depend upon nicely adapting the depletory treatment to the necessities of the case in the febrile stage.

When the febrile action assumes a low type, as it occasionally does in unhealthy spots, and among the lower orders, it need scarcely be added that depletion is dangerous; and here the treatment must be regulated by general principles.

It is a great mistake to suppose that this class of skin diseases, invariably of constitutional origin, can be cured by external applications, or medicated baths; but warm or tepid baths of fresh water are oftentimes a source of much comfort to a patient in the febrile stage of skin disease, and for purposes of cleanliness, are desirable in every stage. Vapour baths, and simple fomentations, fall under the same class of remedies. They are not curative, scarcely auxiliary, but they amuse and relieve the patient, who, sometimes in an agony of suffering, looks to the surgeon for comfort as well as cure. Sea-water, sulphur-fume, and hot-air baths, are generally injurious to the inflamed surface, and unnecessary when the inflammation has been subdued. Equally needless, and not seldom injurious, are the innumerable lotions and ointments which have been recommended in these diseases.

II. If no febrile action exists, the skin being cool, the pulse soft and quiet, or weak and feeble, the secretions natural, and the functions regular, the next question, with a view to determine the treatment, is,—Does the cutaneous disease before us present the character of syphilis? Had it not frequently happened to the author to meet with cases of syphilitic lepra and psoriasis, which had passed uncured and apparently unrecognized through several medical hands, and which eventually yielded to active mercurial treatment, (as well as the converse of this mistake—viz., cases treated by mercury which were not syphilitic,) he would not have thought it necessary to dwell upon this diagnosis. Several forms of chronic skin disease result occasionally from lues, but more especially the squamæ, and these arise originally from a primary sore, (personal or hereditary,) presenting the deep and foul slough, and the thickened hardened edges of the true Hunterian chancre. The scales appear most frequently upon the palms of the hands and the soles of the feet. Indeed, the author does not remember to have seen them in any other situation. They are generally of a reddish-brown or coppery hue. This shade, familiar as it is to the experienced eye, being modified by the natural complexion, is a somewhat fallacious mark of lues, but its appearance should always suggest search for further evidence of the syphilitic taint. If the patient have been the subject of the venereal disease previously, if he have suffered from copper-coloured blotches, ulcerated throat, periostitis, or iritis, and especially, if these have followed each other in the order herein specified, the disease must be treated liberally and perseveringly by mercury. In every stage (primary, secondary, and tertiary) of this peculiar variety of venereal affection, all other remedies are comparatively useless. None of these affections result from the abuse of mercury. They are all decidedly syphilitic; and mercury administered under favourable circumstances, with judgment, tact, and determination, will certainly cure them. The following cases will illustrate the efficacy of the practice:—

CASE I.—A naval officer had been for many years affected with a scaly eruption (psoriasis plantaris) on the sole of each foot, extending inwards towards the malleolus internus. He had tried various remedies without benefit, and had resolved to let the disease take its course. At length, however, the thickened part of the sole became so sore from the pressure in walking, that lameness ensued, and he consulted the writer. Upon inquiry, it appeared that many years previously he had suffered from blotches, nodes, and iritis. Mercury was therefore exhibited freely, and after the administration of three severe courses, the scales disappeared.

CASE 2.—A surgeon, in reducing a paraphymosis, contaminated his forefinger, upon which, at the root of the nail, a dull-red spot appeared, of the size of a split pea. This, in a few weeks, degenerated into a foul sore, and ultimately destroyed the gland. The absorbent glands of the upper arm became inflamed and swollen, but did not suppurate. At the end of six weeks, copper-coloured spots appeared in the forehead, which decided the nature of the affection, hitherto unsuspected.

The original sore healed under the first mild course of mercury; the maculæ and sore throat which followed yielded to

a second course; ulcers on the tongue, to a third; and a node on the tibia, to a fourth. But the most obstinate of all the sequelæ, was an attack of lepra palmaris in both hands, and a slight scaliness on the soles of the feet. These were apparently cured by salivation, but returned nine or ten times, eventually and permanently yielding to five grains of calomel every night for a month, and a drachm of strong mercurial ointment rubbed into the thighs night and morning for the same period, the patient having taken mercury in full doses (with an occasional intermission of a few weeks only) for more than seven years. The nervous system was slightly shaken for a time, but soon recovered, and he is now in excellent health, having been free from disease about eight years.

The extent to which the mercurial treatment was carried in this case, necessary as it was, other remedies having been tried in vain, is not insisted on as a rule for general adoption; yet it serves to show, that of all the forms of syphilis there is not one more obstinate if left to itself, or more tractable under active mercurial remedies, than the syphilitic squamæ. Nor has the writer ever had occasion to regret the liberal administration of mercury in similar cases, of which an unusual proportion have fallen under his notice.

A third class of skin diseases, those, namely, which are neither complicated with syphilis nor with fever, require very different treatment; but they are invariably susceptible either of absolute cure or of such a degree of subjugation as renders their attacks not only extremely rare, but so mild in character as scarcely to attract attention. This division comprehends, among others of minor importance, those formidable diseases of the skin which are generally reckoned incurable. The treatment of these cases will form the subject of a future paper.

ANOTHER CASE OF OVARIAN DROPSY SUCCESSFULLY TREATED BY PRESSURE, MERCURIALS, AND DIURETICS.

By ISAAC B. BROWN, Esq., Consulting Accoucheur to the Paddington Lying-in Charity.

APRIL 3rd, 1845.—Miss F. R.—, aged twenty-seven years, from Dover, paid me a visit in consequence of having heard of Miss E.—'s case from her friends at Rochester. I learnt the following outline of her case:—That she was engaged to be married about four years since, when her intended husband died, and the shock to her nervous system was so great that her health gave way, from which period she considers she can trace the progress of the disease; at all events, her most intimate friends remarked a gradual increase in size from that time.

In September last, whilst on a visit to Mr. Ray, of Milton, near Sittingbourne, Kent, that gentleman pronounced the disease to be ovarian dropsy, and advised her consulting some London physician. She accordingly came to town, and saw Dr. Little and Dr. Ramsbotham, and they both agreed that it was ovarian dropsy, and prescribed iodine internally and externally, gradually increasing the dose, and advised the use of a support in form of belt. Under this treatment her health continued good, but no local benefit accrued, yet the cyst did not increase in size.

In November she consulted Dr. Blundell, of Westminster, who also pronounced it ovarian dropsy, and prescribed a course of medicine, under which her health became seriously impaired, and as Dr. Blundell promised no favourable result as to diminution, or effect upon the tumour, she discontinued the treatment. She had had, during the last two or three years, more than one attack of inflammation in her left side, which was considered to be inflammation of the bowels, and which, under the judicious care of her medical attendant, Mr. George Rutley, of Dover, generally subsided in a few days, but always was attended with violent vomitings, and great prostration of strength, followed by considerable soreness over the bowels in the region of the left iliac fossa.

On examining her in the recumbent posture, I found a large tumour with circumscribed edges, filling the abdomen and pressing up the umbilicus, this tumour evidently containing fluid, and its walls feeling thicker than usual, although the surface of the whole cyst felt smooth and regular, with no protuberance or enlargement at any part; it appeared to come more from the left than the right side, but both sides were so much filled that it was difficult accurately to determine which ovary was really diseased. I found her chest perfectly healthy, but she was much emaciated around the neck and shoulders. On examination per vaginam I found the os uteri perfectly healthy, but pushed back and almost lodging on the recto-

vaginal septum, and the fundus was pressed forwards and pressing up under the pubes, coming in contact with the bladder, but I could find nothing abnormal in the structure of the uterus; menstruation had always been regular as to period, but too profuse in quantity.

This young lady arranged to return to town in a fortnight and place herself entirely under my care. She is engaged to be married to a clergyman, and is most sanguine of being cured by my plan of treatment.

22nd.—Came to town, and took lodgings near me, and I commenced at once the treatment:—Blue pill, one drachm; powdered opium, six grains. Make twenty pills, and take two every night, and the following mixture:—Bicarbonate of potash, one drachm; acetate of potash, four drachms; spirits of juniper, four drachms; tincture of squills, one drachm; distilled water to eight ounces. Mix. Take a wine-glassful twice a day; and to rub in the hollow of the thighs the blue mercurial ointment. Applied a flannel bandage, first measuring the abdomen.

25th.—Incessant sickness, and she consequently retains nothing on her stomach; severe pyalism; pain in the left hip, which is an old pain, and always produces sickness. Omit pills, and tincture of squills in the mixture.

28th.—Sickness relieved by rhubarb-and-magnesia draught, followed by prussic-acid mixture.

29th.—Very weak and exhausted, and mouth sore; the size of the body very much reduced, and tumour softer.

May 10th.—Mouth still continues sore. Added four drachms of acetate of potash to the mixture; passes more urine than the quantity of fluid drank; the tumour is altogether much softer. On comparing her measurement, I found it as follows:—

	Below umbilicus.		Over umbilicus.		Above umbilicus.
April 22	36 inches	...	35½ inches	...	34 inches
" 25	35 "	...	34½ "	...	33 "
" 29	34 "	...	33 "	...	32 "
May 10	32 "	...	31 "	...	30 "

Thus exhibiting a decrease of four inches.

16th.—As her health was now good, and her mouth under the influence of the mercury, I determined to remove the fluid by tapping the cyst. Accordingly, assisted by my friend Mr. Samuel Lane, and my brother, Mr. George Brown, I introduced the trocar midway between the umbilicus and pubes, and the fluid freely escaped, of a bright amber colour, and perfectly transparent, but not very albuminous. Having drawn off ten pints, I placed napkins, carefully doubled up, over the abdomen, so as completely to fill up the pelvic cavity, then passed a flannel bandage round, pinning it each turn, and gradually increasing the pressure each turn, till it was very tightly applied; then stitched a silk handkerchief, on each side, to the bandage, at its lower margin, and passed the end of the handkerchief round the thigh, and tied it firmly at the groin, thus preventing any chance of the bandage getting up. Gave her some sherry and water. Eight p.m.: Pulse 100; skin a little hot, and she complains of the bandage hurting her on the crest of the ileum. Gave her a draught, composed of one drachm of tincture of henbane; two drachms of spirits of mindererus, and an ounce of camphor mixture. Directed her to rub in the mercurial ointment to the thighs, and remain in the recumbent position.

17th.—Ten a.m.: Has passed a good night; bandage retains its position comfortably. Mutton-chop and sherry-and-water allowed. Eleven p.m.: Great pain in the left side, in the region of the ovary, which she describes as constant, producing violent retching. She says this resembles her old pain, which she suffered from some years ago, and neither blisters, leeches, nor anything else, gave her relief. Ordered her two grains of calomel, and one grain of opium in a pill directly, and a mixture of soda and prussic acid; to be taken every hour till sickness subsides.

18th.—Eight a.m.: Since two o'clock has had some good sleep; and the pain is rather better, and the sickness has abated; bowels not relieved. To take a rhubarb-and-magnesia draught at two o'clock, if needful.

19th.—Eight a.m.: Bowels have been freely relieved; pinned a towel tightly over the bandages, which have retained their places well; allowed her to take some weak gin-and-water.

20th.—Removed the bandages, and re-applied them as tightly as possible, with napkins doubled up under them, and over the bandages a towel firmly pinned down.

21st.—Bandages had not retained their position comfortably; re-applied them; first doubled up a book in a napkin, and pinned it down with a towel, and then over that a flannel bandage, fastening the lower edges by means of handkerchiefs

round the thighs. Catamenia a week before the proper period.—Evening: Has been very sick; bowels not relieved; gave her the prussic-acid mixture, which allayed the sickness, and ordered an aperient draught in the morning.

22nd.—Bowels not relieved; rejected the aperient draught. Ordered her two pills, composed of extract of colocynth and extract of henbane, and simple effervescing mixture, with prussic acid.—Evening: Bowels freely relieved; sickness has abated, and she feels exhausted and low.

23rd.—Tightened the bandages; pulse low, and she complains of great exhaustion. Ordered her a generous diet and Madeira wine, and added some decoction of bark to the mixture.

24th.—Nine a.m.: More exhausted than yesterday; pulse fluttering and very feeble; great restlessness and despondency; no pain anywhere. Allowed her port-wine at her own earnest request. Bowels freely relieved from two aperient pills.—Eleven p.m.: Much more exhausted and restless.

25th.—Eight a.m. Had some sleep, but every two hours took a glass of port wine; tongue dry and brown in the centre; consider her in great danger. Ordered her clear turtle soup every four hours, with port wine in the intervals, and to take some plain ice. My esteemed friend Dr. Bright saw her, and gave an unfavourable diagnosis.

26th.—Nine a.m. Has not been sick once since she took the ice; has passed a better night, and is on the whole considerably better; bowels have been slightly relieved.—Ten p.m.: Still going on favourably.

27th.—Rather better, but faint and hysterical.

28th.—Took off the bandages, removed the book, and applied only one napkin doubled up, and over that a flannel bandage; measures twenty-eight and twenty-seven inches; she is faint, easily depressed in spirits, and hysterical.

29th.—The same as yesterday; bowels freely relieved.

30th and 31st.—Sickness returned, and she vomits bile; skin hot, and pulse 120. To discontinue the wine and brandy which she had previously been allowed to take.

June 1st.—Skin hot; face flushed; pulse 120; sickness and vomiting of bile. To take no more soup, but to have a little beer at her own request. Bandages re-applied tightly; bowels distended with flatus. Ordered her the following mixture:—bicarbonate of potash, one drachm; citric acid, two scruples; syrup of orange peel, two drachms; tincture of cantharides, half a drachm; distilled water to six ounces. A fourth part every four hours; and two pills, composed of James's powder, two grains; extract of henbane, three grains; compound rhubarb pill, four grains, at bedtime.

2nd.—Passed a better night, but sickness has returned this morning; removed the bandage, and found on measurement that there was no increase of size, but the whole abdomen was very tympanitic and painful on percussion; did not re-apply the bandages. To continue the medicines as before.—Ten p.m.: Having felt uncomfortable without the bandage, I applied it again, but it soon produced sickness, which induced me again to remove it. Ordered her two pills, composed of five grains of compound galbanum pill, and half a grain of opium.

3rd.—Has passed a better night, but pain over the abdomen severe, with much tympanitis. Ordered ten leeches, to be applied directly, and afterwards, a linseed poultice over the entire surface of the abdomen, and removed every four hours. To take two pills, composed of five grains of compound galbanum pill, and three of compound rhubarb pill, and a mixture, composed of carbonate of soda and prussic acid. To have no more wine or brandy, but to take plain iced water.—Ten p.m.: Bowels have been freely relieved of a dark bilious matter; tympanitis considerable, with pain on pressure. Continue linseed poultices, and to take the same pills, with an addition of half a grain of opium.

4th.—Has slept well, and is very drowsy this morning; tongue brown and dry; not quite so much pain on pressure; has had no dejection, nor passed any water. To have an injection of turpentine, compound extract of colocynth, &c., in a quart of gruel; to continue the poultices; to have arrow-root and iced water, and to take two pills composed of equal parts of compound galbanum pill, compound rhubarb pill, and extract of henbane, every four hours. Pulse very feeble today.—Ten p.m.: Bowels freely relieved by injection, and the bladder emptied by catheter; abdomen tender, but not so tympanitic, and now there is distinct fluctuation, particularly on the left side. Ordered a blister to each side of the abdomen. Continue pills as before.

5th.—Blisters have drawn freely; tenderness less, but the body is increasing in size, and it is evident the cyst is filling. Bowels freely relieved.

6th.—My friend Mr. Samuel Lane saw her, and agreed with me that suppurative inflammation has been going on, and

that there is pus within the cyst, the distention of the abdomen causing great uneasiness to the blistered surfaces. We ordered an ointment spread on lint, of equal parts of soap, cerate, and mild mercurial ointment.

7th.—In much the same state as yesterday; complains of great pain on moving, with a sense of pulling from the swelling on the left side. This appears to arise from adhesions, which probably have existed for some time, as she has had more than one attack of inflammation in that side.

8th.—The same as yesterday.

9th.—Gave her some nitric acid in mixture.

10th.—Low fever and delirium; no pain in the abdomen; still a considerable quantity of nourishment is given.

11th.—Delirium and slow fever continues.

12th.—No sleep during the past night, although I gave her half a grain of acetate of morphia. My old and esteemed friend, Mr. Gilson, of Halstead, Essex, saw her with me, and considered her almost hopelessly ill. I gave her two ounces of port wine, and shortly afterwards, two grains of solid opium.

13th.—Has had some good sound sleep, and is decidedly better; not delirious; pulse firmer. She complains of great exhaustion, but is free from pain. Allowed her two glasses of port wine, and half a pint of beer.

14th.—Better. Bowels not having been relieved, gave two injections of gruel with common salt and castor oil, which relieved them freely. Delirium has entirely disappeared, and her countenance is less anxious, and more natural. Has taken some beer, roasted lamb, and port wine.

15th, 16th, 17th, 18th.—Daily improving.

19th.—Removed her to another bed in the same room.

July 8th.—For the last ten days she has complained of a hot, drawing, aching pain in the cyst; cannot lie on her side without great difficulty; has been, and is, wasting very much, indeed, her bones are merely covered with skin; tongue clean; pulse feeble. On the left side, where there has always appeared adhesions, and where there has been more prominence, there is now a well-marked pointed prominence, as if upon a slight indurament it would burst at that spot. The skin is tense and painful on touch. Feeling certain she cannot long continue in this state, I have strongly advised tapping the cyst. Her usual medical attendant, Mr. George Rutley, of Dover, saw her with me, and I gave the following opinion of the case:—"That the cyst was filled with pus; that the inflammation which supervened the tapping was suppurative inflammation; that if this were the case, there was increased hope, by drawing off the pus, that the cyst might remain a dead mass within the pelvis, and produce no mischief; at the same time, there was considerable hazard in the operation itself."

9th.—At three o'clock P.M. I was assisted in the operation by Mr. Samuel Lane, Mr. George Rutley, and my brother. I placed her on her back, on a sofa, with the left side, where the prominence was more marked, projecting over the edge of the sofa, a soft table-cloth placed round the body above the cyst, and steadily, although not tightly, kept there. I thought we should avoid any fainting or sudden shock to the nervous system by evacuating the cyst in this manner, and the result justified me in so acting. I passed the trocar in at the most projecting point, which was at the junction of one-third of a line from the superior spinous process of the ileum, with two-thirds from the umbilicus; immediately, pure pus escaped freely from the canula, which was allowed to come away steadily, care being taken that no air was admitted into the sac. The patient bore the operation remarkably well, without any faintness, and her countenance gradually assumed a more cheerful and happy character; after drawing off ten pints of this pus, the last pint or two being streaked with blood, we applied the same table-cloth gently round the body, and placed her in a bed of elastic springs, made for the occasion. Gave her some wine.—Eleven P.M.: Very comfortable; no pain; pulse firm, and 100; has partaken freely of food, and her countenance is cheerful. Ordered her a mixture composed of iodide of potash, decoction of sarsaparilla, and infusion of gentian, every four hours.

10th.—Has passed a good night, and expresses the relief and comfort as very great; pulse 108; no pain in the cyst, but she feels the want of support; I placed a soft pad over the cyst before pinning the towel round her; she has passed no urine, which she attributes to the recumbent posture.

15th.—Has been very comfortable and easy every day; this day, her sister told me "that the urine was thick, and when it had stood for some time, deposited a thick whitish-looking matter, resembling that which I had drawn off by tapping." On examination I found this really was the case, and the deposit resembled the pus evacuated from the cyst; the quantity

of fluid voided from the bladder considerably exceeds that taken with the food.

August 21st.—This patient has gradually improved, without a single drawback; the purulent matter has continued to pass off in the urine; appetite has been good, and she has gradually gained flesh; walks up and down stairs easily; walks in the open air for a quarter of a mile, and rides in a carriage for an hour or two at a time; she is now three weeks over her period for menstruation. I accordingly ordered her some Plummer's pills every night, and decoction of aloes every morning. Examined the abdomen, and can easily detect the collapsed cyst, about the size of a small fist, not at all painful on pressure; her measurement now is thirty and twenty-eight inches.

29th.—Still daily improving; the cyst smaller and more firmly contracted; not at all painful on pressure; urine free and natural; appetite good, and she is daily able to take exercise, both walking and riding. Ordered her to have a pair of Amesbury's patent supports.

30th.—Mr. Lane saw her with me, and carefully examined the cyst, which is steadily decreasing, and gave it as his opinion that it is permanently cured, and not at all likely to produce further uneasiness; he also agreed with me that nothing was likely to prevent this young lady being married a year hence. I gave permission for her to return to Dover.

Sept. 4th.—My patient this day took her departure for Dover by railway, in good spirits, and really in excellent health, escorted by her sister, who has been one of the best and most indefatigable nurses, through a long and trying illness, I ever saw.

Oct. 16th.—Received a letter from my patient, saying she had stayed a fortnight at Sandwich, and had returned home quite well. Had daily increased in strength, but not at all in size of body, as ascertained by measurement, and the collapsed cyst remains firm, and free from pain. I have since received a letter from Mr. George Rutley, who says, "I should have replied to your letter earlier, but have not been able to see my patient until to-day. I have thoroughly examined the abdomen, and cannot detect the slightest return of disease; her general health is perfectly good, and (in spite of my former scepticism) I am compelled to acknowledge her case as one of perfect cure." I feel, therefore, certain that this case is permanently cured.

I cannot resist the pleasure of stating that all the cases which I have hitherto published in the pages of THE LANCET continue perfectly well, and the last one—viz., that of Miss E—, of Chatham, has not only continued well, but the lady has since married, and is now some months advanced in pregnancy. I have other cases of cure, which I shall shortly publish, either in the pages of a periodical, or in a small book, the result of which will, I trust, convince my professional brethren of the truth of the treatment. I cannot lose this opportunity of thanking most sincerely those gentlemen who have given my plan of treatment a fair trial. Among the number who will probably be able to record cases of successful treatment, I may mention Mr. Henry Attenboro, of Nottingham, and Mr. Wm. Hunt, of Herne Bay.

Oxford-square, Hyde-park, December, 1845.

CONTRIBUTIONS TO THE PRACTICE OF MIDWIFERY.

By J. HALL DAVIS, M.D., Physician to the Royal Maternity Charity.

Uterine hæmorrhage at about the fourth month of gestation, continuing after the expulsion of the fetus—plugging probably indicated at an early period of the case—not effected until after the discharge of the ovum—further treated by the bandage compress, acetate of lead, ergot, application of cold stimulants, opium, and nourishing diet.—Remarks on the case—importance of a guarded opinion upon the question of pregnancy at an early period of gestation.

ONE morning, in the summer of 1843, a surgeon called upon me for my advice in the case of a patient who, believing herself to be between four and five months pregnant, had been attacked by uterine hæmorrhage, with slight pains in the hypogastric and sacral regions. My recommendation was, the observance of a strictly horizontal posture, the exhibition of cold drinks with cold applications, opium, and the acetate of lead; but that if the flooding should become profuse, and the orifice of the uterus not be sufficiently dilated for the escape of the ovum, he should plug the vagina. It was, however, arranged, at his suggestion, that in the event of that practice becoming necessary, I should be requested to visit the patient.

Hearing nothing of the case on that day nor on the following, I presumed that it had terminated most satisfactorily. To my surprise, on the evening of the second day from my friend's visit, I received a hasty summons, and repaired, without loss of time, to the patient's house. I found a large pool of blood upon the floor, the bedding saturated with the hæmorrhage; the patient pallid, pulseless at the wrists, and restless. She had within the previous hour given birth to a foetus, which had the aspect of one of about four months' growth. The placenta had not been entirely separated, the uterus was relaxed, and the bleeding was still going on. I removed the placenta with some little difficulty, but entire, exhibited draughts of cold water containing brandy, applied cold as a shock to the hypogastrium and vulva, and after grasping the uterus for some time in my hand, adjusted a firm bandage and compress, introduced the vaginal plug, made as I have explained in my former communications; a free ventilation of the room by the door and windows was secured, and I administered the ergot of rye. Through the just apprehensions and fears of her medical attendant for the result, and much to my personal inconvenience, I was left in sole charge of the case.

Not until the lapse of three hours could I venture to leave her. I then left her, rallied somewhat from her very alarming and critical condition, with strict injunctions upon the attendants that on no pretext whatever was the horizontal posture to be departed from for one single moment, until the visit of her surgeon (who never returned until two or three days after) or of myself.

Through the night she took, by my directions, beef-tea at intervals; and to quiet the restlessness, and secure her some sleep, I ordered her three quarters of a grain of the acetate of morphia.

On the following morning she had had some refreshing sleep of about two and three hours at a stretch; the restlessness had left her, (but to return on the following day;) the plug had been efficient; there had been no return of the hæmorrhage; the uterus was felt firmly contracted; the plug was removed.

The patient remained in a most prostrate condition during the twelve days following, with cold clammy skin, scarcely perceptible pulse at the wrist, restless, at times delirious, heaving respiration, delicately balancing as it were between life and death. The friends, who had heard and read much of the operation of "transfusion," were most anxious that it should be performed. I preferred trusting to the restorative effects of strongly nourishing drink. She was plied with beef-tea, containing one pound of the meat to every pint of the fluid, (after reduction,) to the extent of three pints in the twenty-four hours, which she took with avidity from a teapot. At the end of a week she loathed the beef-tea, and longed for milk and the yolk of new-laid eggs beat up together; these were allowed, and agreed with her perfectly. The carbonate of ammonia and some wine were given at intervals during the first week, when the latter was discontinued, as it seemed to occasion flushing, and increase the disturbance of the head.

She subsequently suffered greatly from the effects of reaction after large loss of blood, in the form of temporary blindness, spectra, throbbing headach, giddiness, with sensations as of a steam-engine and sledge hammer at work in the head. Under a continuance of a nourishing diet, at first fluid, afterwards solid, with an occasional opiate at night, which had the effect of relieving the exquisite sensibility of the nervous system, under which she laboured, and the exhibition of different tonic medicines, she gradually, slowly, but steadily, recovered her strength and health; but not until the lapse of six weeks after her delivery was she enabled to leave her bed for the first time.

Remarks.—I will first state, so far as I know, the history of the case, previous to my being sent for. The patient had applied for advice, on account of red discharge, then, however, to a slight amount, and unattended by pain, stating it to be her firm belief that she was pregnant. After a hurried examination, I presume it must have been, she was pronounced most positively to have made a mistake. Unfortunately for the opinion thus positively asserted, a foetus was expelled in about four days after. It would have been better, more politic, in the absence, possibly, at so early a period, of sufficient evidence of the fact of pregnancy, for the party consulted to have paused ere he delivered his positive opinion, and expressed doubts on the point. The case further teaches us the importance of not delaying too long the use of the plug. I was informed by the party consulted in the second place, and who sent for my assistance, that the draining had continued from the time of his calling upon me to the period of expulsion of the

ovum; and from the quantity which appeared upon the clothes and the bedding, and the subsequent effects upon the system of the patient, previously in good and strong health, I should judge to a considerable amount. I would have suggested the application of the plug some hours prior to delivery—its presence, with the aid from the exhibition of the ergot of rye, would have excited a much earlier and effective parturient action, and the very critical state of the patient after delivery, followed by a very tedious and painful recovery, would have been averted. The operation of stiletting the membranes is seldom very feasible or safe at this early period of pregnancy, and with the aid of the plug and the ergot united, I have never yet failed, where the dangerous position of the patient has rendered it imperative to induce expulsion of the ovum, in accomplishing my object.

Russell Place, Fitzroy Square, Sept. 2nd, 1845.

ON THE THERAPEUTIC INFLUENCE OF WARM MOIST AIR IN THE TREATMENT OF INFLAMMATION OF THE AIR-PASSAGES.

By GOLDING BIRD, A.M., M.D., Fellow of the Royal College of Physicians, and Assistant-Physician to Guy's Hospital.

(Read before the Medical Society of London, Sept. 29, 1845.)

So ripe is the present era of our professional history in the production of real or supposed novelty, and so rich appear to be the results of the labour of its members, in the development of new facts, or coining of new theories, that it requires some amount of moral courage to bring before a society of medical practitioners a subject which has neither the charms of novelty nor the attractions of brilliant and imposing hypothesis to recommend it. I believe it will be conceded by all whose experience has been sufficient to justify their offering an opinion, that it is by no means an unprofitable task to review, from time to time, the facts we have observed, and endeavour to eliminate from them some general rule or law, before the data enabling us to do so have faded from memory. It is, indeed, the spirit of the inductive philosophy of the great Lord Bacon, to go on patiently collecting *instances*, as he terms them, until a sufficient number are obtained to allow a general induction to be drawn, which induction may be considered as altogether, or very nearly, true, until other phenomena are observed which invalidate its accuracy. These remarks will not be considered irrelevant on introducing to the Society a subject apparently so thoroughly worn threadbare, as the consideration of the importance of attention to the functions and duties of the cutaneous surfaces, in certain diseases of the air-passages; especially when the old woman's spell, of a hot beer-and-treacle posset, and the more elegant prescription of the practitioner, of antimony and salines, with the pediluvium for the treatment of common catarrh, would seem to show that no fact was more generally admitted, or universally acted upon, than the necessity of an appeal to the skin in every variety of affections of the air-passages. If we, however, go one step further, and inquire after the rationale of this treatment, we encounter, *in limine*, the obscurity which conceals from us the nature of the special functions of the skin.

When we glance at the recognised duties of the different secreting structures of the organism, we are struck with the fact, that whilst all secrete certain elements in common, yet each appears to have a special function assigned to it, of eliminating some particular substance, either the result of metamorphic changes of the blood itself, or of the tissues formed from it. Thus, whilst water and certain modifications of albumen are excreted by all the discerning capillary structures, we find an immense predominance of nitrogenous elements in the secreta of the kidneys, of hydro-carbonaceous ingredients in those of the liver, and of carbonic acid in the pulmonary exhalations. Nay, even in those organs which pour out apparently similar secretions, a minute investigation proves that they are rather analogous than identical—a fact sufficiently demonstrated by the existing diversities of the different mucoid secretions of the body. So then is the great cutaneous covering of the body an exception to this apparent general law?—in other words, has it any special function? I cannot avoid expressing an opinion, that in looking after the unknown we have too generally neglected the known; and in seeking after a peculiar and independent function wherewith we dignify the skin, we have overlooked what appears to me to constitute the important part played by this great expanse of tissue in disease. Like all other glandular structures, the skin separates water from the blood, and, assuming the average weight of perspired matter to be equal to thirty-three ounces in twenty-four hours, the amount of water thus exhaled will be

rather more than thirty-two ounces and a half; still, it must be borne in mind, that more than water is thus excreted; the half-ounce of solids dissolved in the water constitute an important part of the secretion. Further, the inorganized pellicle, or cuticle, covering the exterior of our frame, is to be regarded as part of the true cutaneous excretion. But besides these liquid and solid ingredients, gaseous matters have been proved to be exhaled from the skin; carbonic acid, and, according to some observers, even nitrogen, being thus evolved from the body. It would be here quite out of place to allude to the minute evaporation of the solid matter dissolved in the perspired fluid; it will be sufficient to state, that besides fatty matter, albuminous, extractive, and saline matter, there exists a substance presenting no distant resemblance to urea, the most important element of the urine. In disease, we find these ingredients undergo a marked change, genuine urea being thus excreted in cases where the secreting functions of the kidneys are reduced to a minimum, as in morbus Brightii; uric acid being thus also got rid of in rheumatism and gout. Indeed, in a case of chronic and almost universal rheumatism, with eczema of the lower extremities, which I lately saw, in the practice of Mr. Clark, of Queen-street, abundance of microscopic crystals of urate of soda literally frosted the legs of the patient. In jaundice, again, the colouring matter of bile has been not unfrequently observed to stain the perspiration yellow; and, finally, a pigment, in every respect undistinguishable from the purpurine, which often gives the pink hue to urinary deposits, has exuded from the skin, and stained the linen of a carmine hue in some cases, especially during lactation, an instance of which I witnessed, some years ago, in the practice of Mr. Ramsbotham, of Amwell-street. From these briefly narrated data we may venture to conclude, that the true skin not only generates the protecting cuticle, and secerns an abundance of water, and some solids containing both hydro-carbonaceous (fatty) and nitrogenous matters, but is, moreover, endowed with the important office of performing a great compensating function for the other secreting and excreting glands of the body. Thus the skin can relieve and temporarily compensate for the deficient functions of the lungs, by exhaling carbonic acid; the kidneys, by excreting urea, uric acid, purpurine, &c.; the liver, by excreting elements of bile, fat, purpurine; the mucous and serous surfaces, by excreting water.

Important as thus must be the duties of the structure we are considering, it becomes much more so when we regard it independently of its depurating powers, and consider the large expanse of capillary network supplying it, constituting a large reservoir of blood. Independent of its physiological structure, the pathological uses of this tissue must be regarded as most important: thus, in congestion and inflammation of internal organs, what a powerful derivative agent we have at our command, when by properly applied means we induce a determination of blood to the peripheral vessels, and unload to a certain extent the distended capillaries of the affected viscus.

We have, however, not yet exhausted the physiological uses and duties of the skin; there is yet another remaining for our consideration, and to which attention has been particularly directed by a most ingenious and respected physician, Dr. Robert Willis. To explain the gist of the doctor's views, it will be necessary to remind the Society, that as absorption is presumed to be mainly carried on through the parietes of the venous capillaries, two conditions must necessarily exist for the perfection of the process—namely, that the liquor sanguinis of the blood contained in the capillaries should be of higher specific gravity than that of the fluid to be absorbed, and that the contents of the venous should be denser than those of the arterial capillaries. The importance of these conditions is at once shown by the well-known researches of Dutrochet, with which the members of this Society must be so familiar that it is merely necessary to remind them of the general fact, that when two fluids of different densities capable of mixing are separated by an animal membrane, as a piece of bladder, the lighter fluid, as a general rule, traverses the tissue to dilute the denser. Hence, if a saline solution be swallowed, its absorption into the venous capillaries will mainly depend upon its density, a dilute solution permeating the walls of the vessels by endosmosis, according to the law just alluded to; whereas, if of high specific gravity, the water of the blood will exude by exosmosis, to dilute the solution. Hence, by modifying the doses and strength of saline solutions, we can, almost at pleasure, excite catharsis or diuresis: the former occurring if exudation takes place from the capillaries; the latter, if imbibition into those vessels results. If the specific gravities of venous and arterial blood were the

same in the same individual, there would of necessity be an equal chance of absorption taking place into the arterial or nutrient, and the venous capillaries—assuming, of course, that no anatomical difference exists in the structure of these blood-channels.

By the separation of watery elements from the fluid in the arterial capillaries in the different secreting organs, an increased density of the returning venous blood must be the necessary result. To illustrate this, the density of the blood of the renal vein must be as much greater than that of the renal artery as would be accounted for by the water separated in the urine minus the solids dissolved in that fluid. From a large series of observations, it appears that the average density of venous as compared to arterial blood is as 1.053 to 1.050. The escape of water from the arterial blood in the arterial capillaries thus becomes an essential element in allowing absorption to occur. To use Dr. Willis's own words—"The ideas formerly entertained in regard to nutrition and secretion, as effected by open-mouthed capillaries, are no longer tenable, are no longer maintained; there is no such thing as an open-mouthed capillary vessel; every capillary artery ends in a capillary vein, and nutrition and secretion are accomplished by an electric attraction between the substance of the several tissues and organs, and the appropriate matters held in solution in the general nutrient fluid—the blood. But the blood still contained within its conducting channels being inefficient as a vivifying fluid, transudation of these channels by the plasma, or prepared nutrient element, is implied; and this is now known and acknowledged to take place abundantly at every point of the body; the spongy texture of the canals in which the blood is contained, particularly when put on the stretch by the injecting force of the heart, permits the freest transudation. But how, or by what means, does the fluid thus incessantly transuded find its way back into the circulation? That it should do so is obviously as necessary as that it should escape. The answer generally given to the question just asked is this—the exuded fluid returns into the veins by heterogeneous attraction or endosmose. And this is true. But the conditions to endosmose, in the sense in which that remarkable phenomenon is usually understood, are, the mediate contact of fluids of different densities, and no means have yet been assigned to physiologists for securing a greater degree of density in the returning current, than in the outgoing current of the circulating fluid."* The ingenious author of these remarks then claims for the skin the special function of increasing the density of venous blood by exhaling water from the arterial capillaries, and regards the evolution of that fluid as the proper office of the skin. I think, however, that it will be conceded, that so far from being a special or peculiar function of the skin, the high density of venous blood is a result brought about in an analogous manner, and to a varying extent, by all the depurating glands—the kidneys in particular. I regard the very scientific theory of Dr. Willis as a most important light shed upon the physiology of the glandular textures.

A retrospective glance at what I have advanced will show at once the position I wish to assume, that the skin differs from the other glandular structures in not having any special function, *quoad* any peculiar secretion, except that of the cuticular pellicle covering the surface; but that it possesses, like the kidneys, in an exalted degree, the power of separating a large quantity of water from the blood, and is endowed with the all-important function of being able to compensate, to a most remarkable degree, for the deficient performance of the duties of all the other excreting organs. Thus, within certain limits, and under given circumstances, an animal can breathe by the skin—can excrete the elements of urine by the skin—can depurate its blood of carbon by the skin; besides, by the aid of this organ, keep in full action the process of venous absorption.

The above remarks are offered as prefatory to a practice which promises to be of peculiar and remarkable value in certain diseases of the air-passages, especially in children. I am quite sure that every member of this Society must have felt repeatedly no little regret at the imperfect success of his treatment of cases of capillary bronchitis and pneumonia in children, especially when these diseases occur as the sequelæ or consequences of measles and whooping-cough. It is true, that were we to trust the accounts of parents, and even of those practitioners who, if there be any that yet remain ignorant of the inestimable value of the physical diagnosis of disease, we should be apt to regard inflammation of the lungs as not only the most frequent, but the most remedial disease

* Dr. Willis, in Medical Gazette, 1843-44, p. 4.

in the nosology. I need not, however, remark, that there is scarcely any term so vaguely employed as inflammation, especially of the lungs; and so long as pain is regarded, as it too often is, as a necessary indication of inflammation, and auscultation disregarded, our confidence in the frequency and curability of pneumonia of children, as shown by statistical reports, must be very limited.

(To be continued.)

ON PUERPERAL FEVER.

By Dr. J. M. WADDY, Physician to the Birmingham Lying-in Hospital.

(Continued from page 672.)

Dr. ROBERT LEE relates the case of a gentleman performing a post-mortem examination of a woman who had died of inflammation of the peritoneal coat of the uterus occurring a few days after delivery; the examination took place on the 16th of March, 1831; on the 17th he attended a lady, who was attacked with puerperal fever on the 19th, and died on the 22nd, and between this date and April 6th he attended two other patients, both of whom died from the disease in a malignant form. On the 30th of March he visited a young lady, seventeen years of age, who was suffering from pleuritis; he bled her from the arm with immediate relief; on the 3rd of April pain was felt in the wound, which gradually worked its way towards the axilla. Erysipelas took place on the inner side of the arm. On the 5th, the patient had been delirious in the night; pulse 160, and all the constitutional symptoms of erysipelatosus fever. On the 6th, patches of erysipelas had occurred on various parts of the body, all of which were acutely painful on pressure; pulse 160; restless; dozing; conscious when roused. On the 7th, pulse rapid; teeth and lips covered with sordes; somnolence and delirium. She died on the 9th. The body was examined. The median basilic vein, the one punctured by the lancet, had its coats thickened like to an artery, the inner surface redder than natural, and at the upper part had lost its usual smoothness; the mouths of the veins entering the basilic were all closed up with firm coagula of blood or lymph.

I have quoted this case at some length, but I do not think it of much value in proving the erysipelas of the last patient to be derived from the puerperal fever of the preceding cases, for most practitioners must have seen similar results from bleeding with a foul lancet, and I have a strong suspicion that in this instance the infection was conveyed by the lancet rather than by the doctor.

Had the case been free from this source of error, it would have been of much value in furnishing one of many sequences which point out erysipelas as the cause of puerperal fever, and show that the contagion of this form of fever can also communicate erysipelas to non-parturient individuals. This species of proof is both of an analytical and synthetical kind, and its results afford an evidence almost equal to that of mathematical demonstration. We shall bring some facts to show that typhus is also both a cause and consequence of another form of puerperal fever. We shall also prove that a form of puerperal fever arises from malaria; that it is occasionally of a periodic type; that it is epidemic, and that its contagiousness is questionable. If these facts be admitted, we are forced upon the conviction of the strict analogy and absolute identity existing between childbed fevers of this type and the periodic fevers of this and warmer countries.

Mr. Blagden relates a case in which a midwife had a severe attack of erysipelas of the face, a few days after attending in labour a fatal case of inflammation of the absorbents and uterine appendages.

Dr. Robert Lee states, "In the autumn of 1829, a short time before the epidemic broke out in the British Lying-in Hospital, which led to its being closed for several months, two children died of erysipelas. Another fatal case occurred in the course of the epidemic, and on examining the abdomen, we found the peritonæum extensively inflamed, with a copious effusion of sero-purulent fluid. A few days before the re-appearance of the disease in the hospital, in December, 1830, an infant died of erysipelas of the internal organs of generation and abdomen, and the same diseased state of the abdomen was observed. Another infant was attacked with gangrenous erysipelas of the right forefinger on the 28th of December, whose mother had been cut off on the 24th by uterine phlebitis."

Dr. Ingleby states, that "two eminent practitioners conveyed the disease to a number of puerperal women in succession, in consequence, as is supposed, of having visited patients affected with typhoid diseases; and a physician of eminence assured me that he had succeeded in tracing a number of cases

of puerperal fever to a practitioner affected with low fever, but who continued to see patients until the fever compelled him to secede for a time from practice. I have myself frequently observed different infectious diseases going on in the same family. The following are the most striking of these instances:—a lady was attacked with puerperal fever of the most formidable character, from which, however, she recovered. During her illness, she was attended assiduously by her two daughters, the eldest of whom, when the fever had been in full force for two days, was seized with typhus of the worst kind; and on the following day the second daughter became alarmingly ill with fever and putrid ulceration of the throat. Both girls, though apparently hopeless, ultimately recovered. During the period of this illness, several members of the family were attacked with simple feverish disorders. In a second instance of puerperal fever, the servant was attacked with erysipelas; and in a third instance, the nurse was compelled to leave her situation in consequence of a severe erysipelatosus affection of the throat."

Dr. Gordon remarks, "the circumstance which excites the infection of puerperal fever seems to prevent typhus."

Dr. Collins says, "A patient in typhus fever was admitted into one of the labour wards, where she remained for some hours. The ward contained four beds. The three women occupying the other beds were attacked with puerperal fever, of whom two died." Dr. Collins states, that "puerperal fever has also become epidemic in our hospital upon several occasions when typhus fever prevailed in the city, and at other periods, when erysipelas was frequently met with."

Mr. Ceely remarks, "that the puerperal fever and the prevailing erysipelas were identical, and each capable of producing the other, was soon placed beyond doubt, by the fact of every puerperal case giving rise to numerous cases of the common epidemic in the persons of the nurse and attendants."

M. Tonnellé states, that "the disease frequently occurred in an epidemic form at the Maternité, particularly in January, May, August, September, and October, 1829, when it was particularly severe. It did not seem to depend upon the weather, nor could it depend upon the vitiated atmosphere of the hospital, for this acts constantly and uniformly. There was no reason whatever to believe that the disease spread by contagion, for patients in insulated wards, and who had no communication with other women, were attacked with puerperal fever often immediately after delivery." M. Tonnellé refers the cause of the disease to some secret atmospheric influence.

Mr. Humble relates a case in *THE LANCET* for 1842. He was requested to visit a Mrs. L— on the 17th of September, 1841. She had been ill for two or three weeks with severe typhus, conjoined with an inflammatory affection of the brain. On the 22nd of September her daughter, Mrs. H—, was delivered in her mother's room. On the third day she had an attack of puerperal fever.

My friend Dr. Evans informs me, that he attended upon a lady who had an attack of scarlet fever the day after her confinement; the pulse soon rose to extraordinary rapidity, and at the end of the week she died.

The wife of a medical practitioner in Birmingham had an attack of puerperal scarlatina, from which she ultimately recovered.

In a notice of Professor Oslander's work in the *Medico-Chirurgical Review*, I find it stated, that "often the disease commences as an attack of meningitis, or of erysipelas, or of rheumatic swelling of the joints, &c., and under any of these forms it speedily proves as alarming as when the uterus and peritonæum are primarily affected." The professor has therefore, amongst his different forms of puerperal fevers, puerperal fever with erysipelas, puerperal fever with arthritic swelling, and puerperal fever with typhus fever.

Professor Schönlein considers that the contagion of puerperal fever possesses the greatest analogy to that of hospital gangrene. "He grounds this opinion on the remarkable similarity which he has observed between ulcers in the puerperal state and hospital gangrene. According to some investigations which he made some years ago at Würzburg, it would appear that the one could be developed from the other affection."

Dr. Rigby, in his able review of Mr. Moore's work "On Puerperal Fever," informs us that a woman who washed the linen belonging to a patient who had sunk under a short but violent attack of puerperal fever, was seized with diffuse cellular inflammation of the hand, which terminated in extensive sloughing.

For further information on the nature and constancy of accompanying and concurrent diseases, I beg to refer to the

writings of Hey, Moore, Collins, Ceely, Storrs, Blackmore, &c. I think, however, that the evidence now adduced is sufficient to prove the correctness of my propositions—namely, that there are puerperal fevers of the same type and origin as the concomitant fevers of the season and locality.

Dr. Robert Lee finds contagion a very knotty point to be got over by his hypothesis of the local origin of puerperal fevers. He quotes Tonnellé and Dugès:—"The evidence of Dugès against the doctrine of contagion is not less strong, for he states that in numerous instances pregnant women have been placed in the infirmary, where they were surrounded by cases of peritonitis, without imbibing the germ of the disease; and that still more frequently he has seen women newly delivered brought with some other complaint into the infirmaries, who did not contract the reigning malady, notwithstanding the miasmata which surrounded them. In no instance has he observed a midwife charged with the care of two women at the same time, communicate peritonitis from a sick to a healthy individual, as is reported to have happened in London; and never has this inflammation been propagated from patient to patient in the wards set apart for the reception of healthy women."

M. Dugès evidently supposes that some London practitioners believe that common peritonitis is identical with puerperal peritonitis—improperly so called; and as the latter is occasionally contagious, he wonders the other is not. Surely this argument does not assist Dr. Lee's case.

Dr. Lee further remarks, that "in the Dublin Lying-in Hospital, the Edinburgh Infirmary, the General Lying-in Hospital at Vienna, and in most of those in this metropolis, it has raged as an epidemic at different periods with great violence, and has appeared to be propagated by contagion." In the Aberdeen epidemic Dr. Gordon says, the disease attacked such women only as were visited or delivered by a physician, or taken care of by a nurse who had previously attended patients affected with the disease. I had abundant proofs that every person who had been with a patient in the puerperal fever, became charged with an atmosphere of infection which was communicated to every pregnant woman who happened to come within its sphere." Mr. Hey doubts the contagiousness of the Leeds epidemic, and states, that in many cases of puerperal fever, no channel whatever was discoverable whereby the disease could have been conveyed. Dr. Lee, in a *résumé* of this evidence, remarks, that "it is difficult to reconcile this conflicting evidence and the facts we have observed, though they have led us to adopt the opinion that the disease is sometimes communicable by contagion, yet they have not perhaps been sufficiently numerous, and of so decisive a character as to dispel every doubt on the subject of its contagious or non-contagious nature; it is but proper to state, that it has occurred in many cases in the most destructive form when the idea of contagion could not possibly be entertained." These admissions do anything but accord with Dr. Lee's celebrated proposition, previously quoted, "that inflammation of the uterus and its appendages must be considered as essentially the cause of all the destructive febrile affections which follow parturition, and that the various forms they assume,—inflammatory, congestive, and typhoid,—will, in a great measure, be found to depend on whether the serous, the muscular, or the venous tissue of the organ has become affected." I maintain that no fact can be brought to stand in opposition to itself. A disease cannot be contagious and non-contagious if inflammation is the cause of all puerperal fevers. Contagion cannot be a cause of any part of them: where the doctor has learnt his logic I cannot tell. On reviewing his proposition and admissions, I think he will be convinced that they do not and never can agree. Nature is not to be bent to preconceived opinions; she is to be investigated by her simple, universal, and omnipotent laws. The fact of contagion and non-contagion mark, not a variety of disease, but distinct classes of diseases; small-pox, scarlet-fever, measles, the plague, &c., are always contagious. Concurrent circumstances may modify, subvert, prevent, or destroy the contagion, but the principle of contagion remains as a permanent investment, for ever interwoven and associated with, and forming a part of, the disease. Make contagious diseases to be non-contagious, and the reverse, and you form new diseases, and you effect that which no human power has yet accomplished, and what I venture to predict none will ever accomplish. When it is said that one and the same disease is contagious and non-contagious, it sufficiently demonstrates that this disease, improperly so called, must, at least, be two diseases belonging to two natural classes or divisions of diseases—must arise from different causes, obey different laws, and be productive of different results.

Birmingham, November, 1845.

NARRATIVE OF A CASE OF TRAUMATIC TETANUS, WITH RECOVERY.

By HUMPHRY SANDWITH, M.D., one of the Physicians to the Hull General Infirmary.

The following case was at first under the joint care of Mr. Sharpe and Mr. Gibson, Surgeons, to the latter of whom I am indebted for the following sketch of the earlier history, symptoms, and treatment:—

John B—, aged 30, while unfastening the trace from a truck about noon, on the 31st of August, 1845, was struck by a horse, by which blow he was rendered insensible. On my arrival, I found the circulation depressed, the face pale, and much swollen. There were two small wounds near the right cheek bone, which had penetrated through to the mouth, but I could not detect fracture of any of the facial bones. I ordered him to be immediately taken home, and visited him again in about half an hour, when I found the circulation increased, and sensibility returned. Considering reaction not to be sufficiently set up, I did not bleed him, but ordered evaporating lotions to be applied to the head and face, along with a dose of calomel and colocynth, and a purging draught to be repeated every three hours until the bowels were freely acted on. In the evening he was seen by Mr. Sharpe, when the circulation had recovered its balance, and he was bled from the arm to twelve or fourteen ounces. All the symptoms from that time were favourable, and in the course of five or six days the patient was in a convalescent state, the wounds healing kindly. On the tenth day the wounds were perfectly healed, and nothing now remained but a slight aching pain in both cheeks, which was relieved by an anodyne embrocation.

On the 27th of September, at nine o'clock in the evening, I was suddenly summoned to visit him, when, on inquiry, I found that he had exerted himself during the afternoon and evening to excess, which had induced great pain in the head and back. On my arrival, I found his jaws perfectly closed, with occasional spasmodic contractions of the muscles of the back, and rigidity of all the extremities, this recurring at intervals of three or four minutes. The action of the heart was very languid, feet cold, pupils dilated, skin clammy, and bowels confined. I also learnt that he had suffered from slight pains in the back and limbs during the day, and experienced some difficulty in performing the act of mastication. I ordered twelve leeches to be applied to the temples, a blister down the course of the spine, and the following:—Chloride of mercury, twelve grains; muriate of morphia, four grains; potassio-tartrate of antimony, two grains. Mix and divide into six papers; one to be taken every alternate hour. Also a turpentine enema to be administered immediately.

28th.—Early in the morning he was seen by Mr. Sharpe, when there was no remission of the symptoms. The pulse was a little full and quick, with general feverish action. The powders were ordered to be continued, a tobacco enema administered, half a drachm being infused, and the following powder to be given immediately:—Chloride of mercury, five grains; powdered compound extract of colocynth, five grains; croton oil, one drop. Mix into powders.

On the same day, Sept. 28th, at three o'clock P.M., I was sent for in consultation, and met Mr. Sharpe. I ascertained from the patient's wife that he had exposed himself a good deal in a cold damp atmosphere on the 26th and 27th. He had all along felt mastication difficult from the wound at first, and from the induration surrounding the cicatrices afterwards; but on the afternoon of the 27th, so great was the stiffness about his lower jaw, that he suddenly expressed his strong persuasion that it was lock-jaw. Towards evening the locking was complete, accompanied with severe pain in the loins, which he had felt the whole of the day before also. Suddenly starting from a state of stupor as he sat on his chair, his head was forcibly drawn backwards, he lost his balance, and fell on the floor, greatly bruising the opposite cheek. He was raised from the floor by his friends, and replaced on his chair, but was unable to preserve his equilibrium owing to the spasms, which drew him backward, and he was accordingly put to bed. He was at that time for the most part insensible. I also learnt, that since the accident he had taken but a moderate allowance of food, from the difficulty in masticating it, owing to the pain in the cicatrix. Leeches had been applied twice around the wound.

The patient was now obviously suffering both in body and mind: his countenance indicated depression and dismay; he was taciturn, but on being interrogated complained of pain in the loins and everywhere; the conjunctiva of both eyes was redder than natural, and the pupils less dilated under the

shade of the hand than natural, though not extremely contracted; tongue foul; pulse 80, and full. We agreed upon employing the lancet, mercury, antimony, and aperients, in combination. Bleeding (in the upright position) almost to faintness, (about fourteen ounces.) Calomel, two grains; potassio-tartrate of antimony, quarter of a grain, acacia powder, one grain: to be taken every alternate hour. Strong mercurial ointment, half a drachm, to be rubbed in every alternate hour. Saline senna mixture, one ounce, every fourth hour.—Nine P.M.: Had slept since our last visit two or three times, half an hour at once: now feels easier, and speaks and looks more cheerfully; skin warm; lips red; pulse 86, rather full; no evacuation from the bowels; had made water; no size in the blood; no excess of crassamentum, nor undue tenacity or firmness; felt less rigidity about the jaw. Bleeding (in the upright posture) to fourteen ounces, (almost to fainting.) The calomel, tartar emetic, and mercurial inunction, to be continued, with the senna mixture. To give also half-grain doses of extract of belladonna in solution with each of the powders. Also to administer an injection of spirits of turpentine and castor oil (an ounce and a half of each) with gruel, the bowels being sluggish. The urine tested by heat, no albumen. The patient could open his jaw a little after the second bleeding; pupils more dilated.

29th.—Eight A.M.: Blood last taken exhibited none of the usual signs of inflammation. The patient had passed a comfortable night, and slept the greater part of it; pain in the loins removed; mind more tranquil; feels faint and weak; pulse 88, softer; pupils more dilated; tongue foul, but moist; inner gums slightly tender. Medicines had been given once only in three hours. Turpentine injection acted freely.—Three P.M.: Jaw continues free; mouth very sore; no pain; complains of great faintness; spirits a little depressed; has kept awake until very lately, and is now dosing; coughs and hawks up viscid mucus from the bronchi and fauces; urine with a pinky deposit and acid reaction, reddening litmus paper. Reduce the calomel to half-grain doses; give tartaric acid of antimony in quarter of a grain doses as before; castor-oil, six drachms, immediately, and repeat the turpentine enema after two hours.—Nine P.M.:—Bowels had acted before he took the oil, nevertheless it was given, and followed by the injection, which conjointly freed the bowels of much dark-coloured secretion; complains bitterly of his mouth; jaws free; but has had once this evening a twinge of pain in the loins; skin hot; pulse 96, and bounding. Thinking there was too much re-action in the vascular system, we had the patient raised, and bled to eight or ten ounces, which softened the pulse without producing syncope. He expressed relief in his feelings from the bleeding. The blood had the same characters as before.

30th.—Morning: Has had a most tranquil night; took the medicine once in three or four hours; is perfectly free from pain and spasm; pulse 84, and perfectly soft; skin natural; expectorates with freedom; bowels rather torpid. Repeat six drachms of castor-oil immediately, and after three hours the turpentine enema. Continue the other medicines once in three hours.—Evening: Bowels had acted well; skin cool; pulse soft.

Oct. 2nd.—Having been summoned to a distance, I did not see the patient again before this morning. No trace of tetanus left; complains of pain in the cicatrix and cheek-bone when he moves his jaw. His medicines, which have latterly been taken irregularly, so nauseate him, and he so loathes them, that they were abandoned for a simple saline, and chicken-water allowed. A narcotic ointment applied over the cicatrix.

7th.—Is quite convalescent, excepting some persisting pain in the cicatrix and os malæ. Fomentations ordered, and leeches if necessary. He sits up on the sofa.

Remarks.—Having latterly witnessed three post-mortem examinations of the spinal cord in traumatic tetanus, in all of which there were traces of hyperæmia in the nervous mass or its membranes, and in which, though topical depletion of the spinal column was employed, the chief reliance had been placed on morphia and cathartics, I resolved on the adoption of a more decidedly antiphlogistic course at the first opportunity. All the three cases alluded to had occurred at the Hull General Infirmary, and in one of them, Mr. Wallis (who intends to publish an account of them, with coloured sketches of the medulla spinalis and its investments) contrasted the spinal marrow of the tetanic patient with that of one who had died the same day of a disease not involving in any way the nervous centres. In this and the other tetanic cases, there was increased vascularity of the cellular mem-

brane surrounding the theca vertebralis, together with increase of fluid within the theca, and the tunics, as well as substance of the medulla, were extremely vascular. But when transverse sections or slices of the spinal marrows of the tetanic and non-tetanic patients were both submitted to a microscope of immense magnifying powers, the greatest difference in the two structures became apparent. In that of the tetanic patient the vascularity was in excess as well externally as internally, in the grey as well as in the medullary matter. The medulla of the non-tetanic patient was not only without signs of marked vascularity, but had a more granular appearance; whereas that of the tetanic, on the contrary, had a more areolar or reticular aspect, and looked softer and more spongy. Thus we had presented to us, not only palpable hyperæmia, (which, as many pathologists believe, may exist in various structures during life, and yet leave no positive trace behind,*) but also a real modification of structure characteristic of inflammation, the change having occurred in the very system of nutrition of the nervous tissue.

I am aware that a few observers, on the ground even of a reference to the results of analysis by the scalpel, have objected to the doctrine of hyperæmia of any part of the nervous system in traumatic tetanus. Thus, Dr. Gerhard, of Philadelphia, states, that he has examined the brain and spinal marrow in ten or twelve cases, and that he "could not detect any lesion, which seemed to have the slightest influence upon the production of the symptoms."† Sir Benjamin Brodie and others have made a similar observation. Two replies may be made by way of neutralizing this allegation, both of which appear to me of great weight. In the first place, to adopt the language of Dr. Cowan, (spoken generally, and not in reference to this particular subject,) "the narrow limits of unaided sense are again marvellously enlarged by microscopical discovery, our past acquisitions regarded as elementary and incomplete, and the whole subject is again to undergo renewed and unexpected revision."‡ In short, the refined examination of nervous structure commenced by Ehrenberg, with the aid of the microscope, promises to throw a stronger light on its pathology even than it does on its physiology. In the next place, post-mortem examinations of tetanic patients have been, mostly, much too limited, the brain and spinal marrow having been usually alone examined, and other portions of the nervous system having been comparatively seldom explored. Before the doctrine of hyperæmia of some part of the nervous system in traumatic tetanus can be considered as disproved, we must have the whole of the nervous system examined, and examined microscopically. This negative mode of reasoning is strengthened by much positive proof educed by the scalpel, that different parts of the nervous system are found after death in a hyperæmic condition. "In the greater number of observed cases," says Dr. Dunglison, "hyperæmia of the medulla or its membranes has been found on dissection." Even Mr. Curling frankly admits, that "serous effusion, with increased vascularity, is generally observed in the membranes investing the medulla spinalis, and also a turgid state of the bloodvessels about the origin of the nerves."§ Dr. Saunders also states, as the result of his anatomical inquiries in tetanus, that if any muscle, voluntary or involuntary, has been affected with spasm, it is found, on examination, that the nerves which supply that muscle are covered with turgid vessels at their visible origins, or where they appear to set off from the brain, medulla oblongata, or spinal marrow; but that the nerves serving the muscles which have not laboured under spasm or convulsion, are free from turgid vessels.||

The observation of Mr. Swan, that the ganglia of the grand sympathetic nerves are the parts of the nervous system, to which irritation arising in the intestinal canal tends, and from which it proceeds to the rest of the nervous system, constitutes another link in the chain of evidence confirmatory of the hyperæmic theory of tetanus. Irritation set up in those ganglia obviously disturbs the capillary circulation in them, and hence probably the spasms.¶ In the case which illustrates Mr. Swan's remark,—one of acute idiopathic tetanus,—"the villous coat of the small intestines throughout had the marks of having been in a state of great irritation, many very vascular patches were observed on it, and it was loaded with a green-and-yellow slime and mucus." Along with these appearances in the small intestines, he records, that "in all the ganglia of the grand sympathetic nerve there existed decided marks of irritation. The vessels usually pale and colourless

* Dunglison's Practice of Medicine, vol. i. p. 74.

† Ibid, vol. ii. p. 330.

‡ Transactions of the Provincial Medical and Surgical Association, N. S., vol. i. p. 4.

§ Curling's Treatise on Tetanus, p. 47.

|| Edinburgh Medical and Surgical Journal, vol. xvi. p. 474.

were injected with red blood, and the same was observed in some of the intermediate portions of the nerve. The left semilunar ganglion exhibited a few vessels, but the right was injected in a beautifully minute manner, quite as much so when seen through a magnifying glass, as the conjunctiva in a state of high inflammation.* This fact harmonizes with an interesting exhibition of the highly congested state of the ganglia of the sympathetic system in cholera patients, as shown to me by the late Dr. Mackintosh, of Edinburgh, in his extensive museum of morbid anatomy. The phenomena in both cases throw the strong light of analogy on the assumed hyperæmic condition of the nervous centres, or of the sympathetic system, or of the nerves immediately connected with the seat of injury in tetanus; the spasmodic contractions both in tetanus and cholera apparently owning a similar cause.

The doctrine of hyperæmia, in one form or other, and in varying degrees of intensity, as essential to the tetanic spasm, is further countenanced by the treatment which has proved most successful. Opium, when used alone and without adequate depletion, and other sedative remedies, has been pushed to the most desperate lengths without any advantage, I fear with injury to the patients. Its effect, so employed, must be to promote a hyperæmic condition of the nervous centres, and thus to aggravate the disease. Dr. Holland has acutely remarked, that "it is certain that there is a character in some inflammatory diseases, and a time probably in all, where this remedy (opium) may, safely and beneficially be admitted."* That time, in tetanus, I believe to be, not in an early stage, but after a powerful impression has been made on the vascular system by lowering remedies. The advantage contemplated by Dr. Holland in the well-timed use of opium, is "to lessen what remains of excess in vascular action." All that both Dr. Graves and Dr. Holland predicate of the advantageous combination of opium with tartar emetic in delirium tremens, and in certain states of cerebral affection in fever, applies forcibly to their combined use in morbid conditions of the nervous system in traumatic tetanus, after adequate depletion, general or local. Opium was thus beneficially employed in Mr. Gillard's case, as related in the *Provincial Medical and Surgical Journal* for August last. Its use in that instance was preceded by five general bleedings, aided also by calomel and tartar emetic. In the case above described I gave the preference to belladonna, from its virtues in allaying spasm, as shown in the reported cases of Dr. J. C. Williams and Dr. Hutchinson, as well as from its not interfering with the action of the bowels. But I had no occasion to push the remedy to its full extent.

Bloodletting has been carried to a frightful extent by many who advocate the doctrine of hyperæmia. Lepelletier du Mans took twelve pounds of blood, at six times, from a man, who nevertheless recovered. Martin has reported several cures by this heroic treatment. Lisfranc reports a cure by bleeding a man eight times in nineteen hours, to about four cups each time, and by applying, at the same time, 742 leeches along the spine, and 50 to the epigastrium. Andral also advocates the employment of "the antiphlogistic regimen in all its rigour," and the application of leeches to the spine, to the nape of the neck, to the jaws, and around the wound, where one exists. To me it appears more philosophical to copy the example of an improved treatment in the other phlegmasiæ. The capillary vessels are now rightly referred to as the principal seat of disease, whether in membranes or glandular organs; and mercury is known to control and correct their morbid action. Its employment, like that of the lancet and topical depletion, is designed to be preventive of disorganization of the delicate tissues of the nervous system. Tartar emetic has likewise been employed, singly as well as in combination with other remedies, in this disease. Thus, in the Bengal Transactions, we read, that Mr. Brown succeeded in cure of two severe cases of traumatic tetanus by giving from a fourth to half a grain of tartar emetic every quarter or half an hour, thus keeping up nausea until the symptoms had subsided. Antimony possesses the undisputed power of a sedative, that is, the power of diminishing excess of capillary action, and of limiting its duration as well as its degree. As an auxiliary to the lancet it may fairly compete with mercury. My aim, in the above case, was, by bleeding, mercury, and tartar emetic, aided eventually by belladonna, to break in early upon the morbid concatenation of organic actions in the nervous system, and control and allay their preternatural excitement. In some diseases which have got a start of the remedy, it is possible, sometimes, to overtake and arrest them. It is far otherwise in traumatic tetanus; hence, our treatment

should aim to anticipate those fearful results of hyperæmia in the delicate organization of the nervous system which rapidly ensue, and to direct on one point the combined agencies of various sedative remedies. What Dr. Latham says of a compound plan of treating acute rheumatism by bleeding, purgatives, and opium, in conjoint operation, is true of the method which I adopted in the above case—namely, that "this compound method, while it works with all the means which have been recommended, stops short of what is harsh and excessive in their use, and yet compasses, with more certainty, the successful result."* And if active treatment be necessary to combat states of hyperæmia not yet converted into more intense forms of inflammation, its activity should obviously be augmented, and bear some proportion to the severity of the disease in those graver forms.

December, 1845.

ON THE COMPOSITION OF A NEW BLACK DRAUGHT.

By ALFRED BOWER, Esq. Surgeon, Shoreditch.

I RESPECTFULLY solicit a small space in your valuable and extensively read journal, to communicate to the medical world a form of aperient medicine, at once most effective in operation, and elegant in administration, combining, in a neat compass, all the many good qualities,—all the advantages of the common black draught; but utterly divested of every disagreeable associated with that universally employed medicine.

The nauseous flavour, cold and chilling effects of the popular *haustus niger*, has ever been a strong and reasonable objection to its exhibition, and, though so serviceable, very many often abstain from having recourse to aperients from the unpleasantness accruing from their use.

The preparation I am desirous of introducing, styled by the manufacturer, liquor *sennæ compositus*, contains, in a concentrated form, all the active properties of the senna leaves, but so carefully and elegantly prepared, that a very refined taste would be required to recognise even a trace of the chief article employed.

Every medical man has long desired an efficient and pleasant purgative; the non-existence of such a material has ever been an opprobrium to the profession, and a reproach to pharmaceutical science. All of us have experienced the unpleasant remarks from patients, that "salts and senna (when ordered) are too cold for the stomach, and don't agree;" and as the great public appreciate only the physic administered, (though not invariably even that,) thoroughly unconnected with the skill or experience of the prescriber, so also do they conceive that the professional attendant, who directs such common "stuff," has attained to a very trivial eminence above the said public's self in his knowledge of remedial agents, and capacity to cure disease.

To obviate these inconveniences—to cheat the taste—to deceive the eye—to puzzle the nose—to bewilder the medicine man or woman, we usually have recourse to aromatics, syrups, &c., yet without success, and our multiplied agents do not prohibit the tongue from exclaiming, "There's salts in this, doctor! Aren't there senna tea here?" Though admitted on all hands to be a valuable, safe, and effective purge, the common black draught must be acknowledged to stand out in bold relief from the list of purgative medicines stamped with the most repulsive qualities.

High honour and much praise are due to Mr. William Markham Colchester, of 28, Old-street-road, Shoreditch, pharmaceutical chemist, who, after long perseverance, untiring zeal, and nice discrimination, in the application of pharmaceutical knowledge to the obtaining of effective medicinal agents, in unison with elegance of form, has proudly triumphed over all other competitors, and produced in his liquor *sennæ comp.* what may not inappropriately be designated the philosopher's stone, from the alloys of aperient medicines.

I am fully aware that many preparations of senna have of late been introduced—the concentrated infusion, concentrated syrup of senna, &c. The former is not pleasant nor efficacious, unless mixed freely with other aperients; the latter is open to many objections, being totally inefficient as a purge, even with children, unpleasant in taste, and objectionable, from the quantity of saccharine matter combined. The position, therefore, for an efficacious and pleasant aperient was still vacant, until the appearance of that now presented to the profession by Mr. Colchester.

I beg to subjoin the form of draught I have for some time

* Medical Notes and Reflections, p. 424.

* Latham on Diseases of the Heart, vol. i. p. 208.

and extensively prescribed, with uniform success and universal satisfaction, to the palates of my patients:—Potassio-tartrate of soda, one drachm; compound senna liquor, two or three drachms; water, an ounce and a half. Mix. Aromatic spirit of ammonia, ten minims. Let a draught be made.

The addition of the tartrate of soda, and aromatic spirit of ammonia, I suggested upon first experimentalizing with the senna liquor, presuming that such addition would constitute a draught entirely superseding the one in common use. Such have I found to be the case.

A teaspoonful of the liquor is admirably adapted as a valuable purge for children, and no child, however averse to medicine, will hesitate to take it from anything connected with its taste.

Uninfluenced by feelings of a private nature, unshackled by prejudices in favour of particular men, I trust, that in thus earnestly soliciting the attention of my professional brethren to the compound liquor of senna, I shall not be accused of any interested or partial motive. I place its claim to public and professional confidence upon the broad basis of its own intrinsic value—its realized excellence; the same position I shall urge for some few other preparations, of which I will write upon a future occasion, if you, Mr. Editor, will pardon the intrusion, and I rest assured, that every practical man, after a fair and impartial trial of these remedies, will consider, that in thus introducing these preparations to the notice of the profession, I have only accomplished that which each and every member, however humble he may be, should ever study to achieve—contribute something, however small, to the common good.

Shoreditch, December, 1845.

*** The methods of making these preparations must be published, or the profession will regard the whole affair as a piece of errant quackery.—Ed. L.

ON GENERAL PATHOLOGY.

By J. BOWER HARRISON, Esq. M.R.C.S.L., &c., late Surgeon to the Ardwick and Ancoats Dispensary, and formerly one of the Resident Medical Officers of the Manchester Royal Infirmary.

No. XVII.

OF SOME COMBINATIONS OF INDIVIDUAL DISEASES.

WE have now endeavoured to show in what manner morbid actions are associated and combined, so as to constitute those aggregate assemblages which are commonly spoken of as diseases. It will appear, from a consideration of this subject, that nosological diseases, though convenient, and to a great extent proper, are, at the same time, often arbitrary, and should not be allowed to divert the mind from the steady contemplation of the components of such classifications, and an analytical regard to their elements and dependencies. It will be further evident, that the boundaries of the so-called "diseases," are often not tenable, so that the procession of morbid actions may be looked upon as passing over the artificial limits, and amalgamating two or more maladies into one. In reality, there may be only one unbroken chain of disorder, but as certain portions of that concatenation have received distinct names, it is usual to speak of the whole as a combination of individual diseases. The occurrence of phthisis in diabetes, and of apoplexy in disease of the heart, are familiar instances of the connexion of different maladies. In fact, such associations are of constant occurrence. Every one must have noticed how often whooping-cough is the occasion of hydrocephalus, or abdominal derangement the precursor of infantile phrenitis. It would be inconvenient, and, we trust, in this place unnecessary, in remarking on these combinations, to do more than glance superficially at the nature of their associations; what has been said on the connexion of individual conditions may suffice to show the general laws which regulate the morbid relations. Nor is it possible, in this place, to do justice to a subject of so extensive a nature. It may be deemed sufficient to direct attention to this rich field of investigation.

Amongst the combinations of diseases which most frequently present themselves to our notice, there are none which deserve a more prominent place than those of the heart and lungs. The intimate physiological relation and the importance of the functions of these organs render their affections in most cases reciprocal. In the year 1837, Mr. Wardrop published the first part of a work on the diseases of the heart. In this work he commenced by showing the physiological relations of the lungs and heart, and promised to enter, in a future section,

on their pathological bearings. I regret that no other part of a work on so excellent a plan has yet made its appearance. The embarrassment which is occasioned in the cardiac functions by irregularities in the respiration, is well known. This must be very considerable in long-continued bronchitic affections, the blood being impeded in its egress from the right ventricle, and consequently retarded in its entrance to the left auricle. In process of time, this interference is productive of considerable derangement in the heart itself. A certain accession of dyspnoea is produced by any unusual or protracted effort, and sometimes the sufferer is obliged to sit in an erect position during the night, in order to relieve the unpleasant feelings with which the recumbent posture is attended. Many of those cases which are popularly called asthma, are dependent on the morbid relations of the pulmonary and cardiac functions. Diseases of the heart, on the other hand, greatly affect the well being of the lungs. Ossification of the mitral or semilunar valves, by retarding the exit of the blood from the left ventricle, or admitting its regurgitation, congest the lungs, and produce concomitant derangements. The pulmonary disturbance is, of course, regarded as a part of the cardiac disease, but sometimes the pulmonary affection is itself of sufficient importance or urgency to claim the first attention. Cases resembling spasmodic asthma are sometimes connected with, and dependent upon, diseases of the heart. Angina pectoris often resembles asthma, and has, no doubt, often been confounded with it. In the complication of asthma with disease of the heart, it seems probable that the frequent and very complete arrest of the circulation with which the fit is attended, may, in time, induce the affection of the heart, but it is also to be remembered that the disturbance of the nervous system, which gives occasion to the asthmatic paroxysm, may also give rise to the cardiac derangement.

We formerly heard a great deal said about pulmonary complaints originating in hepatic affections. It was very common to look for the origin of phthisis in disease of the liver, and very common to attribute to obscure hepatic disorder, grave lesions in other parts of the system. I do not think these views are borne out by recent pathological investigations, and I think Dr. Wilson Philip is very far from correct when he says, "that they (liver complaints) lay the foundation of more than half the cases of pulmonary consumption." Of course, it will be readily admitted, that derangements of the biliary functions, as all other derangements, may have an influence in depressing the vital powers and perverting the assimilation of the blood. A structural disease of the liver is certainly found in connexion with phthisis; but there are no good grounds for supposing it to be the cause of tubercular depositions. The fatty degeneration, which M. Louis regards as the disease most commonly met with in that organ, does not seem to precede the disease of the lungs, but rather to be referrible to the same degenerate state of the solids; or, indeed, it appears from the chemical views introduced by the celebrated Liebig, that a collection of fatty matter in the liver might be the result of the diminution of the pulmonary combustion. The association is, therefore, one in which the hepatic derangement performs a subordinate, and not a primary part. It is true that hepatic irritation may have some influence in producing pulmonary disorder, probably by its influence on the nervous system, and mechanically from its immediate contiguity to the diaphragm; yet there is every reason to believe that popular and even professional opinions on the connexion of phthisis with hepatic complaints, are both extravagant and erroneous.

The occurrence of phthisis as a "winding up" of many chronic diseases, and of some of those which rapidly reduce the strength, may, perhaps, be looked upon as a common consequence of the depression which they occasion, acting on certain depraved forms of constitution. In this manner the termination of diabetes in consumption, or the production of tubercles after fever, may, in a great measure, be explained. Of this relation, however, it is impossible to arrive at any correct understanding until we shall have advanced to a more accurate knowledge of the nature of consumption. It may not be that all disorders which equally debilitate the system are of equal efficiency in originating tubercle; at any rate, to generalize too hastily would be a bar to the introduction of further information, and the investigation of interesting relations. The connexion of hydatids with tubercles in the lower animals has been the subject of observation, and Dr. Baron has advocated the doctrine that tubercles originate in hydatid formations. I think the celebrated Jenner was favourable to

the same view. Of the occasional co-existence of the two there can be no doubt, but the relation does not seem one of cause and effect, and, probably, they have a common origin in disordered states of nutrition.

Diseases of the kidney are commonly combined with the diseases of other organs. It is only of late that renal affections have been finely investigated, and for the information we have acquired on this subject, we are greatly indebted to the labours of Dr. Blackall, Wells, Bright, and Christison. A disease of the liver is a common accompaniment of the granular kidney. The latter complaint is often occasioned by a life of intemperance, which is well known to be also productive of hepatic disease. The lesions of both organs, therefore, may be equally dependent on the same ulterior cause. The granular disorganization of the kidney is further found to be attended with disease of the heart, a connexion which is, no doubt, brought about by the distempered state of the blood. The well-known association of rheumatism with this disease of the kidney, may, in all probability, originate from the imperfect excretion of the nitrogenous matter of the blood. So frequent is this combination, that it has been thought advisable, in all cases of chronic rheumatism, to institute an investigation into the nature of the urinary secretion. The occurrence of apoplexy, dropsy, diarrhoea, pleurisy, and various inflammatory complaints, will be readily understood as associations which are likely to arise in the course of the complaint, and will be found easily traceable to the common laws of combination, which associate different conditions of derangement. The disease called Bright's disease is, perhaps, most correctly to be viewed as only a part of a complicated malady.

No association has of late attracted more attention than that of rheumatism and cardiac inflammation. This association was pointed out as long back as 1783, by Dr. Pitcairn, of Bartholomew's Hospital, but more recently, owing to the improved method of examining the heart by auscultation, considerable light has been thrown on it, and its importance and frequency been more and more the subject of remark. For much valuable information on the subject we are indebted to Dr. Latham and Dr. Watson, in England, and M. Bouillaud, in France. In Dr. Latham's recent little treatise on clinical medicine, he insists largely on the connexion of rheumatism with endocarditis as well as pericarditis; and, indeed, speaks of the former as more frequent than the latter, and as seldom long absent in pericardial inflammation. The knowledge of this association is of the greatest importance, as it leads the physician, in the treatment of rheumatism, to be on the watch for the first invasion of carditis, and, therefore, puts him in the best position to subdue it before it has committed any irremediable injury. It should always be remembered, however,—even admitting, to the full extent, that the auscultatory signs are faithful interpreters of disease,—that too much activity may be employed in the endeavour to remove them. The remarks already made on this subject may be referred to. I think those who read the case related by Dr. Latham at p. 167, will be inclined to suppose that a less energetic practice might, possibly, have been attended with happier results.

That rheumatism has many other important, though less understood, associations, I think there can be no doubt. Like gout, it may invade internal organs, and certainly is found to attack those which are mixed up with the fibrous tissue. An alliance was formerly supposed to exist between rheumatism and palsy. That wandering pains, often of an acute character, are experienced in hemiplegic affections, there can be no doubt; but how far such pains are deserving of the name of rheumatism may be questionable. However, it is by no means improbable that such an alliance does exist, for it is far from improbable that rheumatic invasions and paralytic seizures have a common relation to other conditions of derangement, set up by the same irregularities of living. The connexion of rheumatism with gout is acknowledged in popular phraseology if it be not in medical literature. It is certain that there are cases in which it is difficult to say whether the patient be suffering from the one or the other, and the appellation, *rheumatic gout*, is probably correct as well as convenient. The near affinity which exists between these complaints, in respect to their pathology, renders it highly probable that disorders may exist which partake of the peculiarities of both. The occurrence of many complaints in the gouty habit has long been a subject of observation and anxiety. From the consideration of their associations, we may be led to suppose that in a less pronounced form of the gouty diathesis, many obscure affections of the head, stomach, or bowels, may arise, without leading to any suspicion of their real origin. I have already briefly hinted at a connexion which exists between rheumatism and a spinal derangement of a very serious

character. It seems that rheumatic persons are liable to a sort of translation of the disease to the sheath of the spinal cord, attended with pain and spasm. This varies, of course, according to its particular situation, and is productive of more or less important functional disturbance.

No combination of disease is more frequent, in children, than disorder of the head and abdomen. The complication of phrenitis with a deranged state of the alimentary canal is well known to be an ordinary association. Possibly, in many cases, the febrile excitement which is set up by the latter may be the occasion of the former, and constitute the intervening link in the chain of disease. The existence of abdominal irritation is commonly admitted to be one source of hydrocephalus, but I am not aware that much consideration has been bestowed upon the manner in which the connexion is established. Where the abdominal affection is of a tuberculous character, the formation of tubercles in the brain may be viewed as an extension of the disease sufficient to explain the concomitance. The alimentary canal and stomach have so many relations with other parts of the system, that it would be difficult to enumerate all their pathological combinations. The effects of concussion of the brain in producing vomiting are well known to the surgeon, and afford him an important indication of the amount of injury sustained. In hemiplegia, however, digestion and assimilation are carried on with more facility than might be anticipated. Derangements of the stomach are sometimes attended with, and probably operate principally in producing, affections of the lungs. Coughs are often attributed to stomachic complaints. What are called sympathetic coughs are probably produced through the well-known nervous communication which exists between the lungs and stomach. Irritation of one organ may affect another, in the same manner that irritation is propagated in dentition, which every one knows to be a common cause of coughs in children. The manner in which the stomach and alimentary canal suffer from serious local injuries or important visceral lesions is too much a matter of common observation to need being mentioned. A species of rheumatism, or nervous pain, often confounded with rheumatism, I have known to be connected with disorders of the bowels, and to be remedied by ordinary purgatives. These pains are, perhaps, more general than rheumatism, or at least less restricted to the joints.

Diseases of the head are not unfrequently associated with those of the lungs. When whooping-cough occurs at a very early period of life, it is well known that the supervention of hydrocephalus is often the chief source of danger or anxiety. In the long paroxysms of coughing, and violent efforts which accompany the stridulous inspirations, the blood is obviously impeded in its return to the heart, and the cerebral circulation is in consequence delayed. But even independent of these attacks, the contagious essence of whooping cough may possibly operate on the brain in exciting inflammation, or determining active congestion. It does not seem always easy to account otherwise for the frequency with which head affections arise, or the inveteracy with which they continue. In most cases of pulmonary disorder, the return of the blood from the head is impeded, and its proper arterialization in the lungs of course interfered with, so that congestion of the head must be a frequent concomitant of such complaints, and in some instances serious derangements are produced.

The head is further much influenced by an impeded transmission of blood through the heart. Apoplexy occasionally arises from valvular disease, obstructing the return of blood from the cerebral circulation. I remember an instance in which an aneurism was the cause of an apoplectic seizure. I was one day passing through the wards of the Manchester Infirmary, when a man was carried in, in an apoplectic fit. The man was breathing in a loud stertorous manner, he had a labouring pulse, and was perfectly insensible. On inspection, after death, it was found that an aneurism of the arch of the aorta had burst into the right auricle. The aneurism had become united to the parietes of the auricle so as to obstruct the return of the blood from the head, and when it gave way the man died from apoplexy, and not from syncope; the same result may arise from valvular disease. I think it was formerly thought that apoplexy might arise from the increased force of the circulation, consequent upon hypertrophy of the heart, but, on consideration, it scarcely seems possible that this could be a frequent cause of cerebral extravasation.

Dr. Watson observes, in his recent work on the practice of medicine, (vol. ii. p. 516,) which is characterized throughout by great good sense, that as hypertrophy is the result of an impeded escape of blood from the heart, it is clear that no great force of the circulation can operate on the brain. When the pulse is weak and the blood leaves the heart with difficulty,

however much the action of the heart be increased, the momentum of the ejected blood must be below and not above the average, and therefore there can be no reason that apoplexy should arise from mere increased action, setting aside the attendant obstruction in the circulation.

Lastly, no stronger argument can be adduced against the arbitrary divisions of medicine and surgery than that which may be derived from a consideration of the dependencies of disease. Mr. Abernethy has very great credit for having directed the attention of the profession to the connexion of constitutional and local derangements, but it would obviously admit of a more extended consideration than comes within the immediate design of his remarks.

Obstinate ulcerations of the legs are, more frequently than not, consequent on other morbid conditions, nor are they simply referable to disorder of the digestive organs. In many instances a depraved and deficient nutrition is the associated disorder, whether or not connected, in the first instance, with disturbance of the alimentary canal. In these cases, the molecules are insufficiently renewed, the vital cohesion is impaired, and the consequence is ulceration. Hence the frequency of ulcers amongst the poor. A congested or diseased state of the liver, in many instances, accompanies these intractable oedematous ulcerations, which resist with so much pertinacity any purely local measures. I can call a case to mind in which tedious ulcerations of the legs were the first indications of a fatal disease which implicated both the liver and the heart. In all cases, it would be well, where we have chronic ulcerations of the legs, to institute a careful examination into the condition of the viscera. A great variety of surgical complaints are doubtless associated with other affections, and the study of such associations is replete with interest and instruction. The occurrence of fistula or abscess in the neighbourhood of the anus is generally indicative of serious mischief in some one or other organ of the body. Their frequent connexion with pulmonary disease has long been the subject of remark. Diseases of the kidneys and bladder are frequently found together, and painful affections, referred to the latter, are sometimes altogether dependent on diseases of the former. Aneurismal tumours have hitherto been regarded too exclusively as mere local affections, but the same remark is nearly applicable to the whole catalogue of surgical complaints.

Broughton, near Manchester, Sept. 28th, 1845.

REVIEWS.

On Scarlatina and its successful treatment by the Acidum Aceticum Dilutum of the Pharmacopoeia. By ISAAC B. BROWN. London: Churchill. 1846. 8vo. pp. 66.

MR. ISAAC B. BROWN having "had the painful trial of losing his eldest child when scarcely two years of age, and shortly afterwards, besides several other patients, one noble little boy, the pride of his fond parent's hearts," all by scarlatina, resolved on discovering some method by which the progress of this devastating malady might be stayed. It appears that he pondered long, yet unsuccessfully, till at length his brother, Mr. George Brown, a gentleman known to Mr. Isaac as possessing "a rigid spirit of inquiry," informed him that Mr. George Yates Hunter, of Margate, with whom he was then assistant, had been successful in his treatment of the disease by the internal administration of acetic acid, which Mr. Isaac informs us, means distilled vinegar. Accordingly, it occurred to this gentleman, our author, ("how oft the name is got without deserving it!")

"that acetic acid being considered a powerful antiseptic or destroyer of putrefaction, and also a good styptic or having the power to staunch blood, there might be none in this practice than at first met the eye."—p. vii.

So on the first opportunity he put the practice to the test, calling "certain auxiliaries" to his aid, with success. This success he was unwilling to conceal, or to limit to his own practice, and that of a few professional friends—*non sibi sed mundo*—so he wrote a book, which consists of a title-page, a dedication, a table of contents, an introduction, and six chapters, all to announce a single fact which could be done in one of the journals in as many lines as there are here chapters. Against the class of publications to which the book belongs

we have always protested—books written at the public, through the profession, by professional men. Thus, Mr. Brown says, "My object in offering this little treatise to my professional brethren, and through them to the public at large." And again, "I purposely avoid using unnecessarily technical or professional terms, because I wish this to be read by parents and heads of families, as well as by members of the medical profession."

This is really too bad. The quack who writes quack legibly in his advertisements and on his door, is recognised by the character of his establishment, and can be avoided; but the quacks of the profession who write bed-side manuals for anxious mothers, and offer pretty books for drawing-room tables, are less readily discovered, but not less dangerous to meet with. French taught in six lessons—physicians made in "six chapters"—who will hesitate, having studied Mr. Brown's book, to commence the treatment of a case of scarlatina, or who will feel the necessity of seeking a medical attendant when such "successful treatment" is so distinctly submitted to the simplest understanding? Not, we fear, a great many of those into whose hands such a book might fall. And herein consists the danger of professional quackery; the dishonour is elsewhere. But to the book itself. It gives an exceedingly imperfect, not even a good popular description of scarlatina or scarlet fever, and records what may be called the outlines of the histories of seven cases of the disease, the said histories being little more than a fearful catalogue of dietetic and remedial agents made use of during their progress. To give our readers an idea of Mr. Brown's "successful treatment," we shall quote one of the cases; though long, it deserves perusal. It shows how, by a total neglect of every rational indication of treatment—how, by the omission of those simple remedies which would at once have relieved the slightly urgent symptoms which were present—how, by permitting a patient labouring under scarlet fever to adopt a regimen which would have made the stoutest stomach quail—how a case of slight disease might be made, by means like these, to assume an almost fatal type—how, in spite of all that can be done against it, the system will sometimes rally and resist ill usage. All this is shown by the following details:—

"Tuesday, Oct. 14th.—Mrs. —, who had just recovered from a miscarriage, which was preceded and followed by quotidian ague, complained of sore throat and general lassitude. I instantly applied the stick caustic to the tonsils and fauces, even although ulceration had not commenced. Pulse feeble; skin hot; sickness soon came on, and continued almost incessantly. Gave a spoonful of brandy in water and distilled vinegar mixture, and applied linseed poultice to the throat.

"15th.—Nine A.M. Passed a most restless night; incessant sickness; pains in the loins and left leg, with headach; efflorescence of a bright scarlet, freely out over the face, arms, chest, and body, but not over the legs. Continue acid mixture; soup or beef-tea.—Nine P.M.: Rash freely out over the legs as well as body; the skin distressingly irritable; sickness rather better; pulse feeble; countenance anxious; pupils of eyes powerfully contracted. To take two spoonfuls of brandy in arrow-root; continue mixture and nourishment; and to take a quarter of a grain of morphine.

"16th.—Nine A.M. Passed a better night; rash out freely; sickness returned this morning; shivering and afterwards free perspirations. To continue brandy, acid mixture, and nourishment, and to have a castor-oil injection.—Nine P.M.: Pulse quick and feeble; sickness not abated; voice almost inaudible; skin very red and irritable; bowels have been freely relieved from the injection. Ordered morphine to be repeated at bedtime; sherry in arrow-root; and to sponge the extremities with vinegar and tepid water; and to continue acid mixture.

"17th.—Nine A.M. Slept at short intervals through the night; sickness not abated; pulse 140 and feeble; speech scarcely audible; slightly delirious; great anxiety of countenance. To take effervescent mixture with soda and lemon-juice, and chicken-broth in cold water. Skin very red and irritable. To sponge with vinegar and water; apply poultices constantly to the throat. All threatening of ulcerations on

the tonsils and fauces appear[s] to have been arrested by the first application of caustic, and she swallows well.—Four P.M.: Pulse rather better; has kept down the cold chicken-broth, but not the effervescing mixture.—Nine P.M.: Pulse 120 and firmer. To take port wine-and-water, and chicken-broth, and a little plain ice; discontinue effervescing mixture, and resume the acid one; to take morphine draught.

"18th.—Nine A.M. Has had but little sleep; pulse 120 and firmer; the rash disappearing, but the skin round the mammae very red from scratching; has not been sick since last night at twelve o'clock. Repeat the morphine draught directly.—Two P.M.: Has had some quiet sleep; pulse 120; countenance more cheerful. To have (at her own earnest request) some bitter beer; continue port wine, chicken-broth, and acid mixture. Bowels not relieved.—Ten P.M.: Enjoyed the beer, and slept well after it; pulse 120; no sickness. Continue everything as before, and morphine at bed-time.

"19th.—Nine A.M. Has not passed a good night; is very restless and low; pulse feeble; no dejection. Gave a wine-glass of port wine-and-water, and added four drachms. of acid to the mixture, making an ounce and a half of acid in six-ounce mixture, a fourth part every three hours; to have injection of castor-oil and warm water.—Three P.M.: No dejection from enema; pulse rather better. Has taken (at her own earnest request) some cold roast beef, cut up very fine, and soaked in vinegar and mustard, and some iced champagne.—Eleven P.M.: No dejection; pulse 120 and feeble; the redness of skin disappeared. Gave a table-spoonful of brandy in lemonade. Has been once a little sick. Gave a third of a grain of morphine in pill, and added one ounce of compound tincture of bark to the mixture.

"20th.—Nine A.M. Passed a good night; pulse 120; no dejection. Brandy in soda-water, and bread-and-butter for breakfast.—Three P.M.: Bowels freely relieved.—Eleven P.M.: Has taken some hock-wine and good turtle-soup. Continue mixture of acid and bark, and repeat the morphine pill.

"21st.—Nine A.M. Better; pulse 120. Continue the turtle-soup, brandy, and wine. No dejection. Repeat enema.—Three P.M.: Progressively improving.—Ten P.M.: Bowels relieved; feels very low and sinking. Continue nourishment and medicines as before, and morphine pill.

"From this period she gradually progressed favourably, persevering with both mixture and nourishment."

Is it necessary to offer a remark on a case like this? By the permission granted to a morbid appetite to gratify its false desires, (a part of the popular system,) a case of simple uncomplicated fever is converted into a dangerous and urgent malady. We read the details with a shudder, and thanked our propitious stars that we were placed beyond the reach of Mr. Brown's "successful treatment of scarlatina." The subject is almost too serious to jest on; still the words of an old favourite are so applicable—so expressive of the fate of the doctor and his patients, that we cannot resist a few lines of quotation—

"Whoe'er adopts this monstrous plan,
Can gain no fair renown;
His patients first, and next himself,
Must surely be *done Brown*."

True, enough, we can see no other termination. It is impossible to conceive on what grounds Mr. Brown writes successful treatment on his title-page. This statement could only be made on the results of a number of cases compared under similar circumstances, with the same number of like cases treated on a different plan. What are seven cases, each of which exhibits features nearly as objectionable as the one which we have quoted? But this is quite sufficient. Surely the royal physician-accoucheur, to whom the volume is dedicated, is not aware of the deformities of the nattily-attired abortion which he thus ushers into the world. It is not at all improbable that distilled vinegar may be found of use in the treatment of the disease (excluding, of course, the auxiliaries—the wines, the soups, the beef steeped in vinegar and mustard, the broths, the brandies.) Mr. Hunter is a respectable authority, and in a very sensible letter addressed to Mr. Brown, he describes the favourable results of his practice. He never knew dropsy occur when the disease had been treated by vinegar. The publication of this letter would have answered every useful purpose but that of Mr. Brown. It would have

spared us a painful duty, and the writer a large amount of regret.

Before concluding, we must say a word in praise of the printer and his colleagues—the binder and the paper-maker; they have shown that the old axiom, *ex nihilo nihil fit*, does not hold good in every case; they have succeeded in making a book—and a pretty one too—out of nothing.

MEDICAL SOCIETY OF LONDON.

MONDAY, DEC. 1, 1845.—DR. THEOPHILUS THOMPSON, PRESIDENT.

DR. THOMAS WILLIAMS detailed some cases of renal dropsy in which the urine was albuminous for periods varying from two years to four months, in which a perfect cure was effected. The treatment pursued consisted in the administration of citrate or acetate of iron and hyoscyamus at night.

DR. ROBERTS detailed the case of a man, aged sixty-two, of convivial habits, who was in the habit of exciting the pharyngeal end of the oesophagus, so as to produce vomiting, whenever the contents of the stomach caused any uneasiness. He became the subject of severe jaundice. The skin was of a deep yellowish-green colour, the conjunctivæ nearly of an orange tint; the urine as dark as porter, and the stools clay coloured. He never complained of pain in either side, nor did strong pressure in the region of the liver cause any inconvenience. From the large quantity of fat on the abdominal parietes, and also from the tympanitic state of the intestines, no satisfactory examination of the liver could be perfected during life. He lingered several weeks, and died. On opening the body, the liver was found gorged with green bile; the ductus communis choledochus was obliterated at its exit from the gall-bladder. The duodenum and pancreas were scirrhus. The other organs were healthy. The usual mode of treatment, with mercury and counter-irritation, had been employed unavailingly.

DR. CLUTTERBUCK was inclined to refer all the symptoms to the state of the liver, which he considered to be one of inflammation, and thought that had the patient been depleted, and purged with mild purgatives, he would have had better chance of life. He referred to the case of the late Dr. Birkbeck, who was treated for an inactive liver, without benefit; the symptoms were jaundice and dyspepsia, without fever or pain. Mild depletion and mild purgatives effected a cure.

DR. ROBERTS, in reply, said that at no stage of the malady was depletion indicated. The reference to the case of Dr. Birkbeck did not offer any analogy, as Dr. Birkbeck was a most careful liver, whilst his (Dr. Roberts) patient had been a dissipated man. Such patients scarcely ever bore blood-letting well. He thought the disease had its origin in the duodenum.

DR. BENNETT regarded the pancreas and duodenum as the organs primarily affected, and that the disease spread to the gall-bladder and liver. He should not have expected benefit from depletion.

MONDAY, DECEMBER 15, 1845.

DELIRIUM CUM TREMORE.

DR. CLUTTERBUCK made some general remarks with the view of showing that delirium cum tremore, as it was called, was, in its essential character, an inflammatory condition of the brain, and required to be treated antiphlogistically. The treatment was, of course, to be modified, with a due regard to the cause of the affection—bloodletting to a very moderate extent, as to two or three ounces; cooling aperients, quiet, cold to the head, and sinapisms to the feet, were the remedies required. He reprobated the use of opium in the disease, and related cases to show, that where opium had failed, the plan he had recommended had succeeded in effecting a cure.

DR. ROBERTS said, that Dr. Ward, of Boston, United States, had many years since advanced the same opinions as those just expressed by Dr. Clutterbuck. He (Dr. Roberts) generally employed opium to some extent in this affection, and with usual success. As an instance of how much opium could be borne in this disease without producing ill effects, he mentioned a case in which, in twelve days, he had administered 2380 minims of laudanum, and 119 grains of solid opium. The patient got quite well. In addition to opiates in these cases, due regard must be paid to the careful administration of the usual stimuli of the patient.

DR. BENNETT observed, that every case of this disease must be treated on its own merits; opium was very generally used

with advantage; its combination with tartar emetic was also very useful in many cases; but opium would not always cure. In cases of this disease connected with epilepsy, he had usually found gastritis.

Dr. CROWNE made some remarks on the evils generally of intemperance. Delirium cum tremore occurred under two distinct sets of circumstances. The first was of the sthenic kind, and occurred in the occasional drinker, of strong constitution; here you might have inflammation of the brain and its membranes, and active treatment might be required. In the asthenic form, which occurred in the steady drunkard of a long period, whose health and strength were impaired, the state was one of collapse, and bleeding was not admissible. He related two cases of delirium tremens, one resulting from hæmorrhage, and the other from excessive loss of blood by venesection.

Mr. ALDER FISHER had usually found this disease occur in persons of plethoric habits. Opium was sometimes successful, sometimes not. His usual treatment consisted in the administration of salines with tartar emetic, cold applications to the head, quiet, and low diet. If these failed, he then resorted to opium.

Mr. HIRD had seen much of the disease in Ireland. In some cases there was evidence of congestion of the membranes of the brain; in others, an opposite state presented itself. Some of these cases were best treated with tartar emetic and opium, others with opium alone.

Mr. DENDY characterized the disease as one frequently of inflammation, with excessive irritation. The tartar emetic or gentle bloodletting relieved the one, the opium the other.

Dr. LEONARD STEWART had usually associated the occurrence of this disease with concussion of the brain, or some other shock to the nervous system. He referred to the fact, that the sudden removal of the usual stimulus, even in cases of confirmed drunkards, was not injurious, as was exemplified in the cases of prisoners.

Mr. PILCHER was gratified to hear the statement by the last speaker respecting the harmlessness of suddenly leaving off an accustomed stimulus. The condition of the brain connected with delirium cum tremore might originate in a variety of causes; it was irritation primarily in opposition to inflammation; and where inflammation did occur, it was the result of the irritation. The cases must be treated according to the indications presented.

MONDAY, DECEMBER 22.

The Society was occupied this evening with the same subject, and at its rising adjourned until January 12, 1846.

AMERICAN MEDICAL JOURNALS.

ON THE PATHOLOGICAL EFFECTS OF ALCOHOL.

EXAMINATIONS of drunkards are not rare in Great Britain. The results of a series so extended as that collected by Drs. PETERS, GOLDSMITH, and MOSES, are not often submitted to our notice; so, finding the communication in a late number of the *New York Journal of Medicine*, we extract it nearly at length. The number of bodies examined amounted to nearly seventy; all died from the excessive use of ardent spirits. Such a communication will be appreciated by temperance advocates.

External appearances.—These presented nothing peculiar, except that in some the muscular development, but more frequently the adipose, was very great; in others, the bloated face, tumid belly, thin and flabby legs and arms, were quite characteristic.

Head.—Invariably there was present more or less congestion of the scalp, and of the membranes of the brain, with considerable serous effusion under the arachnoid, while the substance of the brain was unusually white and firm, as if it had lain in alcohol for an hour or two, and the ventricles were nearly or quite empty. In not more than eight or ten instances did we find more red spots upon the cut surface of the brain than usual. The peculiar firmness of the brain was noticed several times, even when decomposition of the rest of the body had made considerable advances; typhus fever is the only disease in which we have noticed a like firmness. Occasionally a few drachms of colourless, or reddish turbid serum, were found in the ventricles of the brain.

The lungs were generally healthy, except that congestion of them was frequently met with. Where large quantities of

spirits had been taken shortly before death, the lungs were often found in a state of extensive splenization; they appeared perfectly saturated with dark blood, which soon changed to a florid red on exposure to the air, except that which flowed from the large, severed bloodvessels, for this remained thick, dark, and tar-like. The parenchyma was heavy and semi-solid to the feel, but softened; for the finger could be easily forced through it. We must make particular mention of the infrequency of phthisis in drunkards; never have we met a tubercular abscess in them, even of the smallest size, while a small number of chalky tubercles was frequently noticed; and cicatrices also were often met with, and were marked by presence of puckering of the surface of the lungs, of solid bodies which were readily felt before the lung was cut into, and when this was done, they were found to consist of lumps or stripes of callous fibrous tissue, around which we rarely discovered a few discrete, grey, crude, small, tubercular granulations; in every instance these appearances were strictly confined to the upper third of the superior lobes, and the rest of the lungs was entirely free from either old or recent tubercular disease. The bronchi were almost always found reddened, somewhat dilated, and more or less filled with catarrhal secretions. The readers of the *London LANCET* will remember that Marshall Hall has lately recommended the constant application to the chest of folds of linen or flannel soaked in alcohol, as a cure for incipient phthisis; we should judge that this might prove serviceable.

The heart was always flabby, enlarged, dilated, but little or not at all thickened, and its external surface loaded with fat. Fluid, dark, cherry-juice-like blood was often found in both ventricles, in the aorta and pulmonary arteries. Coagula are rarely or never found in the heart or large bloodvessels. In some cases where sudden death has been occasioned by the excessive use of ardent spirits, no other appearances are found in the body except the fluid condition of the blood, the above-described congestion of the lungs and membranes of the brain, with serous effusion under the arachnoid.

The stomach represents various appearances; in some habitual drunkards the mucous membrane is perfectly white, but somewhat thickened, with distinct, flat, mamellated elevations of small size. Dr. Middleton Goldsmith was one of the first to call attention to the fact, that when a large quantity of undiluted spirits had been taken shortly before death, the stomach was often found wrinkled, as if from the action of an astringent substance; the tops of the wrinkles or rugæ presented a punctated and vivid red appearance, while the depressions between were blanched, as if from the action of alcohol, and the whole mucous membrane was coated with a thick layer of blanched and very tenacious mucus. In other instances we found thickening and mamellation of the mucous membrane, with patches of slate-grey chronic inflammation, upon which spots of punctated, star-like, or diffused hæmorrhagic inflammation had supervened. In ten or twelve of the worst cases, in which from three pints to two quarts of liquor had been swallowed within thirty-six or forty-eight hours before death, we found extensive hæmorrhagic inflammation of the larger portion of the stomach, with effusion of blood in large patches under the mucous membrane. In several instances in which unknown persons were found in the river, with severe cuts or bruises upon their heads or bodies, we have been enabled to testify positively, from the above appearances of the stomach, and those of the liver and omentum presently to be described, that they had been deep in liquor just before they had fallen into the water, and that, in all probability, no murder had been committed, as the cuts or bruises would lead one to suspect.

The liver, in moderate drinkers, was found a little larger than natural, somewhat softened, and its external surface spotted with patches of fatty infiltration, which extended but two or three lines into the parenchyma; the colour of the rest of the organ was nearly natural, and the edges retained their normal sharpness. In higher degrees it was considerably larger, the edges more obtuse, and the patches of fat larger and more numerous. In old drunkards the liver was very large, weighing at least six to eight pounds, often ten to twelve; the edges were very thick and much rounded; the parenchyma almost white with fat, soft, fragile, and the peritoneal covering could be torn off in very large pieces with ease. Granular liver was found in four or five cases only. The *gall bladder* was always large and filled with bile; gall-stones were found in two cases only, and, singularly enough, both on the same day; none were found either before or after.

The spleen presents but few characteristic alterations. It generally retains its normal size, and is softened; occasionally it is rather larger than natural, but as a rule, the small size

of the spleen contrasts strongly with the very great enlargement of the liver.

"The appearance of the *omentum* is very peculiar; it is loaded with an ashy-grey slushy fat. Our attention was called to this sign in Vienna; it is there regarded as so characteristic, that a man is often judged to have been a drunkard, from a glance at the *omentum*, when the abdomen is first laid open.

"The *kidneys* are generally somewhat enlarged, flabby, their cortical substance infiltrated in numerous small spots, with a whitish matter, either albuminous or fatty; occasionally they are granular. The *pelvis* and *uterus* are generally in a state of chronic, slate-grey inflammation.

"The *bladder* generally presents nothing peculiar, except in the worst cases, in three or four of which we have found it in a state of hæmorrhagic inflammation, which rivalled in extent and severity that which has already been described as occurring in the stomach.

"The *mesentery* is always loaded with a thick layer of fat.

"The *small bowels*, in the majority of cases, are literally filled with bile, and their mucous membrane thickly coated with a very tenacious mucus. In eight or ten of the worst cases, numerous and extensive patches of hæmorrhagic inflammation were found, with copious effusion of blood in and beneath the mucous membrane. This may account for the frequency of discharges of blood from the bowels of drunkards.

"The whole body of drunkards, with the exception of the brain, passes over into decomposition with unusual rapidity.

"The most important appearances are the fluid and venous condition of the blood and the great superabundance of fat. According to Steinheimer and Roesch, alcohol acts directly upon the blood, and drunkenness is owing to an alcoholic venous plethora, in which the proportion of hydrogen and carbon in the blood is much increased. The same alteration of the blood occurs in poisoning with narcotic drugs, and the delirium and excitement of the nervous system produced by them and alcohol, is supposed to be secondary to this change in the quality of the blood. According to Orfila, if a large quantity of alcohol be taken during, or shortly after, a meal, it coagulates the albuminous portions of the contents of the stomach, and this coagulated albumen passes off almost unchanged into the small intestines. The action of the gastric juice upon other portions of the food is prevented, and they undergo acetous fermentation. A large quantity of pure alcohol also reaches the duodenum, mixes with the bile, which loses its alkalence, and can no longer be precipitated into insoluble flocculi by the addition of the acid chyme, as is normally the case. In the natural state this insoluble precipitate from the bile is not re-absorbed, but is cast out with the feces; but in drunkards no such precipitate ensues, the bile remains fluid and unchanged by the chyme, and a larger portion of it is re-absorbed; hence the bilious difficulties in drunkards, and the frequent occurrence of jaundice in them. Large quantities of acid chyme and imperfectly digested food pass along the small intestines, and even reach the cæcum and colon, where they also undergo acetous fermentation; this is sufficient to account for the dyspeptic difficulties and sour eructations in drunkards. The blood which returns from the intestines into the vena porta system and liver, is more or less mixed with alcohol, imperfect bile, and other impure matters; hence the venous plethora of the vena porta and subsequent affections of the liver. As much bile is brought back to the liver, it is, doubtless, re-secreted from it with great rapidity; hence, among other causes, the large quantity of bile which is usually found in the gall-bladder and small intestines.

"The chyle which is absorbed by the lacteals must be very imperfect, and is mixed with more or less altered alcohol; of course, the blood which is formed from it is equally imperfect. If alcohol be added to blood which has been drawn from a vein, the blood becomes dark, it loses its normal opacity, becomes transparent, and changes to a cherry-juice-like fluid. With the aid of the microscope we see the blood globules gradually losing their red colouring matter, which becomes equally dissolved and diffused through the serum, which assumes the peculiar cherry-red colour; this serum coagulates to the consistency of thick milk, but cannot form solid coagulæ, and no watery particles separate from it. These appearances agree with those of the blood of toppers, which is thick, but fluid; it coagulates very loosely, contains but little fibrine, but much albumen and fat.

"According to Rokitsky, Andral, and Engel, the blood in tubercular cachexia is arterial and rich in fibrin; while in the cancerous cachexia and typhus fever, it is more venous, it abounds in albumen, and is deficient in fibrin; hence, alcohol

would seem to produce a state of the blood opposite to that which occurs in tubercular disease, and is somewhat similar to that which obtains in cancer; therefore, it may prevent the development of the former, and hasten that of the latter."

CHEMISTRY, PHARMACY, AND MATERIA MEDICA.

OBSERVATIONS ON SOME POINTS IN THE CHEMISTRY OF THE URINE. By J. W. GRIFFITH, M.D.

1. It has usually been considered that the amorphous deposit ordinarily occurring in the urine is the lithate of ammonia, mixed with variable portions of urate of soda and lime, and sometimes magnesia. The cause of the deposit assuming the amorphous form has always been, and still remains, in our opinion, a difficulty, and we think receives no explanation from the mere fact of the lithate of ammonia being mixed with lithate of soda and lime. If so, why does it ever assume the crystalline form when mixed with the soda?—and the spheres of lithate not uncommonly occurring in urine are decided crystals, and possess the optical characters of such. We think it a question whether the crystalline salt obtained by M. Heintz, and containing from 12.73 to 14.79 per cent. of soda, is the same as the amorphous urinary compound, the inorganic constituents of which are exceedingly variable in quantity and amount (2.98—8.02 per cent.)

2. We differ from those who, with Liebig, consider that soda has anything to do with the solubility of uric acid in urine. The fact of urate of ammonia being deposited from the urine, either by exposure to cold or the air-pump, is sufficient to show that it exists therein in combination with ammonia, and not soda; and how can this occur from a mixture of phosphate of soda, uric acid, and hippuric acid (Liebig's artificial urine)? In our opinion, uric acid most probably exists in the blood in combination with soda; and although, under ordinary circumstances, as in the case with urea, we cannot detect it, (being probably excreted as rapidly as it is formed,) still, in certain morbid conditions, where it apparently formed in excess, it is secreted from the blood in this form, as we see in and around the joints of gouty patients: here the compound is not exposed to the salts capable of decomposing it, as in the urine. At the moment of its secretion from the kidney, it is probably decomposed by muriate of ammonia. If a deficiency of this is formed, a quantity of the urate of soda will escape decomposition, and appear in the urine. Whether tribasic phosphate pre-exists in the urine is very problematical, as we know of no process by which either the soda or its carbonate, or such compounds as yield this on incineration, can be removed from the alkaline phosphate prior to the combustion of the ash; and supposing with Löwig that the phosphate is the ordinary one, the atom of water it contains could be replaced by an atom of soda, as long since shown by Graham.

3. Regarding the presence of ammonia in urine, the chloride of platinum test applied previously to evaporation (and, of course, it cannot be applied after) is entirely fallacious. Admitting that the lithic acid exists as bi-lithate of ammonia, 1000 grains of urine contain, on an average, one grain of lithic acid; this would combine with 0.1892 grains of ammonia, which would form 2.341 grains of ammonio-chloride of platinum. Since one part of ammonio-chloride of platinum dissolves in 150 parts of cold water, 1000 grains of urine (admitting urine to be as good a solvent as water) might contain more than twice as much ammonia, and yet the chloride of platinum would yield no precipitate.—*Chemical Gazette*.

GRATIOLA OFFICINALIS (HEDGE HYSSOP.)

Vauquelin, in 1809, published an examination of this plant. He found it to contain a bitter resinous substance, which he considered its active principle, gum, albumen, an acid (malic or acetic) combined with potass, soda, and lime, and vegetable fibre, phosphates of lime and iron, oxalate of lime, chloride of sodium and silica.

M. Eug. Marchand, in the *Journal de Chim. Médicale*, 1845, p. 518, says he found also tannic acid, in combination with a crystalline substance, bearing an analogy to digitaline, which he proposes to call Gratioline. This substance is soluble in alcohol, and slightly so in water and ether, imparting an intensely bitter taste. No analysis of it is given.

PYRUS CYDONIA (QUINA.)

Dr. Rieckher has found three to three and a half per cent. of malic acid in the juice of quinces.

THE LANCET.

LONDON: SATURDAY, JANUARY 10, 1846.

THE monster evil, of a social kind, which affects the MEDICAL PROFESSION, is the general poverty of its members; no further proof of this need be adduced than the immense number of qualified assistants, who are everywhere ready to take service at less salary than that obtained by ordinary clerks, or even the superior classes of servants. The numbers of the profession, relative to the general population, is frequently complained of, and none can deny that the legally constituted bodies have most reprehensively suffered pretenders to medical knowledge to spring up on all sides of the regularly educated practitioners of every grade, many of them armed with degrees which may be had for mere purchase, and which are in no wise a test of medical proficiency. But setting aside, in a great measure, this source of mischief, we believe that the legitimate funds which should of right be contributed by the nation to the medical faculty would be amply sufficient to provide for every respectable individual in this country, having any title, legal or otherwise, to call himself physician, surgeon, or apothecary.

The profession is robbed, not by thousands, or by tens of thousands, but by hundreds of thousands sterling, annually. This may seem startling at the first blush, but let us consider the modes in which the funds, which should enrich the profession, flow into illegitimate channels; consider how the public, the other professions, and the government, trench upon its rights, and it will no longer be matter of doubt. Take the sums paid annually to knavish pretenders, who are impudently engaged in practice without the slightest show of right; add to this the sums taken by prescribing druggists; add again the yearly sums paid by the public for patent medicines; to these add the immense sums by which the profession is underpaid by the Government for services rendered to the state, or by public bodies, as in the case of the New Poor-Law Commission;—take these, and numerous other items, into consideration, and it will be seen that we have not dealt in figures of speech, but in plain figures of arithmetic.

The obvious mode of relieving the profession of that poverty which these and other causes have rendered so prevalent, is to raise the qualification for practice by raising the standard of medical education, and rendering it penal for unqualified persons to engage in practice. Then, this good effected, the boundaries of the profession must be enlarged, by a close examination of all those points in which the evident functions of the medical faculty are performed by other persons; and this scrutiny must be followed by a determination to assert the rights of the profession. To show our meaning, we need only refer to a few points which, together with others, we shall have hereafter to consider seriatim. There is the quarantine system; the office of coroner; and the entire range of medical statistics: the regulation of lunatics and lunatic asylums; sanatory commissions of various kinds;—all these departments of the public service ought, if the public welfare were alone considered, to belong to the domain of the medical faculty. These things belong to us of right and justice, and can and may be had for the asking. The profession is like a

big boy at school who has been set upon by his fellows, but who has only to put out his strength to take at once his proper position.

The monster cause of poverty and degradation is quackery; and this we confidently believe could not exist in its present rampant state, but for the countenance afforded to it by members of the profession. Often, indeed, this is done without improper motive,—unsuspectingly, in fact, though the bane is not the less. Low views have crept in, and the very highest members of the profession often give direct and indirect aid to empiricism, without dreaming of what they do. They will recoil from the consequences of their own act when placed nakedly before them. It will be a grand object to separate legitimate medicine distinctly from quackery. When this can be done, quackery by itself is such a monstrous bubble that it must shrivel of itself to nothing. But until this is accomplished, legislation will be in vain, and quackery will continue respectable. We shall begin the task by putting our finger upon every glaring or covert professional support of empiricism open to observation, not, meanwhile, sparing the unprincipled public quacks themselves. If this separation were effected, and quackery stood bare to public scorn, the profession might then ask for the abolition of patent medicines; till this is the case, the proposal will only be met by ridicule.

Time will show whether the great objects we have proposed are attainable in the present day; whether the professional boundary may be so enlarged as to include a vast amount of emolument and honour now absorbed by extra-professional persons, and whether the immense funds which are at present diverted into improper channels may not be regained for the profession.

Professional opinion, and the action born of strong opinion, are the powerful levers which must be moved to effect these things. It may be a difficult task, but in our labours we shall be animated with a bold hope for the issue.

In this country the various branches of the healing art are so inextricably mingled, there is such a want of efficient organization, and such a disregard of all considerations but those of personal or party interest, that anything like the common effort for general good effected by the Parisian Medical Congress appears next to an impossibility. We cannot, indeed, but admit that the state of social organization which allows medical men, veterinary practitioners, and druggists, all to unite for the purpose of strengthening their social position, throwing into the scale of reform their united weight, must be superior to that which exists in Great Britain. Nothing connected with the Parisian Congress more clearly illustrates the estimable value of union between the different divisions of the healing art, than what has occurred with reference to the veterinary section, respecting the labours of which we have not hitherto spoken. This important section of the Congress, after numerous discussions and deliberations, framed a report embodying a number of resolutions. This report was subsequently adopted by the entire Congress, and has been presented to the Minister of the Interior, under whose jurisdiction the veterinary corps is placed, as the expression of the wishes of the Parisian Medical Congress on this subject. We understand that the Report, thus representing the opinions of a medical senate, composed of delegates from all

parts of France, has been most graciously received. It is evident that, backed by the entire Congress, it has carried with it a weight which no document proceeding from the veterinary body alone could have enjoyed. The sentiments and wishes embodied in the Report being quite as applicable to this country as to France, we shall analyze a few of the most important.

"The veterinary surgeon," says the Report, "living generally in the midst of a rural population, is daily in contact with the peasantry who apply to his science that he may save the animals which constitute a great part of their property. A science so directly applicable to their worldly interests must be appreciated and respected by them, and must give authority to those who possess it. Were, therefore, veterinary practitioners, thoroughly acquainted with the true doctrines of rural economy, to inculcate them to the agriculturists of their district, to show them how to rear cattle so as to preserve their health, and to make them as productive as possible,—and to enlighten them as to the means of ameliorating stock, no doubt but they would be listened to and obeyed. They might, thus, become the benefactors of the locality in which they resided. If this beneficial influence were exercised, not in one spot only, but throughout the kingdom, with harmony and union, under the superintendence of a superior authority, a new era would be opened to agriculture.

"At present," continues the Report, "veterinary practitioners, as a body, are far from being able to render such services to their country, although all, no doubt, are anxious to do so. But in order to fulfil efficaciously the important functions of agents and promoters of agricultural ameliorations, they must be prepared by an appropriate education, which the existing schools are inadequate to give. The means of instruction presented by the three veterinary schools of Alfort, Lyons, and Toulouse, are so limited as to be nugatory in this respect. These establishments require completely remodelling. A sufficiently large extent of land should be added to them to admit of the rearing of cattle, and of illustrating the various improvements introduced into agriculture. They should, therefore, contain a model farm, a stud of horses, flocks of sheep and of other cattle. The duration of the studies should be at least five years. The pupils should follow theoretical and practical courses of agriculture, and of rural economy; and particularly courses treating of the hygiene and rearing of animals. The grade of Bachelor of Letters should be demanded of all pupils, and they should cease to be examined on horse-shoeing.

"Thus formed by five years of practical and theoretical studies, those who obtained the diploma of veterinary practitioners ought to be protected by public authority from the quacks who now prey on the rural populations, and the exercise of the veterinary art ought to be exclusively intrusted to them. In the army they should be placed on a footing of equality with the military surgeons, with whom their knowledge would entitle them to rank. Their special information might be rendered useful to the country in various ways. Thus, in the chief town of each district, there might be a veterinary surgeon appointed to examine into any epizootic that might appear, and to consult with the civil authorities. It is also to veterinary surgeons exclusively that should be intrusted the inspection of markets; and one or more should form a part of every local council of health or salubrity.

"Measures should likewise be taken to forward the progress of a science which has such influence over the health, riches, and power of the nation. Intelligent veterinary practitioners should be sent, occasionally, into foreign countries, to study the state of veterinary science, and to report on it, and a veterinary section should be established in the Academy of Sciences.

"Lastly, the due activity of all subaltern agents should be secured by the nomination of inspectors-general, chosen from amongst the most distinguished practitioners, who would constitute a kind of superior Council or Board, attached to the Ministry of the Interior. By the means of this Board, the Government would be able to ascertain, at any time, the number of domestic animals, their value, and their sanitary state, even in the most remote districts of the country."

The above slight sketch of the "wishes" of the veterinary section of the Congress, not only embodies many desirable improvements, but also gives us an insight into the present condition of veterinary medicine in France. As with us, it appears that the legitimate practitioner is hemmed in on every side by ignorant pretenders, who diminish his income, undermine his influence, and detract from the social position to which his knowledge fairly entitles him. We trust, however, that the manifestation made by the Congress in this direction will not be without a beneficial result, and that the veterinary practitioners of France will eventually obtain that protection which they would long since have enjoyed had the interests of the nation been consulted.

To those who practise veterinary medicine in our own country, the declaration of the wishes of the French veterinary surgeons must be a matter of great interest. It shows them the path which they ought to follow, to attain that scientific and social position to which they are aspiring. No honours would be too great for men who conscientiously accomplished the task so nobly traced by the veterinary members of the French Congress.

OBITUARY.

A SKETCH OF THE LIFE, AND SOME ACCOUNT OF THE WORKS, OF THE LATE DR. JAMES JOHNSON.*

JAMES JOHNSON, or rather Johnstone, for that was really his name, was born in February, 1777, on the banks of Lough Neagh, in the parish of Ballinderry, County of Derry, Ireland. Like Cobden, he might boast that he was "a farmer's son," his father cultivating a small farm, which had been for some time in the possession of the family. James Johnson was the youngest of the children, all of whom he lived to survive.

At the age of six years, he was put to a grammar-school, kept by a Catholic, the village pedagogue, and brother of the parish priest. Whatever his attainments, they were probably of no very elevated order, for the pupil in after-life spoke somewhat lightly of them, and implied, at all events, if he did not state, that he learnt little at school which he cared subsequently to remember. Before he was fifteen he had quitted school, and the instruction that he got there was all that he ever obtained from others.

At the age of fifteen, he was apprenticed to Mr. Young, a surgeon-apothecary in Port-Glenone, in the county of Antrim. He remained there only two years, when he was transferred to Mr. Bankhead, of Belfast, where he continued for two years more, and then came to London, without either money or friends. He became assistant to an apothecary in the metropolis, and by hard study and irregular attendance on lectures in anatomy and surgery, he passed a creditable ex-

* The above interesting biographical sketch of Dr. James Johnson is abridged from the January number of *The Medico-Chirurgical Review*.

amination at Surgeon's Hall, in 1798, and was appointed surgeon's mate in the navy, in the month of May of that year. In the "Mercury" frigate, he sailed to Newfoundland and Nova Scotia, always reading indefatigably, and seizing every opportunity, when the ship was in harbour, to visit the naval hospitals, to watch the cases they contained, and store up professional knowledge. Now, and ever after, he made notes of any thing important that he saw, and is another instance (if instances were wanting) of the value of recording facts and impressions at the time of their occurrence.

Capt. Rogers, the commander of the "Mercury," had a great antipathy to the Irish, but the zeal and good conduct of the young surgeon's mate subdued the ungenerous prejudice, and Captain Rogers winked at his absence from the ship, for some months, in the winter of 1799, when he studied night and day in London. The fruits of his diligence were soon apparent, for in January, 1800, he passed, for the second time, a triumphant examination at Surgeon's Hall.

He had obtained some honour, and, what was more substantial, he had gained a patron in Captain Rogers. This gentleman, of whom he always spoke in terms of affectionate remembrance, got him made full surgeon, and appointed to the "Cynthia" sloop-of-war, on the 27th Feb. He was now in the twenty-second year of his age, and, in the "Cynthia," he accompanied the famous expedition to Egypt, was at the siege of Belleisle, and at all the descents which the troops made on the coasts of France, Spain, &c., till they reached their destination. The fatigues and anxious nature of his duties proved too much for him; he was attacked with illness, and was sent back to Gibraltar, where he did duty for some time, under Mr. Vaughan, the Surgeon of the Naval Hospital.

From Gibraltar he returned to London, in the winter of 1800. He had recruited from his sickness—saved a little from his pay—had a few months before him—and resolved to expend all that he possessed, both in guineas and in time, in working out that professional education which had so far been acquired, and must now be completed, by hurried and broken snatches. The Sybaritic student of the present day, propped up on all sides by prosecutors and by lecturers—provided with means, and gluttled with help—who flies, in despair, at the difficulties that overwhelm him, to the friendly arms of the *Grinder*, may blush, perhaps, to read how Mr. Johnson struggled to obtain an education, unsupported by money, unassisted by friends, unaided by those manuals, plates, and woodcuts, which, professing to facilitate, appear to supersede exertion, and form at once the refuge and the ruin of complaining indolence. But "heaven helps those who help themselves," and so thought, or seemed to think, the subject of this memoir.

He went to the Anatomical Theatre in Great Windmill Street, and placed himself under Mr. Wilson and Mr. Thomas. During the winter he distinguished himself as a dissector, and generally prepared the subjects for his teachers' lectures—an opportunity, which once was sought with eagerness and regarded as a prize, but seems now to be mostly considered a bore. It was in this winter that the present Master of the Rolls, Mr. Bickersteth, and Mr. Johnson, formed, with others, a society of six, who gave demonstrations daily, in their turn, to a large class of students in the theatre.

In June, 1801, Mr. Johnson, whatever his thirst for knowledge, discovered that the lamp must be fed with oil, and was warned by his circumstances to seek employment. He applied to the Navy Medical Board for a ship, and his best credentials were contained in a note by Mr. Wilson:—"The bearer of this, Mr. James Johnson, has actually lived in the dissecting-room of Great Windmill Street during the last six months. Examine him, and see whether he has studied in vain." Dr. Harness was at the head of the Board, and, to his credit, he instantly appointed the young anatomist, devoid as he was of friends and interest, to the "Driver" sloop-of-war. In this ship he served in the North Sea, visiting the Orkney and Shetland Islands, and going with a convoy to the vicinity of Greenland, and Hudson's Bay.

At the peace of 1802, he was again out of employ. Many young men would have done nothing, or have done mischief. They would have "seen life," that is, mis-spent or sacrificed it. Mr. Johnson's mode of passing leisure time was a different one. His economical habits had again enabled him to save a few pounds, and he put it out at interest in—study. So soon as his money was gone, something must be done. To get on the peace establishment was very difficult, for it required great interest, and he had none. He applied to the Sick and Hurt Board, and was fortunate enough to obtain a conversation with the late Sir Gilbert Blane. Like Dr. Har-

ness, Blane was pleased with the ingenuousness, enthusiasm, and industry of the applicant, and he immediately appointed him to the "Caroline."

He now gave indications of his taste and talent for writing, and at the age of 27, amidst the bustle and confusion of a mess-room, and surrounded by his brother-officers, men whose gallantry was more unquestionable than their literature, he composed his earliest work.

The work itself, which now lies before us, bears the following, not altogether uncharacteristic, title:—

"THE ORIENTAL VOYAGER; OR DESCRIPTIVE SKETCHES AND CURSORY REMARKS, ON A VOYAGE TO INDIA AND CHINA, IN HIS Majesty's Ship *Caroline*, performed in the years 1803-4-5-6, interspersed with Extracts from the best Modern Voyages and Travels. The whole intended to exhibit a topographical and picturesque Sketch of all the principal Places which are annually or occasionally visited by our East India and China Fleets. The Routes to and from India, illustrated by the tracks of His Majesty's Ships *Caroline* and *Medusa*, correctly set off on a Chart, extending from the British Isles to Canton. By J. JOHNSON, Esq., Surgeon in the Royal Navy.

The Preface gives a tolerably accurate account of the nature of the volume. His object, he informs us, is to furnish the young voyager with an agreeable and useful companion on his first visits to the Oriental world.

The *Oriental Voyager* comprises the history of three important years of Mr. Johnson's life; then it was he acquired his taste for varied and discursive information, tested his powers of description, made those observations on which he founded his work upon Tropical Climates, consolidated and confirmed his habits of industry, and, unfortunately, contracted the germs of a disease which saddened his future years, and doomed him to a late, though still a premature death. His return from the East, somewhat shattered as he was in constitution, by dysentery, was a return to the dissecting and the lecture-room. The privateer and the Dutchman contributed their quota to the fees, and his prize-money enabled him to enter as a student at Guy's and St. Thomas's, where he formed the acquaintance and gained the esteem of Sir Astley Cooper, Dr. Curry, and the other ornaments of that celebrated school.

His professional education, so far as attendance on lectures went, was now completed. Desultory as it was, from the necessity of the case, we cannot but own that it was judicious in design and as perfect as circumstances admitted in its execution. Nor can we fail to admire the undaunted resolution of the man. Saving his few pounds that they might be spent on knowledge, returning, when they were spent, to work and save again for the same object, and through the long period of eight or ten years, with every interruption, with those inducements to professional indolence that conquer and debase the resolves of so many, with the obstacles (none know who have not felt them) of poverty and ill health, having but one aim—his education,—and attaining it.

In the autumn of 1806, he re-visited his native country, and became acquainted with Miss Charlotte Wolfenden, of a highly respectable family, in Lambeg, County of Antrim. This lady he shortly married, and she now survives him. Soon after his marriage, he was engaged in attending the prisoners of war, in the dépôts at Plymouth and Portsmouth. Here he made the most of his opportunities. In 1808, he was appointed to the "Valiant," of seventy-four guns, in which ship he remained nearly five years, was, we believe, in several engagements, and saw a great deal of active service.

On quitting the "Valiant," he remained for a short time in the neighbourhood of Gosport. He was not idle. The notes that he had made in his voyage to India, notes that he had composed with diligence and preserved with care, were brought out, compared, corrected, and expanded into his principal work, "The Influence of Tropical Climates on European Constitutions." But it is not enough to write a work, we must print it. This *sine quâ non* is frequently the difficulty, and perhaps many a production has missed immortality from the bad taste or prudence of a bookseller. This essential personage shook his head at the "Tropical Climates," and had not its author treasured up his prize-money for this very purpose, he would probably never have attained either reputation or a name. How subtle are the links that connect the chain of human fortune! If he had not saved from his pay to study, he would not have won the good opinion of Sir Gilbert Blane, nor been appointed to the "Caroline;" if he had not got the ship, he would not have enjoyed the opportunities in the East, of which he so decisively availed himself; and if he had not fallen in with a privateer, and husbanded his prize-money, those opportunities would have been, after all, profitless.

The publication of the work at once conferred on him a high character, and immediately on its appearance, he was appointed

flag-surgeon, with the late Sir William Young, then in command of the North-Sea Fleet. He did the duty of physician to the fleet in a most inclement season, with constant hurricanes, and vessels foundering on all sides. So pleased was Sir William Young with his surgeon that he extended to him his patronage and friendship to the last hour of his life. Sir William Young, indeed, was one of the two or three friends whom alone he knew, and on whom he relied, when he afterwards embarked his all in the metropolis.

The best and most complete edition is undoubtedly the last. In the arrangement of that, Dr. Johnson had the valuable aid of Mr. Martin, formerly presidency surgeon in Bengal, and surgeon to the Native Hospital of Calcutta. Mr. Martin informs us in the part of the preface assigned to him:—

"The materials of the brief sketches now incorporated in Dr. Johnson's well-known work appeared originally in an official report on the climate and diseases of Calcutta, of which two editions were ordered to be printed at the public cost by the supreme government of India.

"These sketches were the result of observations made in the earlier period of my service, with troops engaged in active military operations in some of the most unhealthy countries in India, and in the Burman Empire, during the late war with that State; confirmed subsequently in an extensive hospital and private practice amongst both Europeans and Natives, in the British Indian Capital. The mode of their first appearance was, as I have said, official;—indeed, they were thrown together without care, and in the hurry of excessive professional labour, with the sole view of affording such facts and materials as might assist a public inquiry I then suggested into the health history of Calcutta, and the existing condition of that city and the surrounding country, with a view to their improvement; as I had very early satisfied myself, that if we would effectually attend to the welfare of its vast population, we must adopt measures of correction and prevention in vigorous and systematic form. On this subject, I had previous official and personal communication, first in 1821, and then in 1823, with the Governors-General of India; but it was not till 1835 that effectual measures were taken for a full investigation into the various and important matters connected with the subject."

Of Mr. Martin's contributions it is impossible to speak too highly. The result of two and twenty years' observation in India, we may well suppose they are derived from a varied and vast experience. But it is not experience only they evince. Those who have the pleasure of Mr. Martin's acquaintance can speak to his independent and cultivated mind, his clear views, his patient investigation, and his sound judgment. The portions that he has written are indicative of all these qualities, and are at once lucid and complete analyses of the subjects they embrace. His sketch of the climate of Calcutta is one of the most masterly things of the kind.

The manner in which Mr. Martin came to be connected with Dr. Johnson, in this last edition, is flattering to the one and characteristic of the other. Mr. Martin, who was entirely unknown to Dr. Johnson, consulted him on the state of his health, enfeebled by his long residence in Bengal. Dr. Johnson gave the best advice in his power, and was so impressed with a high value of Mr. Martin's opportunities and talents, that he frankly offered to associate him with himself in the editing of an edition then in the press, and proved a most warm and liberal friend in furthering his professional views.

At the peace of 1814, King William IV., then Duke of Clarence, hoisted his flag in the "Impregnable," 98-gun ship, when Sir William Young retired. Mr. Johnson was so strongly recommended to the Duke, that he was retained, and served with his Royal Highness, while conveying the Emperor of Russia, King of Prussia, and other Potentates, to England. The Duke had an attack of his hay-asthma at Boulogne; Mr. Johnson attended him, and the attack was speedily subdued. This and the frank and simple character of his surgeon, so congenial to his own, pleased the Duke highly, and was the foundation of what might almost be called a friendship. At the time, this was shown by the Duke's exerting all his influence to obtain for Mr. Johnson the rank of physician to the fleet. But the King's son was baffled by the First Lord of the Admiralty, and Lord Melville negatived the application.

When the long war ended in 1814, Mr. Johnson felt that his naval life was run, and that the future must be sought and found on shore. His desire and intention were to practise as a physician* for which he was best qualified, both by his general and professional attainments. But to succeed as a physician he must first be known, to be known must be a

work of at least a few years, and during those years of preparation and of trial himself and his family must live. His resolution was shortly taken, and it proved, as it seemed like to be, a sound and a successful one. While serving with Sir William Young, in the North Sea, he had published some papers in the *New Medical and Physical Journal*. Of this he now became the editor, in conjunction with Drs. Shearman and Palmer. In 1816, it appeared under the title of the *Medico-Chirurgical Journal*, in a monthly form, comprising about 100 pages, and divided into four parts, which were devoted to Original Communications,—to a comprehensive Analytical Review of Medical Literature,—to Selections, principally from the Foreign Journals,—and to Medical Miscellanies. The Journal itself met with no great success, so far as money went, but it answered Mr. Johnson's purpose.

In 1818, he bade adieu to Portsmouth, and took a house in the Albany Court-yard, in London, becoming a licentiate of the College of Physicians in 1820. He had indifferent health—one friend in the metropolis, Sir William Young—a wife and five children—something less than five hundred pounds—and his half-pay, under a hundred a year. The risk was palpable, ruin might seem, even to a sanguine vision, looming in the distance; but what are these to an undaunted will and a consciousness of power! Like Sheridan, he felt, when his first speech failed, that "Damn it, it was in him, and it should come out," and, like Sheridan, he found the conviction the means of its own realization. He changed the *Monthly Medico-Chirurgical Journal* into the *Medico-Chirurgical Review*, and published it thenceforth as a Quarterly Journal, at his own sole risk and expense. Success attended his efforts; his health, which had been for some time greatly impaired, improved; and there began to appear some prospects of professional success in the sphere which he had lately selected.

In October, 1844, Dr. Johnson, finding that his health and strength were no longer sufficient to enable him to support the constant fag of the editorship of the Review, in addition to the toils of his extensive practice, most reluctantly determined to resign its management. An excellent constitution had been shaken by fever in India and at Walcheren—was shaken now by this incessant toil, and, we may well suppose, anxiety. In the winter of 1822, hæmorrhoids and prolapsus ani, from which he had suffered since his dysenteric attacks, led to the formation of matter in the cellular membrane round the rectum. Two operations, of some severity and risk, were requisite; Sir Astley Cooper performing one, Mr. Guthrie the other. Both these gentlemen were his personal friends, and showed him the most considerate kindness. He recovered, after a long and painful illness, and shortly afterwards removed from Spring Gardens, where he had lived for the last few years, to 8, Suffolk-place, Pall Mall, where he afterwards resided. But his nerves were unstrung—his digestion, never good, was impaired. His own sufferings directed his attention more particularly to dyspepsia, and were the foundation of his "Essay on Indigestion," which was drawn most vividly and truly from the life. This work, which bore the following title,—*"An Essay on Indigestion; or Morbid Sensibility of the Stomach and Bowels, as the Proximate Cause, or Characteristic Condition, of Dyspepsia"*—was published in 1826. Its success was the most striking thing imaginable.

Of the next three years of his life there is little or nothing to be said. They were devoted to those avocations which left few minutes of a long day unoccupied. In the autumn of 1829, he made a lengthened and agreeable excursion to France, Switzerland, and Italy. He had previously made a not very dissimilar tour in 1823. The impressions of the first were strengthened or corrected by the last, and the result was a work which saw the light in 1831. It was intitled, *"Change of Air, or the Pursuit of Health and Recreation."*

The last tour he made was in his native country—the last work he wrote was upon Ireland. The same bodily vigour characterized his journey through the Emerald Isle—the same sprightliness of description was found in his account of what he saw. He was now advanced in life. At the age of 67, he still carried his years bravely; his hair was scarcely bleached by so many winters—it had grown a little, and but a little, sparse upon the crown—his frame was still erect—his step firm—and not a tooth was missing from its appointed place.

He had long been partial to Brighton, and the railroad offered him facilities of which he determined to avail himself. He resolved to remain there for a couple of months, coming up to town three days in the week to see his patients. Unfortunately, Brighton was so full that he found it impossible to procure a house or apartments on West Cliff, and was compelled to repair to East Cliff, the lower portion of the town. Here the drains are frequently deranged, and it happened

* He had taken out a Scotch degree in the preceding year.

that they had been so at the house he selected, immediately before his visit to it. The residents and visitors had all been seized with diarrhoea, and this attacked himself and those attending him almost on the instant that he entered it.

His intention to remain at Brighton three days in the week was not acted on. Devoured by ennui, he turned with satiety from the groups on the Parade, or the boats upon the beach, and after one attempt, he fled to the express train, and came to and returned from London daily. The excitement and exertion were too great. On the 4th October, returning by the train to Brighton, he was seized in it with a rigor. On arriving at his lodgings, he exclaimed to his wife, that unless he could procure a free perspiration this attack would be his death. That night he was delirious. The diarrhoea, which had never ceased, became aggravated, dysenteric—the low fever of the aged and exhausted was established on it—and worn out by purging, tormina, tenesmus, hiccup, he expired on the 10th, surrounded by his family, and sensible nearly to the last.

If we look back on Dr. Johnson's career, we cannot but deem it a successful one. He started in life without money, friends, or education. He was literally unknown. By his energy and talents he worked out for himself education, a profession, reputation, and a competency, if not a fortune. He gratified his tastes, while he raised his position. Fond of observation, he saw a large portion of the globe—and, happy in describing what he saw, his writings were a source of emolument and honour.

HOSPITAL REPORTS.

WESTMINSTER HOSPITAL.

CASES OF FEVER WITH PLEURO-PNEUMONIA, AND CONVALESCENCE;
AND OF PLEURISY AND CONVALESCENCE.

WITH CLINICAL REMARKS BY DR. BASHAM.

ROBERT E—, aged fifteen, admitted 21st October, under Dr. Basham. Has been ill four days. Symptoms ushered in by lumbar pains, epigastric uneasiness, thirst, loss of appetite, rigors, and general prostration. The pulse is 120, compressible; skin hot and dry; tongue very foul, coated with a white fur; red at margin and extremity; face flushed; respiration much accelerated, forty-eight; the right side laterally, posteriorly, and inferiorly, is dull on percussion; the superior regions are resonant, but duller than natural; over the inferior parts, lateral, and subscapular regions, there is total absence of the respiratory murmur; there is distinct evidence of crepitation. There is also pectus loquens, confined to the region last named. The sounds on the right side are augmented in character, the respiration being somewhat puerile and bronchial. He was ordered a warm bath; the left side to be covered with a blister; the diaphoretic mixture; and calomel, three grains, with one grain of opium; beef-tea diet; purging draught occasionally.

Second day from admission.—The report states him better; skin still hot; pulse reduced to 100; bowels freely moved; offensive excretions; frequent cough; but respiratory movements less frequent. At the mid-day visit on this day, however, the respiration had become again much oppressed; the expectoration also was brownish, rust-coloured, viscid, and tenacious; the lateral and sub-scapular regions were dull on percussion; pectus loquens, with deep-seated bronchial respiration; and the crepitating sound fainter than on the preceding day. Ordered, calomel, two grains; opium, half a grain; tartar emetic, quarter of a grain. To be taken every four hours, with occasional saline purgatives.—In the evening the respiratory movements had become more natural; there was no dyspnoea; cough much less troublesome; sputa, as before, viscid, and streaked with blood, but very scanty, not amounting to more than an ounce in the twenty-four hours. To continue the remedies.

Third day.—Ten A.M.: Had slept quietly during the night, and stated that he felt better; tongue coated; but less thirst; skin of a moderate temperature; pulse 116; sharp and jerking.—One P.M.: The blistered surface permitted the affected side to be examined. The lateral, posterior, and inferior regions of the lung of the right side exhibit complete dullness; anteriorly and superiorly, resonance is deficient. In the affected regions there is total absence of either bronchial or vesicular sounds, but the voice is heard through the tube in a sharp shrill key, indicative of the true ægophony; bronchial respiration and pectus loquens are evident in the superior regions; the sputa is frothy, rust-coloured, viscid, and tena-

cious, with sanguinolent streaks. To continue the pills, and to take a purging draught with the potassio-tartrate of antimony.

Fourth day.—The bowels had become much relaxed from the operation of the draught; the pulse was reduced to ninety, soft; the cough was much less frequent; the sputa still rust-coloured; right side still dull, with absence of respiratory murmurs; ægophonic echo of voice still present; stated that he felt much easier in his breathing and cough; tongue had become clean and moist; no thirst; pulse eighty-four. To continue the pills, omitting the antimony.

Fifth day.—Symptoms continued to improve; ægophonic resonance much diminished; faint crepitating murmur.

From the sixth to the eighth day improved gradually; appetite improving; and cough and expectoration abating.

On the ninth day the chest was examined; the resonance in the affected regions had partially returned; faint indices of vesicular-murmur obscured by a mucous gurgle. To omit the pills.

Tenth day.—Neither cough nor expectoration; regaining strength rapidly; vesicular murmur of right side natural; no obscuration of any of the natural sounds. Ordered infusion of cinchona, with improved diet, and pronounced convalescent.

CASE OF PLEURITIS, LEFT SIDE, ADMITTED AFTER EFFUSION HAD
TAKEN PLACE.

WILLIAM E—, aged 22, cabman, admitted into Burdett Ward, under Dr. Basham, October 27. Had been taken ill four days with sore throat, pain in the left side, thirst, prostration, rigors, cough, with sputa tinged with blood, anorexia, profuse perspirations last day. Tongue coated with feverish fur. Pulse 110, full, and hard. On examination of the chest, the left side presents complete dullness, with entire absence of all vesicular sounds. Pectus loquens in every region. Ordered pills of calomel, opium, and antimony, every four hours.

Second day.—There is frequent cough; hurried respiration; sputa scanty; frothy; skin hot, with occasional profuse perspiration; bowels open; urine high coloured, depositing lithates in abundance; can rest only on the right side. The dullness of the left side is not so complete as yesterday; superiorly, resonance is greater, but there is total absence of respiratory murmurs, except very deep-seated bronchial respiration; the pectus loquens is present also in each region, and it is remarkably acute, a tone or two higher than the key of the natural voice, but it does not amount to ægophony. The cough occurs in severe suffocative paroxysms; expectoration viscid and frothy, streaked occasionally with blood; tongue coated with slimy fur; pulse 96, softer; skin moist; slight indications of pyalism. To omit the pills, and to take the diaphoretic mixture with twenty minims of laudanum every four hours, and the purging saline draught with antimony.

Third day.—Reports himself better. Dyspnoea and cough less urgent; tongue coated; bowels well moved; skin cool; pulse 108, soft; the left side much more sonorous on percussion; bronchial respiration audible throughout, with pectus loquens in each region.

Fourth day.—Continues to improve. Pulse 84, soft; cough less frequent; sputa mucoid and frothy; resonance of left side increasing; bronchial respiration, with mucous gurgle.

Fifth day.—Sleeps well; much refreshed; tongue clean; natural cough, but slight; appetite craving. Fish diet.

Sixth day.—Continued improvement of the affected side; in the supra and sub-clavicular and axillary regions, resonance is good, with bronchial respiration, and slight indications of the natural murmur; cough slight; sputa of a muco-purulent character, but very scanty.

On the seventh day, succeeding to a violent paroxysm of coughing, a small mass of agglutinated mucus was expectorated, which was tinged and streaked with blood, the resonance of the affected side approaching the natural condition. He continued progressively to lose all trace of abnormal sounds, and on the eleventh day was placed on full diet as a convalescent patient.

Remarks.—Dr. Basham selected these cases as well adapted to illustrate the signs by which pleuro-pneumonia on one hand, and pleurisy with effusion on the other, might be detected. In these cases the symptoms were not complicated, but simple and expressive; and they proceeded in each case steadily onward to convalescence, illustrating in their progress the peculiar modifications to which the symptoms are subject as the organs gradually returned to their healthy and normal function. They were cases well adapted for the observation

of students just entering on a course of clinical study. The first symptom that arrested attention in pneumonic inflammation was the diminished resonance in some part of the thoracic surface; generally laterally or posteriorly in the sub-scapular region: this dullness was usually circumscribed, as in the case of E—and over the space of this diminished resonance, a peculiar crepitating murmur was heard,—the *rôle crépitante humide* of the French,—and always considered as pathognomonic of inflammation of that portion of the pulmonary tissue that lines the air cells. This inflammatory state of the air cells exhibited all the phenomena of a true fibrous inflammation, being attended by the exudation of fibrine and the consequent consolidation of the parts involved in the disease. It was this fibrinous effusion and partial consolidation that produced the crepitating murmur heard when the patient's chest was examined. And here existed the distinctive physical sign between pneumonia and inflammation affecting the bronchial mucous membrane. Co-existent with this crepitating murmur, and occupying the same region, was a certain resonance of the voice, called bronchophony—but better named *pectus loquens*: the term was meant to express a peculiar impression conveyed to the ear, by the voice of the patient being heard at the obturator end of the tube, and appearing as if issuing from the surface of the chest. A similar impression was made on the ear when applied over the sternum and intermammary regions in a healthy subject, then depending upon the echo of the voice in the primary bronchial tubes. The student should cautiously distinguish between the peculiarity of the sign called *pectus loquens*, or bronchophony, and that to which the term *pectoriloquy* was applied. In the *pectus loquens* the voice appeared at the surface of the chest, and as if confined to the distal end of the stethoscope; while in *pectoriloquy* the voice traversed the entire length of the tube, and seemed to strike direct on the ear. This latter condition was mostly expressive of a tubercular cavity. In the case now under consideration, the *pectus loquens* resulted from the consolidation of the lung, in which state it had become a better conductor of sound. In addition to these physical signs, there were present, symptoms of general pyrexia, hurried respiration, anxious countenance, and frequent cough. So soon as expectoration appeared, it was viscid, tenacious, rust-coloured—all characteristic of pneumonia. The rust-coloured, tenacious, adhesive sputa, was by the elder physicians accepted as the certain index of pneumonia. On the third day the dullness had become more extended; all traces of respiratory sounds had ceased; and the patient's voice, in the lateral region more particularly, instead of coming to the ear in a key equal in tone to the natural voice, was as if pitched many notes higher, and sounded sharp, shrill, and bleating; to this peculiar modification of the voice, the term *agophony* has been applied, from a supposed analogy to the bleat of a goat. This sound resulted from the effusion of a thin stratum of fluid between the pleura, and could only be detected in the earliest stage. On this day, therefore, there could be no doubt that the inflammatory action, originating in the air cells, and in a part of the lung contiguous to the surface of the lobe, (a frequent situation of pneumonia,) had extended itself to the pleura, and had been followed by serous effusion. The increased extent of dullness, the absence of all respiratory sounds, and the *agophony*, left no doubt on this point. These symptoms gradually subsided, and first was heard a return of the crepitating murmur, only fainter than in the onset of the disease; and this fact should be well remembered, that as the lung returns from its inflammatory consolidation, and as the absorption of the fibrinous product of this action proceeds, that a crepitating murmur is again heard, only fainter generally than at first. If this be forgotten, the reappearance of this sign might lead the inexperienced to imagine a return of the inflammation, and not its resolution. To this was added, increased resonance of the chest, with a bronchial murmur, or such a sound as is heard over the sternal region; a mucous rhonchus was also evident. There was detected a vesicular murmur, at first in the regions remote from the original site of the disease, then in the region first affected, and accompanied by a uniform resonance over the entire chest—conditions that declared the complete resolution of the disease, and a return to the natural and unimpeded function of respiration.

The second case exemplified the auscultatory signs of pleuritic effusion. This patient had not come under observation till complete effusion had taken place. The left side of the chest was dull throughout, only a deep-seated bronchial murmur. *Pectus loquens* was detected in every region; there was no true *agophony*; the stage had passed. The remaining general signs were—hurried respiration, dyspnoea, frequent cough, expectoration scanty but frothy, general

pyrexia, and a high inflammatory condition of the whole system, as expressed by the abundant azotised products in the urine. The occasional streaks of blood in the white and frothy sputa at a subsequent period of the disease, arose from the congested state of the lungs, the frequent paroxysms of urgent and suffocative cough causing transudation of blood from the mucous surface, with which the sputa became streaked. The subsequent stages of this case were marked by a gradual and very uniform progress towards convalescence. The chest each day became more resonant; the bronchial and vesicular murmurs more evident as the lung became relieved of its peripheral pressure, the cough less frequent, and at length, complete convalescence. Dr. Basham also pointed out the general principles upon which the treatment was based in each case, and more especially referred to the gradual removal, by absorption, of the effused pleuritic fluid by the agency of the mercurial and antimonial preparations employed.

DIVISION OF MIDWIFERY FEES.

To the Editor of THE LANCET.

SIR,—I have been anxiously expecting to see in your journal some further account of the proceedings of those gentlemen who met some time ago, with the view of carrying out a plan to settle the difference of opinion which at present exists between those who practise midwifery.

I live in one of the many suburbs, and am often called upon to attend the midwifery cases of gentlemen who reside in London, they being from home when sent for, &c. Now it sometimes happens that the loss of a few hours operates against my own interests, yet am I compelled to be content with a call from the gentleman whom I have obliged, and to receive his thanks, with offers of reciprocity, feeling that years may pass away before I may have a patient in his locality; or that it may so happen he can never repay the obligation. I have devoted the whole of a night in attendance on another's patient, yet the engaged accoucheur has never called upon me to thank me for my exertions in his behalf, although he has passed my door for many successive days. Having suffered thus, I beg to assure you, Sir, it is with great reluctance I now go to attend for another; yet I dare not refuse, but would decline, if I could make the excuse of prior engagement with a patient of my own, a thing very often done in London, but here impracticable. What can be more fair, more just, than a division of the fee, if I devote my time in the service of another, whilst he is gaining an advantage elsewhere? Surely he ought not to object to divide with me the amount I have earned for him. Those gentlemen who think and act otherwise, need not wonder if they find the whole of the fee sometimes demanded, or, when offered by the patient, retained by those who attend for them. I hope the promoters of so good a cause will not relax in their endeavours to benefit a great portion of general practitioners, especially those who reside in the suburbs of London. Were it generally known that a proper understanding existed between medical men who practise midwifery, every woman would feel consoled, for, however far she may have to send for her favourite medical attendant, she would know that, could he not arrive in time to render her aid, she may rely on the attendance of one who resided near her.

I am, Sir, your obedient servant,

December 23, 1845.

A SUBURBAN PRACTITIONER.

CHLORINE IN SCARLATINA.

To the Editor of THE LANCET.

SIR,—The administration of chlorine in scarlatina, recently recommended by various practical writers, is attended with a theoretical difficulty which is likely to prevent many from fully testing its power of disinfecting the poisoned secretions. I refer to its liability to produce corrosive sublimate, by combination with calomel previously introduced into the system. My object in troubling you with this paper is twofold:—to draw the attention of your readers to the remedy, and its mode of exhibition; and also to obtain from those who have tried it, such assurance of its safety, or description of the cautions necessary, as may embolden others to employ it.

The formula for preparing chlorine in solution is given in Dr. Watson's "Lectures on the Practice of Physic," vol. ii., p. 764, second edition. A drachm of chlorate of potash is there ordered to be dissolved in an ounce of hydrochloric acid, previously diluted with an ounce of water. This proportion of water is too small, being neither sufficient to dissolve the chlorate nor to retain the gaseous chlorine in solution at the

ordinary temperature of a chemist's shop. I should therefore recommend two ounces of water to ensure uniformity, and this in addition to the usual precaution of a well-stoppered bottle, and a dark place for its preservation.

That such a solution of chlorine, even when highly diluted, will convert calomel into corrosive sublimate, is easily proved. After some preliminary experiments, made to determine the general fact, I mixed together six minims of Dr. Watson's solution of chlorine, two ounces of water at 60° Fahrenheit, and two grains of calomel. After ten minutes, a drop of the fluid placed upon polished gold, and touched with a steel point, yielded a perceptible amalgam; and after fifteen minutes a decided amalgam was formed. After thirty minutes, iodide of potassium gave a pale scarlet precipitate.

A similar mixture at the temperature of 98° Fahr. yielded traces of mercury by the amalgam test, after five minutes' digestion.

Two ounces of warm infusion of tea, with some tea-leaves, milk, and sugar, were mixed with six minims of solution of chlorine, and two grains of calomel. After an hour, all smell of chlorine had disappeared, and no trace of amalgam could be obtained during the next sixteen hours.

From these experiments, it would seem that the formation of corrosive sublimate by the co-administration of chlorine and calomel, depends upon the amount of organic matter present in the stomach and bowels; a condition which materially affects also the disinfecting power of chlorine, if we may judge of the processes within the body by that which takes place without it. Experience, therefore, must decide the question, whether chlorine can be both safely and effectively given to persons already influenced by mercury, or taking it at the time.

After fasting for five hours, I took at bedtime two grains of calomel, and immediately after three ounces of water, containing six minims of the solution of chlorine. A dull pain and heat over the umbilical region during the night, with the griping usually attributed to the action of mineral acids together with mercury, were the only unpleasant symptoms that followed: but next day there were, slight coppery taste, looseness of the teeth, and a little grey edging to the gums, never before produced by the same dose of calomel alone. There is therefore reason to suppose, that if followed up by repeated doses of solution of chlorine, the *Draco mitigatus* would have altogether forfeited its claim to the appellation, and under some circumstances disagreeable results might occasionally follow.

Should this paper meet the eye of Dr. Watson, it is hoped that he will be kind enough to supply any information which he may possess on this point, and thereby add to the obligations which he has already conferred on the profession, by the many valuable suggestions contained in his truly practical work. I have the honour to be, Sir, your obedient servant,

Windsor, Dec. 27, 1845.

CHARLES MAITLAND, M.D.

NOTE ON THE IRRITABILITY OF THE MUSCULAR FIBRE IN HEMIPLEGIA.

BY MARSHALL HALL, M.D.

To the Editor of THE LANCET.

SIR,—I trust this note will not be regarded as a deviation from the resolution which I expressed at the commencement of my last. Of Dr. Copland's first letter I have read but ten lines; of his second, not one. I cannot, therefore, be supposed to enter into any controversy with that gentleman.

The object of my former note was to state, in as few words as possible, what I claim, and what I have repeatedly and distinctly disclaimed, in regard to the progress made in our knowledge of the nervous system, Dr. Copland having, as I am assured, like so many others, occupied himself only with the latter.

The object of the present note is a *matter of fact*—viz., the comparative condition of the irritability of the muscular fibre in the hemiplegic limb—a fact of the greatest importance, as I have elsewhere stated, in the diagnosis of cerebral and spinal paralysis.

The fact cannot be better stated, than in the following memorandum,—one of a considerable number in my possession, which will be published hereafter.

MEMORANDUM.

"I have several times galvanized Mrs. B—, aged thirty-seven, between the periods of six and fourteen weeks, after a severe attack of hemiplegia, in consultation with Dr. Marshall

Hall. In every instance, when the galvanic influence has been administered in its mildest form, so as to be a test of the irritability of the muscular fibre, and passed equally, and in the same direction, through both arms, the paralytic arm has been uniformly moved by a *less* galvanic power, and *more* by a *given* galvanic power, (within certain limits,) than the unaffected arm.

"ROBERT YOUNG, M.D., Surgeon.

"Camberwell, Dec. 18th, 1845."

The whole question is being subjected to the most careful and exact scrutiny.—I am, Sir, your obedient servant,
Manchester-square, Jan. 6th, 1846. MARSHALL HALL.

P.S.—Is it not singular that the profession still refuse to take the large view of the recent inquiries into the physiology of the nervous system, which has been so repeatedly laid before them, and that they still dote on a few experimental facts and sympathetic actions?

Remove the brain, and remove the ganglionic system, which may be readily done in an animal of cold blood, and—what remains? The true SPINAL MARROW, viewed exclusively of the spinal cord of cerebral nerves, and of ganglionic connexions,—the true SPINAL MARROW, with its incident and reflex nerves endowed with the *vis nervosa*, and accomplishing the acts of ingestion and of egestion throughout the animal economy, to say nothing of pathology and therapeutics.

HOMŒOPATHIC SURGEONS.

To the Editor of THE LANCET.

SIR,—The enclosed I have sent you, being an advertisement published in a Liverpool newspaper. I could hardly believe my sight. What! are poor sailors to be entrusted, when labouring under African dysentery and African fever, to homœopathic treatment?—Your obedient servant,
Jan. 3, 1846. A CONSTANT READER.

WANTED, a SURGEON, for Africa; one having a knowledge of Homœopathy would be preferred.

* * We purposely omit the name of the referee of the advertiser, as we could not in any way encourage such quackery and brutality.—ED. L.

TO CLEANSE VESSELS FROM THE ODOUR OF ESSENTIAL OILS, ASSAFŒTIDA, ETC.

M. MAHIER tells us that this may be done by the use of bitter almond paste, leaves of the lauro-cerasus, or substances containing prussic acid. In the case of fatty admixtures, first use caustic potass, or resinous tinctures, spirits of wine, and afterwards bitter almond paste. M. Mahier suggests the employment of these substances in cleansing rooms where bad odours linger, as dissecting theatres, &c.—*Jour. de Chim. Méd.*, 1845.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, January 2nd, 1846:—J. H. Budd, A. Davies, J. R. Holman, T. B. Thwaites, J. B. Gilpin, J. Welch, L. C. Heslop, S. S. Sidebottom, J. Broadbent, and W. A. Harland.

CORRESPONDENTS.

The lecture of Dr. James Turnbull, (Liverpool), on auscultation, was received. It shall be published. We must apologize to Dr. Turnbull for not having made an earlier acknowledgment of his communication.

It would be useless to publish the circular of the itinerant "Daniel Carr." If the profession were under a proper system of government such fellows would not be tolerated.

J. Q. R.—He can practise surgery anywhere in the British dominions, and is deemed to be an eligible candidate for any public surgical office.

G. D., (Exeter,) and many others on the same subject. The matter is under consideration. Probably some such arrangement will be adopted. We did not believe that the appearance of "advertisements" in the body of the work could create so much dissatisfaction. We consider, however, that very few of our readers would "prefer paying one shilling a number rather than see trading advertisements bound up in the volume."

We do not recollect having received any communication from Mr. F. Robinson. Perhaps he will take the trouble to write again.

Iatros. The description is perfectly correct. The members of the Lawless Committee, with one or two exceptions, do not practise surgery; consequently, it is a body of apothecaries.

Communications have been received from J. T., Mr. Lansdown, Ein Deutscher.

CLINICAL LECTURES

ON THE

PRINCIPAL FORMS OF INSANITY,

DELIVERED IN THE MIDDLESEX LUNATIC-ASYLUM
AT HANWELL.

BY JOHN CONOLLY, M.D.,

PHYSICIAN TO THE ASYLUM.

LECTURE VIII.

Melancholia.—The Treatment.

It is impossible for any man of the smallest degree of feeling to converse, as you have to-day done, with patients suffering from the melancholy described in the last lecture, without a most anxious wish to relieve their extreme distress. The countenance and attitude express such intense and unaffected suffering, and their language is usually so painfully descriptive, as to leave an impression that of all human afflictions this is the worst. In fact it scarcely admits of aggravation, for the horrors of remorse are superadded to despondency, and the sorrow that is felt shuts out both human consolation and immortal hope. Many years ago I knew an amiable lady who had long suffered from melancholia, for the cure of which she at length took large doses of the oxy muriate of mercury and of diluted sulphuric acid at the same time, by the direction of an amateur prescriber. It certainly happened that about this time the mental despondency gave way, and what would appear to have been the cerebral disorder; but excessive pain and burning heat ensued, referred to the spine, and radiating from thence round the trunk; the pain at length amounted to agony, and was incessant day and night for more than twelve months, scarcely permitting sleep, or relieved by any opiates, and unchecked, even for an hour, by any general or topical remedies: contraction of the lower limbs took place; deformity; loss of all power of walking; ulceration of the knees from pressure; and, finally, the relief of death. Throughout all this excessive suffering, the patient often assured me, that, dreadful as it was, she would not wish to be relieved from it by a return of her despondency.

In determining on the treatment of any case of melancholia, it is essential to ascertain, if possible, whether it depends on a removable cause. Peculiar states of the liver, stomach, and bowels, are well known to be by no means unfrequently associated with, and are generally supposed to produce, lowness of spirits. It is very possible that certain conditions of the spleen may have a like effect. The displacement of the colon, its arch being dragged down into the pelvis, in shape of the letter V, has been supposed to be an ordinary cause of the melancholic state; but this displacement does not seem peculiar to cases of melancholia, although it has not, I believe, been often found, except in the insane. Any material disturbance of so important a bowel may well be supposed to exercise considerable influence on the state of the brain. Simple constipation will, it is well known, occasion severe temporary dejection of mind.

Very often the sole cause is debility. The time of life must be considered also, especially in women; but in young women of very feeble constitution, the melancholia is but a want of mental alacrity, associated with loss of appetite and languor of every function, without disease of any organ. Impressions or passing thoughts cause delusions to arise in the feeble brain; and these delusions yield to whatever gives bodily strength; to mineral tonics, the shower-bath, nourishing food, well regulated exercise; everything being done in moderation; for the system can bear no strong impressions. The delusions reappear and fade with increasing debility or returning strength, and if the patient attains good bodily health, they altogether vanish. In man, also, debility is a frequent cause, and the melancholy is merely the earliest indication of a brain worn out, and unfit for more exertion.

In the cases so frequently met with in young women, and, although less frequently, in young men, in which indolence passes on to incurable apathy, it is very difficult to determine the true relation of the disordered digestion, which is almost always present, to the disordered nervous system. The circulation, especially within the brain, appears to be affected in such cases. Weight in the head is complained of; the patient is lethargic; awakes, perhaps, with a flushed face and bloodshot eyes, and becomes better towards evening. Dimness of sight is felt, the extremities are cold, or one hand is

cold and the other hot, and the pulse is feeble. The patients often bite their nails to the quick. With these symptoms there are, a whitish tongue, a feeling of distention in the stomach, and costive bowels, which the patient imagines to be never perfectly relieved. On this account, female patients so affected have recourse to very tight lacing, from which they derive a kind of comfort, although this prejudicial custom perhaps aggravates the malady. The complexion is pale, sallow, sometimes yellowish, and the upper eyelid droops. Food is not always disliked, but in some cases it is resisted with obstinacy, and the patient becomes a mere skeleton, appearing almost bloodless, yet retaining considerable muscular strength and activity, often displayed in sudden and violent attempts at self-destruction. On the occurrence of these suicidal paroxysms, the tongue will in many cases be found to have become red, and vomiting, loss of all ordinary desire for food, and general gastric uneasiness, are present; and these symptoms subside in so marked a manner with the subsidence of the paroxysm of melancholy and of suicide, as plainly to show that there is a close connexion between the state of the primæ viæ and the brain.

These paroxysms require an especial treatment, interrupting the ordinary treatment as the paroxysms interrupt the ordinary course of the malady; and the allaying of the gastric irritability is to be attempted by the application of leeches and small blisters to the epigastrium, by warm baths, un-irritating diet, demulcent and sedative medicines, and, in some cases, by mild mercurial alteratives, as mercury and chalk, in small doses. The general treatment of such cases, when these paroxysms are absent, or have subsided, must not be expected to be rewarded by any speedy effects. The malady is essentially chronic, and demands chronic remedies. Much depends on that general management of the patient's diet and regimen which it is so difficult to effect anywhere except in an asylum, for which such cases are not always fitted. Tonic medicines, although apparently indicated, are not so directly useful as might be wished, and good diet, and much exercise in the open air, are far more serviceable. Warm bathing, and the use of the shower-bath, give the most decided relief; and the shower-bath, at first tepid, should be used three times a week, on rising in the morning. Aperient medicine is commonly indispensable; and the best of the class in such cases is a course of saline mineral waters, their use being combined with the bathing, and attended ordinarily with many inducements to bodily and mental exertion. In some such cases, I believe the weaker spring at Cheltenham to be extremely advantageous; but the water should be drank in moderation, the quantity not exceeding two half pints daily, taken before breakfast, without the addition of what the pump-room attendants call the solution. This quantity, with moderate exercise, will seldom fail to induce a daily action of the bowels after taking the first meal. If it does not, a mere increase of the dose of aperient salts is not what is indicated, but some other stimulus. Regular evacuations, not in excess, and a gradual alterative effect, are the things required, and violent purging is an obstacle to both. The state of the skin deserves attention in these languid cases, and the good effects of the bath may be promoted by daily friction of the surface, and by clothing adapted to the season. The society of hopeful, rational, and good-tempered friends, is of no small importance. It is far from unfrequent to find a mental malady kept up in some sensitive member of a family by the continual ill temper or fidgetiness of some other member in whom this state is not acknowledged to be, as it really is, a malady also. Hence often arises an additional reason for removal from home, and much difficulty as regards returning to it.

Delusions of some kind or other have a tendency to spring up in most of these cases; sometimes they are very prominent, sometimes difficult to detect. It is a curious circumstance, but one which I have repeatedly verified, that when the delusions are the most active, there is an increase of temperature in the scalp, and most frequently at a central point, midway between the forehead and vertex; and this will appear and disappear with the delusions. When the bodily functions are restored to regular exercise, and the malady seems to be kept up by mere debility, recourse may be had to tonic remedies, and especially to some form of iron, of which none, numerous as they are, and ingeniously varied as they have been of late years, is better than the tincture of the sesquichloride of iron, in small doses.

In the case of S. F.—, in the male infirmary, you may remark the entire dependence of melancholia on the debility of declining life. Although the patient is not yet sixty, he has every appearance of old age. He is indisposed to take food;

the bowels are inactive; he is scarcely capable of the exertion of taking a walk; reading a newspaper fatigues him; he is emaciated and dejected, and has some delusions respecting having enemies, but generally answers every question rationally. He is utterly desponding of his own recovery, and the most careful attention to his health for some months has produced so little good effect, that I fear his opinion of himself is correct. Even in these cases of simple debility, in elderly persons, there is a frequent impulse to self-destruction, against which you must be on your guard. Men of eighty years of age have destroyed themselves, from a feeling of impatience for that death which would so soon and so surely have overtaken them in a natural way.

The desire which the practitioner feels to ascertain the cause of the melancholy in any particular case, as a guide to its rational treatment, is often baffled by the difficulty of obtaining an accurate history of the malady, and the tendency in all observers to confound the first symptoms with the cause. J. B—, in the female infirmary, was sixty years of age when admitted, and a widow; she had been affected with melancholia six months, and the cause assigned was religion. Four years' acquaintance with her case have convinced me that religion had nothing to do with the commencement of her malady. She is subject to paroxysms of irritability of the stomach and bowels, and when these come on, she fancies her food consists of rats and mice, that she has committed some sin not to be forgiven, and is disposed to destroy herself. When the stomach becomes calm, the delusions disappear, and the impulse to suicide is felt no longer. In S. C—, a widow, seventy years of age, melancholia had existed for three months before admission, and religion was reported to be the cause. The disorder appeared to be wholly dependent on debility; and when she enjoyed good food and the various comforts of the asylum, she never spoke of religion despondingly, but began to mend, and left us in five months, quite recovered.

Not only is it rare to find the malady ascribed to bodily disorder, but it is rare to find a case in which it is at all plain that such is its real origin. In the generality of cases there appears to be a highly susceptible nervous system, to which mental and bodily disorders are incidental on the application of impressions that in healthier nervous systems would only produce natural reactions. I must, however, mention one very clear case of melancholia and delusions dependent on simple plethora, although I cannot show you the case. It was that of a clergyman, whose appearance, on superficial observation, would have indicated the possession of robust health; his face was florid, and his figure stout; but his very short neck; the rest he required after walking a little way, before he could tell his story without embarrassment of his breathing; the expression of his face, and the redundancy of colour in it, showed the existence of a general plethora, with a tendency to oppression of the heart and to apoplexy. This excellent and intelligent man had become the subject of delusions; and you will think it a contradiction when I say, that he knew they were delusions, and yet could not deliver himself from them. For this is one of the peculiarities of the insane, that they give credit to opposite assertions, or incompatible facts, at one time; thus seeming to illustrate the opinion of Dr. Wigan, that the two sides of the brain have, in many cases, an independent action; a theory ably supported in his very interesting work on the Duality of the Mind. The particular delusion of this patient was, that he had entered into pecuniary engagements with a friend which must end in his total ruin. His words were—"I know that I have not; I could make oath that I have not; and yet I cannot get rid of the impression that I have; and I am continually haunted with a dread of coming to the workhouse." This melancholy idea had even, now and then, led his thoughts toward suicide. He had tried in vain, and frequently, to get rid of the delusive impression by the exercise of his reason, and felt conscious of the want of some help. "I think," he added, "that I must get my friend to write me a letter, assuring me that I have not made this ruinous agreement with him; perhaps that may convince me." But in these cases, until the morbid state is removed, conviction seems inadmissible by the mind. A man will send for his banker's book, see that he has a large balance in his favour, and persist in saying that he is not worth a farthing. Unquestionable symptoms of fulness in the head had long made this patient habitually careful as to his diet and regimen, and there seemed little to be done in the way of additional treatment. It was important, however, that this should be done in a right direction, and he was enjoined to continue his abstemious habits, to attend to exercise, to avoid, as much as possible, vexatious thoughts and "fretting inwards," to have leeches occasionally applied behind his ears, to apply cold water

to his head, to keep his feet warm, and in addition to all this, to take a gentle aperient powder every morning. The powder prescribed was compound powder of jalap, a preparation which I have already mentioned to you, and in the power of which, to reduce habitual plethora, I place a reliance founded on an observation of its effects in numerous cases. In the moderate dose of a scruple, or half a drachm, taken every morning, it produces one or two watery evacuations, and sometimes brings away disordered secretions in a very effectual manner. Its success in the patient in question was conspicuous. He called upon me some months afterward, looking less plethoric, breathing more easily, and reported that his delusions had left him, and that he was so convinced that he owed his freedom from them mainly to the powders which had been prescribed, that he never meant to stir from home without them.

In M. R—, a single woman in ward No. 12, and now convalescent, (1841;) melancholia existed on admission, eleven months ago, combined with occasional vomiting of green matter, pain in the right and left hypochondria, costive bowels, a sallow face, and other signs of hepatic disorder. She is now forty-nine years of age, and the uterine functions continue at the customary periods, at which time there is a little hysterical excitement. The treatment, after admission, consisted chiefly of mercurial alteratives, aperient medicines, and the use of the warm bath. Cases occur in which it is difficult to establish the precise nature of the disorder, and in which a kind of general disorder of the digestive functions is connected with the melancholia, both being, perhaps, connected with extensive nervous disturbance; but they are commonly capable of relief by simple treatment. When much pain of the head is complained of, the application of leeches behind the ears, or to the forehead, usually gives relief, and especially if followed by a blister behind the neck. When very distinct uneasiness or pain is referred to the epigastrium, leeches may be more advantageously applied in that situation; and I have known the agitation and sense of terror, referred to the epigastrium, in many cases assuaged by the same means, and by friction with the ointment of tartarized antimony, and sometimes simply by the application of a plaster of equal parts of soap plaster and the extract of belladonna. The warm bath is always comfortable, and generally useful to such patients, and should be used for half an hour, at bed-time. A few grains of Plummer's pill, or of mercury and chalk, may be usefully combined with a few grains of the extract of henbane, and given every night; and a gentle saline aperient administered in the morning. The infusion of calumba or of cascarrilla may be taken once a day, with the liquor potassæ, or the bicarbonate; or, in some cases, with a small quantity of the aromatic spirit of ammonia. I doubt the advantage of the very free use of purgatives. The addition of a few grains of rhubarb, or of the compound extract of colocynth, is commonly sufficient for every useful purpose. The ancient remedy of the black hellebore scarcely preserves its reputation. The compound powder of jalap I have already spoken of. There are cases of melancholia, however, in which constipation is so very obstinate a symptom, and so appears to aggravate the other symptoms, that it becomes indispensable to give very large doses of purgative medicine every four or five days. The bowels are quite inactive, as if paralyzed. F. R—, an elderly woman in ward No. 2, and M. H—, a young woman in No. 1, and M. U—, a middle-aged woman in the infirmary, all present examples of this. Several drops of croton oil, with six drachms of castor-oil, merely produce an ordinary evacuation. In young patients this condition is merely temporary; but it may become permanent in the older. A convenient and useful form of medicine in such cases is a pill of compound extract of colocynth with half a drop of croton oil, two pills or more being taken at night. Dr. Hutcheson, of Glasgow, has found the pills of aloes and assafoetida, with one-sixth of a grain of croton oil in each pill, useful in such cases. I have sometimes thought the addition of the compound galbanum pill of service also. In this form of constipation the nuxvomica has been recommended; but the inutility of the strychnine, in all the cases of paralysis in which I have prescribed it, has discouraged me from any trial of it in these instances. A combination of tonic and aperient medicines is sometimes useful, and the stimulus of nourishing food, in sufficient quantity, is important.

Although the bowels are more disposed to inactivity in most cases of melancholia than in mania, it is by no means common to find the colon or small intestines containing fecal matter after death; and I am convinced that we must be satisfied in these cases, and in some other forms of mental malady, if the bowels are moved every third or fourth day. If the constipation really depends on a kind of paralysis, their

action can scarcely be forced with propriety by violent means frequently repeated. It is even probable that the long delay of the contents of the bowels is an intention of Nature in such cases; and I have often noticed, that if daily aperient medicine is taken, the patients become emaciated.

There appears to be some practical wisdom in the general distinction of cases of melancholia made by Lorry, and afterward by Esquirol, according to their being cases of purely nervous melancholy, or cases originating in abdominal repletion, or, as they express it, "with matter." In the abdominal cases, purgatives, and even emetics, would be useful; whilst in the purely nervous cases, good food is chiefly required, and careful moral treatment: it is in this form, also, that sedatives are very serviceable, and in these cases it was that Dr. Odier, of Geneva, gave opium in doses gradually increased to twenty or twenty-five grains; but the effect to be apprehended from the excessive and prolonged use of sedatives is, the production of a mere alteration in the form of the disease.

I have said little of emetics, a form of medicine seldom now employed, but their employment is recorded by Dr. Copland, on the authority of Dr. Burrows, as being very useful in some cases of melancholia, and particularly where, from obstinacy, the urine is retained.

In these days we read with horror of the calm recommendation of the whirling-chair, by the last generation of practitioners in insanity, as an emetic and purgative instrument. That frightful contrivance is confessed to have produced epistaxis, faintness, debility, and a tendency to apoplexy. It lies under a heavy suspicion of having been occasionally fatal, in the old days before reports of deaths were made; and it should make us jealous of sanctioning any form of violent control, when we see how much the habitual recourse to it hardened the feelings and blinded the understandings of physicians, who ought to be the friends of mankind; for the whirling-chair was resigned with the same lingering and affectionate reluctance as, in our day, has accompanied, or is accompanying, the abandonment of the muff, the handcuffs, and the strait-waistcoat.

Melancholia is, I think, not unfrequently accompanied by various degrees of hypertrophy of the heart; paroxysms of palpitation and despondency occur during life, and the heart is found to be in a morbid state after death. In T. H.—, a carpenter, aged sixty, lately admitted, and whose case ended fatally, this combination existed. In another patient, also a carpenter, who was removed by his friends in 1841, fits of agitation and melancholia were always attended by tumultuous action of the heart. There are two patients now in the asylum, whose cases are illustrations of this combination; the cause assigned for the mental malady in both being distress. One is I. J.—, an intelligent, fine-looking woman, in ward No. 1. There are days and weeks in which you would think no malady of any kind existed; her complexion is florid and clear, her expression animated, and her voice pleasing, and she is generally occupied in very beautiful needle-work: but the patient is liable to severe pain about the heart, (breast-pang, or angina pectoris,) extending down the left arm, and sometimes down the right also, and followed by pain on the top of the wrist, as if inflicted by a many-pointed instrument; and during these attacks her face becomes pale, her attitude expressive of the utmost depression, her voice lost in miserable moans: at such times the pulse is very weak and intermitting, and the surface and extremities become cold; the patient walks about feebly, with drooping head, or sits, day after day, sorrowfully upon the ground, heedless of all attempts to cheer her. Long before her admission, she had been told that there was aneurism of the aorta, of which there are certainly no symptoms. The attacks of palpitation and pain first came on after an attack of uterine hemorrhage, and were again induced on her separation from a friend to whom she was much attached. One might reasonably suspect some disease of the coronary arteries, if some of the patient's symptoms were hysterical, no malady confounding physical diagnosis so much as hysteria. Her malady is accompanied with obstinate constipation, and benefit is sometimes derived from purgatives; but the painful symptoms about the heart are only relieved by stimulants. This patient is well educated, and of a station above that of most of her present companions, and has been, in the course of her life, exposed to severe causes of mental suffering, which have acted banefully on a very susceptible mind.

You were interested in the case of the young man seen this morning, who is recovering from a dangerous wound in the side, inflicted by himself before admission. I suspect that in his case there is a commencement of disease of the heart,

the action of which is generally vehement. E. B.— is twenty-four years of age, single, and by trade a watchmaker; he has been with us four months, and his malady had existed one month when he was admitted into the asylum; at least it had been recognised about a month as insanity, for it had come on, as is so often seen, very slowly, beginning by slight indications. Eighteen months before, after suffering sometimes for want of employment, and sometimes from overwork when employed, he became listless, melancholy, and inattentive to his dress. Greater agitation supervened in about a year afterward. Ten days before admission his malady became violently declared; he could not sleep, he said that his head was on fire, and that there was burning sulphur in his throat; the next day he wounded his arms with a carving-knife, and finding the wounds not fatal, stabbed himself in the side of the chest. Medical aid was called in; ice was applied to his head; but the excitement continuing, he was brought to the asylum. When admitted, his external senses were found to be perfect; his mind was depressed; his thoughts were still bent on suicide; he was very pale, thin, and sickly-looking, and stooped and tottered in his walk. His skin was moist and clammy; his head hot and painful; the tongue white and tremulous; he had scarcely any desire to take food; the bowels were confined; the urine was copious and high-coloured; the pulse 108 when he was lying down; and the action of the heart strong. His voice was low and weak, and he slept little. He suffered some inconvenience from the state of his side, but seldom complained of it. He was placed in the infirmary; leeches were applied to his head, and afterward, for a long time, cold applications continued; aperient and saline medicines were given; he was carefully watched; his friends were allowed to come and see him, and every consolation was administered by the medical officers and chaplain, with a very tranquillizing effect. In about a month, a spontaneous opening took place in the wound, and a copious discharge of purulent matter followed, and continued for some time, until the dull sound on percussion of the side, which at one time was extensive, became limited to a very small space. He had a hot skin, a dry and red tongue, and his general state became that of fever; and although his mind was more composed than at first, we long feared his renewing the attempt to destroy himself. He continues to labour under melancholia, although at times he is able to read, and talks more cheerfully; but the result of his case is very doubtful. He has latterly required careful nourishment and support.

It is difficult to form an opinion as to the exact relation of a diseased state of the heart with the mental malady, when both exist together. The depressing passions impair and disturb the circulation, and maladies of the heart and liver, or of the lungs, ensue, as well as of the brain. But in the cases in which I have found that paroxysms of mental distress came on with vehement disturbance of the heart, it has seemed to me, that measures calculated to calm the action of the heart were followed also by composure of the brain. Leeches applied to the region of the heart, sedatives, a belladonna plaster, and perfect rest, have often relieved all the symptoms considerably. Examples of this have been several times presented in the case of V. D.—, a very diminutive woman, in ward No. 1, and in S. G.—, in female ward No. 12, and both of these patients are convalescent, and likely to leave the asylum well. S. G.— has been liable to sudden fits of agitation, suspicion, and dread of pursuit from imaginary enemies, accompanied by palpitation and oppression of the heart, and a strong impulse to suicide; but these rarely occur at present, and now only in a modified form.

Now and then cases of mania and of melancholia are met with in which there are such extraordinary sensations as to heat and cold, smell and taste and touch, as can only be ascribed to disorder of the nerves of the senses; and sometimes there are internal sensations which appear to arise from some analogous modification of the sentient nerves of the internal organs. You saw a poor Irish woman crouching down in a corner in ward No. 14, looking extremely miserable, and who jumped up when spoken to, and began with great volubility to describe the strange torments endured in her throat and chest and stomach, and which she repeatedly said were produced by a fire being in her inside, and her being in the power of Satan. This poor woman is a widow, forty years of age, and has been two years insane. She says that she was before that time in the London Hospital, affected with disease of the liver. Her sufferings are always described rapidly; she generally talks about the devil; says she is all over brimstone; complains of sensations as of something alive within her; of tearing, and gnawing, and burning; of hardness and pain, and of bad smells over her whole body, and in her forehead. She was reported

to be violent at times, but has not been so with us. She often cries and seems much distressed; and is herself hopeless of being relieved. Her head is frequently painful; her pulse quick, sometimes 140; the periodical functions of the uterus became suppressed a year after the commencement of the attack. Our attempts to relieve her symptoms have not been successful: leeches have been applied to the head and to the abdomen; aperients have been given, calomel administered without benefit; warm baths, sedatives of various kinds, laudanum in small doses frequently repeated, a grain of the extract of belladonna twice a day, with scarcely any effect; and the ointment of tartarized antimony has been applied to the scalp without advantage. In her case, and in that of others of our melancholic patients, the exhilarating effects of the occasional entertainments given to the patients are most remarkable.

I have little doubt but that what appear in many cases to be morbid fancies, existing in the minds of the hypochondriac and melancholy, are suggested by sensations connected with serious disease of the abdominal or other viscera, difficult to detect, but requiring appropriate treatment, irrespective of the mental affection, and yet the only means of relieving the mental disturbance.

As I am strongly opposed to the continual invention of new divisions of insanity, founded on single circumstances, and think the invention of new terms to designate them only tends to produce confusion, I have scarcely spoken of hypochondriasis as distinct from melancholia, any more than of monomania distinct from mania. What is called hypochondriasis, I understand to be a symptom sometimes associated with melancholia, and sometimes with mania, the symptom being a delusion respecting the health or integrity of the body. When great anxiety prevails respecting the health, the patient is usually of a delicate constitution, both of body and mind; and when the patient fancies his nose so large that on riding up to a toll-gate he turns his horse's head round and rides back, convinced that he cannot pass through, I suppose there is some disordered sensation in the nose analogous to the disordered state of the nerves of sight or hearing, when objects are supposed by the patient to be seen, or voices to be heard, which have no real existence. Such delusions are endless; and the manner in which they act well illustrates the dependence of insanity on an impairment of the comparing power. Imaginary sights and sounds are familiar to most persons when in a feverish state, but they are known to be unreal, and incompatible with other circumstances, the existence of which is attested by the senses. When they are believed in, it is because this salutary comparison cannot be made, and the judgment or reason is perverted. In one case, the patient sometimes contends with the delusive impression, and reasons himself out of a belief of it, concluding, with Macbeth, "there's no such thing." In other cases, as in that of L. S.—, a young woman in ward No. 1, who described her symptoms to us to-day, there is a belief that real voices are addressed to them. A. R.—, a married woman in ward No. 14, will talk to me occasionally quite like a sane woman for a short time, and then begin to remonstrate, in a most reasonable tone, on the impropriety of allowing "such strange conversation to be addressed to her from the walls of the ward as is continually going on." J. L.—, in male ward No. 3, a most inoffensive man, fond of wearing a profusion of ornaments round his neck, rings on his fingers, and gloves made by himself, with the seams outside, almost daily represents, and often with distress and tears, that although he has never done anybody any harm, "treason-speeches" are made at him from the walls, and threats of murder addressed to him, and accusations of all manner of crimes. Sometimes he describes the voices as saying, "let his hands be wasted," and he points to their supposed wasted state. In these cases the general state of the patients is one of depression, with occasional maniacal excitement of short duration; and in each of the cases mentioned, there is reason to suspect a tuberculous state of the lungs. J. S.—, a patient who died in 1842, of pulmonary consumption, used to tell us that all the mischief was done to him "by Bramah's people," with machinery which they had fixed in his chest. He often said that he could feel it working quite plainly.

Such cases illustrate Esquirol's remark, that the fancies of hypochondriacs sometimes originate in actual disease of some organ, which becomes the point of departure of the hallucination; and sometimes we find that the delusion may be removed by medical treatment. E. B.—, a young man in the infirmary, desponding and melancholic, has now and then fancied that snakes were creeping about in the lower part of his intestines; and a warm bath has quite relieved him.

M. M.—, an Irishwoman, in ward No. 12, thought one day that both faces and voices came out of the ventilators in the walls, and that some animal leaped upon her shoulder; but an anodyne draught entirely composed her. M. F.—, an elderly woman, who was some years since in the infirmary, and generally in the deepest state of melancholy, moaning and crying bitterly from morning to night, used to assert that she was in the power of Satan; and she at length related circumstantially how he had first violently seized her by the small of the back, where she said she had felt pain ever since. Numerous leeches were applied to the spine in that situation, and the effect exceeded our expectation; for the pain and delusion vanished together, and the poor woman was soon discharged from the asylum quite cheerful and well.

Esquirol records the case of a merchant who always asserted that some substance was sticking in his throat. Nothing could be discovered. The patient continued melancholy, and died; and an ulcer was found occupying the upper third of the œsophagus. The same experienced physician mentions cases in which scirrhus or inflammation of the stomach or intestines, or gangrene of the colon, had caused the sufferers to think they had toads or devils in the bowels, or that some one wrought upon them by electric or magnetic agencies.

A very intelligent gentleman told me, a few months ago, that his father and one of his brothers had died of disease of the colon; and that he was himself subject to violent attacks of spasm, apparently in the sigmoid flexure of that bowel, during the presence of which, his whole moral nature, he said, appeared to be changed, all the lower propensities, at other times kept in subordination, then predominating; and this in a manner so wholly contrary to his habitual character, and so afflicting to him, as to induce deep melancholy, and a disposition to suicide. Dr. Alexander Sutherland relates, in his lectures, (*Medical Gazette*, vol. ii.) the case of a young lady for whom he had prescribed the potassio-tartrate of antimony to relieve maniacal excitement, and in whom the nauseating effects of the medicine brought on the delusion that she was on board ship. "She sang sea-songs, and rolled her body about as if she were walking the deck in a heavy gale;" thus very clearly illustrating the origin of specific delusions in bodily disorders.

Most of the delusions of which I have spoken, and many others, were referred by M. Broussais to inflammatory action going on in some part of the intestines, but in the majority of cases no proof of this is afforded. C. W.—, a patient in male ward No. 9, was melancholy and hypochondriac, he constantly, and for years, asserted that his bowels were closed up by cement; and we felt rather confident that after death we should find disease of the colon, but we found no intestinal disease of any kind. Such delusive sensations seem, indeed, to arise, in some instances, from a purely accidental impression on the mind; as in the case of the clergyman mentioned by Dr. Darwin, who by chance swallowing the seal of a letter, for ever afterward thought his bowels were bound up, and could not be convinced to the contrary by copious evacuations. Sometimes they originate in morbid sensations connected with the natural functions. One of our female patients believes she gives birth to a child at every monthly period, and complains much of being weakened by so many confinements. Another, after the monthly period, has sensations as of a fire within her, and believes that the nurses are permitted to bring down fire from heaven to consume her.

In women of the higher classes, certain morbid uterine sensations induce them readily to believe in the existence of uterine disease, and to submit to the actual cautery, or even to excision of the neck of the uterus, or to moxas applied with remorseless cruelty by practitioners who prey on the weaknesses of mankind. I am inclined to think that some, at least, of the numerous cases of religious melancholia in young women have the same origin, and that the best means of mitigating the mental malady are those calculated to allay the local morbid excitability; as leeches to the pubes or sacrum, the warm hip-bath, gentle aperients, mercurial alteratives, combined with the tincture of henbane, and perseverance in taking much exercise in the open air. By such means many cases will prove eventually curable, although they will not be quickly cured.

But we have still several cases of melancholia in which the malady is not apparently associated with any disease; some in which it has arisen from mere intemperance, and some in which its origin is ascribed to mental causes only; and on these examples, which will again be pointed out to you at your next visit to the asylum, I must make a few observations.

A COURSE OF FIVE LECTURES

ON

FRACTURES AND DISLOCATIONS:

EXPLAINING

NEW MODES OF TREATMENT, FOUNDED ON ANATOMY
AND PHYSIOLOGY, AND THE LAWS
OF MECHANICS.

By GEORGE O. JARVIS, M.D.

SURGEON TO THE FREE-STONE QUARRY, PORTLAND, CONNECTICUT,
ETC. ETC.

UNITED STATES,

*Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,
London, November, 1845, and sent to THE LANCET by the Lecturer.*

Illustrated by Engravings.

Division of the muscles of the thigh into classes—Mechanical actions of those muscles in fractures of the bone—Usual violation of the laws of mechanics in the treatment of such fractures—Necessary attention to fixed points in applying force to reduce luxations.

I AM this evening to call your attention again to those principles of surgery which relate to fractures, particularly to fractures of the thigh. At our first lecture we endeavoured to show the manner in which the laws of mechanics were violated or neglected in treatment. It will be our object, this evening, to show in what manner they may be applied, so as to fulfil the indications required, or, in other words, to be conformed to the principles of surgery.

But before we proceed, allow me to lay down four principal rules, which I cannot but regard as essential in the treatment of all fractures. They are the following:—

1st.—So place the limb as that the fractured portions shall be inclined the nearest to a normal line of that bone, which can be effected by the action of those agents.

2nd.—So apply extension and counter-extension as that the smallest amount capable of preserving coaptation shall be employed.

3rd.—So apply force as that the line of extension shall operate the nearest possible to a perfectly normal line of the fractured bone.

4th.—Let the points of extension and counter-extension be confined within the limits of the fractured bone.

If, in our treatment, we succeed in applying efficiently these four rules in practice, it is conceived that we then have the laws of mechanics conformed effectually to the principles of surgery, in the treatment of fractures; if not, we fail in our object. We will first see, however, whether these rules have been correctly applied by the apparatus in general use. You recollect we showed that there were but three, although there may be, and undoubtedly were, a thousand modifications of these.

From what appeared at our first lecture, it is manifest, that in a fracture of the thigh, between the trochanter minor and the insertion of the glutens-maximus muscle, and also, in one between the insertion of that muscle and the brace, that to place the limb in a line with the body, we violate our first rule by inclining the fractured extremities further from each other, instead of the reverse, as should be the case. And this is the position which the splint of Desault imposes. It also violates the second rule, by requiring more force to restore the normal length of the limb, than is required when the flexor muscles are relaxed. The third rule it appears not to violate. The fourth one, however, is violated, the points of extension &c. not being confined within the limits of the fractured bone.

We will now look at the double-inclined plane. In this it is obvious the first rule may be correctly applied—viz., that of inclining the fractured portions nearest a normal line, and relaxing the muscles of the limb. The second, third, and fourth rules, however, are altogether neglected.

We will also look at the double-inclined plane, so arranged as to produce extension and counter-extension, from the extreme points of the limb. The first rule, with this as with the last, would, of course, be correctly observed; but how is it with the other three? Of the second, our remarks at the first lecture pointed out that this rule would be violated by there being more force exerted at right angles with the bone than was employed in the line of the limb. Of the third rule,—is that any better applied? In our remarks, we endeavoured to show, also, that the tendency of force applied to the extremities of a limb laid on a double-inclined plane, was to throw

the fractured extremities out of a normal line. Hence, if our remarks on that point were, in any measure, correct, this rule is also violated. But let us look at the fourth rule: indeed, this one, too, is violated, the points of extension and counter-extension not being within the limits of the fractured bone. Thus, important as are each of these rules, (and it is believed their importance will not be denied by any surgeon,) yet we find but one of them applied by any one apparatus. I therefore ask once more—is not that apparatus defective which applies but one of these rules in the treatment of fractures?—which comes no nearer answering the intentions of the surgeon?—which violates or neglects so important a rule in surgery as that of coaptation?

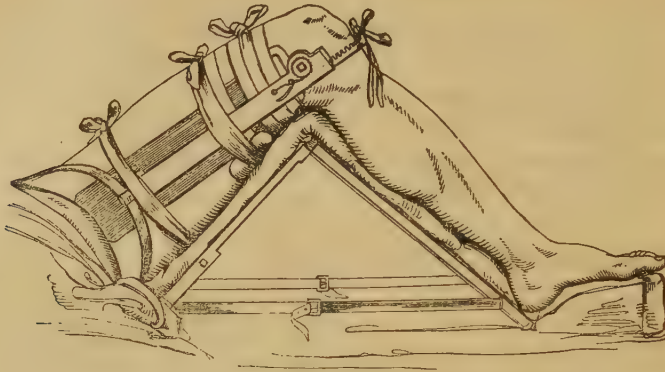
It will not be claimed, I trust, that I have here been making rules by which to try the various mechanical means. Those rules are true in nature, and are founded on the immutability of her laws, and hence were always true; and the mere circumstance of my having given them a definite form for the purpose of aiding our own frail intellect, does not in the least touch the matter of their originality.

But some will say, perhaps, it is quite impossible to apply all these rules, and at once, in the treatment of any fracture.

During a recent visit to Paris, I was kindly invited by Marshal de Calvi, a military surgeon, and a gentleman of superior attainments in his profession, to visit the Val de Grace, a military hospital in Paris. At that visit he very kindly showed me through the various wards of that noble institution. He took especial pains to show me the fractures which were then in progress of treatment—for there were several, both of the leg and of the thigh, and in their various stages,—and what, think you, was my surprise, when I unexpectedly found, that precisely the same rules which I have here laid down as necessary to be observed in the treatment of fractures, were there correctly applied in practice; not, however, by adopting the same means which I employ, but those, nevertheless, which faithfully applied all those principles; not so conveniently, nor so happily, perhaps, as might be desired, but yet they were applied; and I had a good opportunity to judge, too, of their effects, as compared, not only with others, but also with those in my own practice. I understood they did not always, and in every case, employ the apparatus, probably from the inconveniences which attended its use, but when the least difficulty presented in preserving coaptation, they invariably resorted to it; and the cases which I saw showed not only its efficiency, but the truth of the principles which I here advocate. Among all the hospitals which I have visited, I have not seen in one such good results; they answered perfectly to the experience which I had had in applying those rules. I will not stop to describe the apparatus; it was simple, and constructed on sound principles, but yet so inconvenient that it could not well be used except in hospital practice, and then not always with the facility desired. I was informed the name of the inventor, but unfortunately do not recollect it; I was also informed that he ranked at the head of the military surgeons; I regret having lost his name, the more from having had the honour of a very pleasant and agreeable interview with him. Whether the inventor of that apparatus designed to fulfil the same intentions which I had in view in the arrangement of the one which you saw, I know not; all that I know about it is, that those rules were there applied, and I saw the results, which I have already stated.

We will, however, apply the apparatus which you have seen here; you will then be able to judge whether those rules may all be applied in fractures by this one. We will apply it as to a fracture of the thigh in the shaft of the bone.

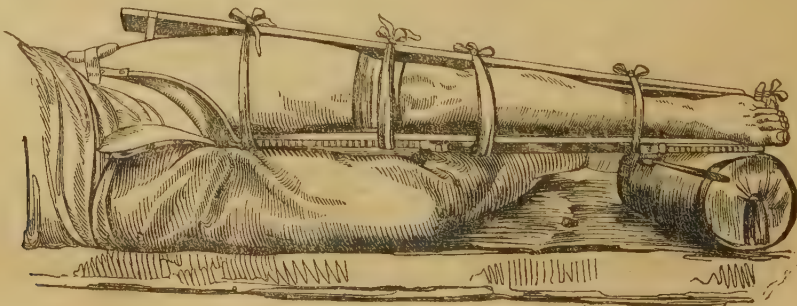
We will first place the pads (fig. 8) one on each side above the knee, immediately back of the condyles; around the limb and pads first apply a common bandage loosely, to prevent the India-rubber surface of the belts from stimulating the skin; then apply a belt loosely, with a loop armed with tapes, on each side of the knee, the tapes crossing the bulbous part of the pads. Apply the instrument to the limb as in dislocation of the femur, except that the side lever is not attached to it; then lay the limb, and instrument attached, on the double-inclined plane, previously arranged with mats, or that which will make an easy surface on the plane on which the limb is to rest. Over the whole lay the eighteen-tailed bandage or tapes at suitable distances, ready for dressing after the bone is adjusted. All being arranged in the manner just described, the surgeon will with one hand apply the lever (fig. 2) to the shaft of the pinion-wheel, while the other is laid over the seat of injury; thus with one hand he makes gradual extension, while with the other he is able to feel the progress which the bones make towards coaptation. When properly adjusted,



apply splints on each side of the thigh, letting the ends pass a little distance under the pads; let the space between the inside splint and the instrument be filled up with folds of cloth, so that the pressure may be equal on the inside of the thigh. Apply the tapes or bandages over the whole. A bolster should also be laid under the bandage, between the instrument and plane, to support the former from bearing on the limb. I will also state, here the mode which I saw adopted at the Val de Grace Hospital, from which to fix the point of counter-extension, and which, in some cases, I think I should prefer; the dextrin bandage was applied above, below, and over the knee, with tapes or a piece of roller inclosed in the coils of the bandage, so as to be tied to the counter-extending point of the apparatus; extension could not, of course, be made by it, until the dextrin had become dry and hard. Those on whom I saw it applied appeared to wear it with perfect ease. The same material was used for fixing the counter-extending point at the knee, and the extending point at the foot, in fractures of the leg. Thus you now see the mode in which this instrument is applied on the double-inclined plane, and you will therefore readily perceive it is conformed to the first side, by the limb being placed on the inclined plane. It is also conformed to the second, by its being so applied as that the smallest amount of extension necessary to preserve coaptation is employed. It is conformed to the third, because the line of extension is the nearest possible to a perfectly normal line of the fractured bone. It is, finally, conformed to the fourth, the points of extension and counter-extension being confined within the limits of the fractured bone. Thus we here see all the four rules applied to practice in this apparatus, and at one time.

We will now call your attention to a fracture at the neck of the thigh bone. But before we proceed, allow me to suggest another position in which that fracture may be treated; and for that purpose I will call your attention to that particular arrangement between the head of the bone and the pelvis, to which I alluded on the first evening's lecture—viz., that the head of the bone serves as a pivot on which turns all the movements of the body with the lower extremities. In this I wish to show you, that in a fracture at the neck of the femur, there will be less motion at the point of fracture, and between the fractured portions, by placing the patient on the side opposite the one injured, than there would be to place him on his back, as is usually done. Our reasons for it are the following:—A person while lying on his back cannot raise his shoulders, or turn them to either side, even but a trifle, without producing motion at the fractured point; and how much inclined patients are to do this, you are doubtless all

aware, especially for the purpose of viewing objects around them. Indeed, the movements of the head, and the trifle of corresponding motion of the shoulder, seems almost involuntary. Still, involuntary as those motions may be, they all result in motion at the point of fracture; and it is not my wonder that so few fractures at the neck of the bone result in an osseous union, but rather that there are so many result in it; for motion, the great disturber of all osseous union, is constantly, yet involuntarily, employed by the patient. On the contrary, to place the patient on the uninjured side, the position subjects him to greater impediments to motion of the shoulders than on his back; he would be unlikely to raise his shoulders for any object, especially if he were told not to do so, yet his head he could move freely without communicating motion to the shoulders; his inclination to turn to either side would doubtless be increased, although that could be greatly restricted. Still, if the limb were properly secured with the pelvis, it would move with the body without producing motion at the site of fracture. These are our reasons for placing a patient with a fractured neck of the thigh bone on the side, yet if it is not found to answer (in the hands of others) equally well with those placed on the back, there is nothing in our principles or treatment in other respects which renders that position essential. We will, however, apply the instrument in the position we have been describing; indeed, it is applied the same in both; and it is only for the surgeon to select, according to the case to be treated; the one of the sides being especially adapted to persons who are large and fleshy, and can with difficulty be confined on the back. We occasionally meet with such patients. I once had one, and I would have given anything to have been able to accommodate my patient with that position she so much desired, but it was before I knew how to accomplish it. Extensive sloughing, after everything we could do to prevent it, was the consequence of her confinement; and after suffering beyond my power of description, the case resulted in death. During the whole treatment, I was convinced, that could she be allowed to lie on her side—a position which she had used for years—without at the same time provoking greater pain by the fractured ends of the bone piercing the muscular substance around them, she would have been comparatively easy; but the last evil, at least for a time, seemed worse than the first. Her suffering was extreme, and she died at the end of about five weeks from the time of receiving the injury. But I will not detain you by stating any more cases. For the one, however, which I have just related, should you ever have a case of the kind to treat, I doubt not you will feel greatly obliged for the account I have here given. We will now apply the instrument.



The surgeon should first be provided with two long splints, one to reach from the perinæum to the sole of the foot, the other from the top of the ilium to the sole of the foot, and with a square piece of cloth in which to roll the splints, so as to make a trough in which to lay the limb. First apply a belt around the thigh above the knee, minding first to protect the skin by a common roller. Let a piece of tape, of about three feet in length, be tied to each loop on the side of the knee; now let the limb be laid between the splints, rolled in the cloth as described. The counter-extending bar, D, will now be drawn out to its full length, and made fast by the screw, E; the thigh-fork (fig. 4) will be applied to it with the roll, H, suspended between its arms, and the rack will be drawn out sufficient to allow the foot of it to cross the sole of the foot. Now apply the instrument on the external side of the inner splint, the roll, H, pressing against the perinæum as in fractures in the shaft of the bone. Draw the tapes tensesly, and tie them on each side of the foot to the foot of the rack; apply the strap across the top of the ilium, and around the arms of the fork, in the manner before described; place a thick pad between it and the skin, and draw the strap sufficiently tense over it to give full length to the neck. Tie tapes around the whole at convenient points, to securely fix the limb, splints, and instrument, as one piece; the instrument may be further secured to the pelvis by passing a band once round the pelvis, and on its second turn, pass it round the end of the arm of its respective side, and make it fast to it—now give the necessary extension to the limb. I will not detain you to point out how the four rules have been complied with in the treatment of this fracture; I trust you will be able to discover it without my assistance.

THE SUBSTANCE
OF
AN ADDRESS

TO THE

STUDENTS OF ANDERSON'S UNIVERSITY,

GLASGOW,

AT THE

OPENING OF DR. WEIR'S FIRST COURSE OF LECTURES
ON PHRENOLOGY IN THAT INSTITUTION,

JANUARY 7, 1846.

By ANDREW COMBE, M.D.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH,
ETC. ETC.*

GENTLEMEN,—On seeing a stranger present himself before you to deliver a lecture introductory to a Course on Phrenology, it will naturally occur to you to ask, Why does he occupy the place which belongs of right to Dr. Weir? The answer to this question will be found in the following brief history of the origin and progress of Phrenology, and of the events which led to the institution of a lectureship on the subject in this University.

From the earliest dawn of science, the attention of anatomists and physiologists, and, I may add, of philosophers also, has been earnestly directed to the study of the brain and the nervous system. Enveloped in obscurity as these important organs were, facts of daily and hourly occurrence nevertheless forced the conviction upon the minds of all reflecting men, that whenever their functions should be discovered, they would be found to fulfil the very highest purposes in the economy of man. Even the most cursory observation was sufficient to show, not only that the brain is the seat and centre of sensation, voluntary motion, thought, and feeling, but that it exercises a paramount, although often indirect, influence over the whole bodily organization. Under the pressure of deep grief, for example, every function is impaired, and the powers of life become more and more enfeebled, till death at last closes the scene, and the individual is said to have died of "a broken heart." Under the influence of the strong passion which accompanies maniacal excitement of the brain, the action of the heart is characterized by unusual violence, the circulation becomes rapid and tumultuous, and the whole system is so instinct with energy, as almost to defy restraint. Under the calmer and more equally diffused excitement of hope and joy, the different bodily functions are raised in tone, and so agreeably stimulated, that all the operations of life are carried on with a vivacity and ease which at

once enliven existence, and form the best safeguards against the inroads of disease. A blow on the head, or a powerful narcotic, on the other hand, may, by disturbing the action of the brain, produce absolute insensibility of both body and mind, and lay prostrate the highest genius. The bursts of mental power and extraordinary bodily strength developed during the delirium of fever, or under the use of wine or spirits, form equally striking and instructive examples of the predominant influence of the brain in the animal economy; and its intimate connexion with the mind is perhaps nowhere exhibited with greater clearness than in the regularity with which the different mental powers become developed and advance through the different stages of maturity and decay, in exact proportion as the brain itself passes from the imperfect development of infancy through its stages of maturity and decay.

These, and similar facts, all leading to the same conclusion, have forced themselves upon the attention of mankind in all ages and countries, and they form the groundwork of the almost universal conviction, that the brain is, in some way or other, the seat or organ of the mind. An enlightened curiosity, however, does not stop short at this vague and general proposition—it seeks to discover farther under what conditions this association of mind with brain exists. It seeks to know whether, in producing and giving expression to the varied and complicated phenomena of thought and feeling, the brain acts as a whole or as an aggregate of many parts, each subserving a particular sense or faculty. For thousands of years philosophers have laboured to penetrate this mystery, but laboured in vain; and yet, in every succeeding age, the constant recurrence of the same phenomena has kept alive, in its fullest force, the conviction, that the discovery of the functions of the brain and nervous system would be fraught with important advantages to science and to mankind; both by explaining some of the profoundest mysteries of our being and position, and by affording principles of the highest utility for our future progress and improvement. Under this stimulus, inquiry never became apathetic, even when it seemed most unpromising. If it failed of success, this was not from want of zeal, talent, or perseverance, on the part of those engaged in it. The failure, as will be afterwards pointed out to you by my friend Dr. Weir, arose solely from pursuing methods of research which, because they were founded on a wrong principle, were incapable of leading to success. Not suspecting or perceiving where the error really lay, one physiologist after another either entered upon the beaten path of his predecessors, without attempting to remedy the defects of method which had misled them, or he *invented* a new theory, bearing the impress, not of nature, but of his own imagination, and of course failed, in his turn, to arrive at the truth. The anatomists also, from no lack of talent, zeal, or industry, but purely from a similar want of a guiding principle, expended their time in nearly profitless labour. Instead of attempting to trace the natural relations of the parts of the brain to each other, they continued for centuries to cut it into slices, and thus *destroyed, by their own act*, the very structure they wished to examine; a proceeding, the only parallel to which would be, to examine the anatomy of a limb by slicing it transversely, like a round of beef! Failing to arrive at any useful result by such destructive methods, they, too, had recourse to their imagination, and enlivened the dryness of their researches by the discovery of supposed resemblances of parts of the brain to natural or artificial objects, and believed that in giving names significant of these most grotesque resemblances, they were advancing the cause of science. Hence the learned application of the terms *nates* and *testes* to the quadrigeminal bodies; hence the *aqueduct* of Sylvius, the *bridge* of Varolius, the *writer's style* or *calamus scriptorius*, and other equally unmeaning designations. From the same imaginative source was derived the fancy which gravely seated the soul in the pineal gland. Hence also the various "spirits" with which it pleased philosophers at different times to fill the ventricles of the brain! In reflecting on all these things, however, let us not give way only to a smile of ridicule or contempt. Seriously considered, these very vagaries indicated the strong and constant desire to arrive at the discovery of truths which were felt to be important. They sprang from no innate love of absurdity, but simply from zeal and activity of mind, operating without a principle to guide them through the labyrinth which they sought to penetrate. If a man, set down in a new country, wanders in a direction the opposite of that in which he wishes to go, it is no proof that he is destitute of the power of motion. The greater, indeed, his power of walking in such circumstances, the further will he be likely to go astray; but provide him

* On account of the author's infirm state of health, this Address was delivered by his brother, Mr. GEORGE COMBE.

with a sure guide, and then see how vigorously and safely he will advance! It is the same with the anatomist and physiologist; set them down without a guide, to study the unknown regions of the brain and nervous system, and the greater their talent, the further will they be liable at times to wander from the way of truth. But once provide them with a guiding principle, and every step will then bring them nearer and nearer to the goal.

The more, indeed, we consider the nature of science and the history of the past, the more manifest does it become, that it has been the want of a sound method of investigation, and not any inherent difficulty in the subject, or any marvellous complexity of function, which has hitherto constituted the chief obstacle to success. Nature's laws and operations rarely remain wholly inaccessible to well-directed and persevering inquiry, and they seem to be a maze of confusion and contradiction only when considered in a wrong point of view, or when examined apart from their natural relations to each other. When correctly understood, they generally present an aspect of remarkable simplicity. For a similar reason, many of the plainest of the laws or phenomena of nature appear the very image of incongruity to the untutored savage, who knows not how to trace the principle which binds them into harmonious connexion. It is precisely thus with the anatomist of the brain and nervous system. If he has no sound principle to direct him where to begin, and how to proceed, many of his results must necessarily appear to him perplexing, incongruous, and inexplicable. By a lucky chance he may hit upon useful truths, which will remain like landmarks amidst the waste of error over which he has fatiguingly wandered; but he will do little to throw light upon the general scheme of Nature, and will often leave even his surest facts a subject of doubt to those who succeed him, simply because he cannot present them in harmonious connexion with any other ascertained truths.

Here, then, is the source of the barrenness of results which has, in times past, so signally characterized most of the researches which have been made into the structure and functions of the brain and nervous system. False methods of inquiry, and not any insuperable difficulty in the subject, have been the causes of failure; and it is most important that at this your outset in a new study, you should fix your attention strongly on this fact, and satisfy yourselves of its foundation. If the method which Gall has followed be really superior to any hitherto in use, it becomes no longer wonderful that he should have succeeded in unfolding, to a greater extent than his predecessors, not only the real structure of the brain, but many of its most important uses; or that he should have put you in possession of means whereby you may, in your turn, correct his errors, and improve what he and his followers may have left imperfect. I shall, in a subsequent part of this lecture, explain his method; but in the meantime remark, that if I shall assign adequate causes for so many centuries of failure by other physiologists, and for the success which has attended the labours of Gall, it will follow, as a matter of course, that any condemnation of his discoveries by those who have never zealously pursued his method, but derived their knowledge wholly from methods proved to be utterly inadequate, must be held, in the eye of reason, as of scarcely higher value than would be the hostile opinion of any uneducated man regarding any disputed point in modern chemistry, optics, or electricity. Ignorant as such an opponent must be regarding the uses of the brain, it is impossible that he *can* have anything except theory or early prejudices to oppose to the facts of phrenology; and for these I have no respect as sources of evidence. I am as much disposed as any one to yield deference to authority, or to opinions based upon certain and positive knowledge, however much they may militate against my own prepossessions; but where mere opinion is brought against what I know, from direct, careful, and repeated observation, to be *clear and positive facts*, no matter how eminent the source of the opinion may be, I stand firm and unmoved, because Nature is at my back, and I have the fullest assurance that she commits no mistakes, and is never inconsistent; and I know that, on appeal being made, she will be found to speak the same language to-day as yesterday, or as a thousand years ago, and to bear out all I have advanced, if I have really been accurate in my observations.

To place this argument before you in its full force, it would be necessary, if your time permitted, to expose, in some detail, the inherent defects of the different methods of investigation resorted to before the days of Gall. This will be done more fully at a subsequent part of the course, by my friend Dr. Weir. In the meantime, it will be enough for my purpose to state, that anatomists have tried to discover by dis-

section the uses of the different parts of the brain; but unaided examination of structure has never yet been sufficient to reveal the function of an organ; and even if it did, the structure of the brain is, or was till very lately, as little known as its uses. We might dissect the optic nerve till the crack of doom, without being enabled, by that means alone, to demonstrate that its use is to convey visual impressions from the eye to the mind. It is by observing the concomitance of the faculty of vision with the existence and development of the nerve, and the effects of its diseases in destroying sight, that we arrive at the discovery of its function. *Having once made this discovery*, anatomy steps in to confirm its truth, by showing its consistency with the relations of the nerve to the eye on the one side, and the brain on the other. It is the same with the nerve of hearing, with the nerves of sensation and motion, and, indeed, with every part of our bodily structure. We might dissect them all for centuries, apart from observation of the living phenomena, without being thereby enabled to discover their uses. A familiar proof of this is to be found in our still remaining ignorant of the functions of the spleen and thyroid and mesenteric glands, and of parts of the brain itself, of which the structure is now pretty well ascertained. Even the structure of a muscle, plainly as it speaks *after* we perceive its function, does not, of itself, suffice to teach us that its office is to contract. It is by observation of the actual concomitance of contraction and structure that we first ascertain the fact. Dissection may prove the *compatibility of function and structure*, *after the function is found out by observation*, or disprove an alleged function, by showing its incompatibility with *well ascertained* structure; but, in the case of the brain, neither of these principles can be very safely applied, because the structure itself is even yet too imperfectly known to lead to positive results; and hence, among those who reject the discoveries of Gall, there is to this hour no agreement whatever regarding the functions of the different parts of the brain, whereas, if structure revealed function, there would be unanimity amongst them.

Metaphysicians, on the other hand, have attempted to solve the problem of the cerebral functions by the aid of *consciousness*; but their failure has been equally signal. So far from revealing to us the uses of different parts of the brain, consciousness does not even reveal its existence. We know that there is *something* within the skull, but we have not a trace of information from consciousness what it is, how composed, or what its form. If it had been possible to discover the functions of the brain by reflecting on the phenomena of our own consciousness, they would not now have continued to prove as great a stumbling-block to the modern as they did to the ancient metaphysicians; and I need only appeal to yourselves, and ask what amount of information you can derive regarding the operation of your own brains, or of any internal function, from consciousness alone. Did consciousness enable any one to anticipate Harvey's discovery of the circulation of the blood? or does it throw any light on the phenomena of digestion or of respiration? None whatever. We know that we breathe and digest, but we are left to find out, by observation, both the manner and the mechanism; and it is the same with the brain. We have a kind of consciousness that we think and feel by means of our heads; but none whatever that our skulls contain brain, much less of the uses of its component parts, or of its particular uses even as a whole.

The only other channel through which information has been sought, and sought in vain, is the study of the effects of injuries and diseases of the brain, and the effects produced by mutilating the brains of animals. Dr. Weir will, by-and-by, demonstrate to you the inadequacy of this method also to furnish the information required. Suffice it for me to say, that it is not amidst the suffering of disease, or the general disturbance of system caused by wounds or mutilations, that healthy regularity of function is to be found. Where any part of the nervous system is concerned, and suffering is excited, it generally becomes too much mixed up with local results to admit of being properly discriminated; and, accordingly, not one new fact of any radical importance to the physiology of the brain in its connexion with the mind has yet been demonstrated by this method of inquiry, notwithstanding the many and persevering efforts made in recent times to turn it to account; and except for the light thrown upon its results from other quarters, many of them would remain before us nearly as destitute of meaning as at first.

Such, then, was the state of the physiology of the brain down to the time of Dr. Gall, and such continues to be essentially its state even now, among those who reject his discoveries. If, therefore, any adherent of the old methods of inquiry should happen, in your presence, to enlarge upon the

demerits of phrenology, or the presumption of its disciples, you need be under no alarm for the consequences; you may at once turn the attack against himself, by requiring him to show what he can put in its place. If he has made any discovery of his own of the functions of the brain, he must be a very modest man indeed to hide its brilliancy under a bushel; for, as yet, nobody has claimed any such merit. If, therefore, phrenology contain *any portion* of truth, science can only gain by its candid and unprejudiced examination; and you are interested in exact proportion to the amount of truth which it embodies, not rejecting it heedlessly or unexamined.

But what, then, you will ask, is this boasted method by which Gall has derived such a rich harvest from a field which others have cultivated with so little success? The answer is, simply, that in investigating the functions of the brain, he has followed the same principle which, applied to other organs, has led to the discovery of their functions, but which, from various causes, had never before been systematically applied to the brain. When the physiologist wished to ascertain the function of any particular organ of the body, he did not rest satisfied with examining its structure, and speculating on the purposes for which that structure seemed in his eyes to be adapted. He began by direct observation, and watched what kind of function *appeared during life as the invariable accompaniment of the presence and action of that particular part*, and by repeated and careful observation, he at last succeeded in discovering the functions. The knowledge thus obtained was afterwards verified, confirmed, and completed, by the examination of structure, and the observation of the effects of its injury or diseases.

It was by this method that the liver, for example, was proved to be the secreting organ of the bile, many centuries before its true anatomical structure was ascertained. This fact being once arrived at, its truth was confirmed by observing, further, that bile is met with only in animals in which a liver also is found, and that its secretion varies in amount with the development of that organ, and is affected by its diseases. The same with the kidneys: observation, during life, of the concomitance of organ and function, is the *first source* of all our authentic knowledge of the part they perform in the animal economy; and it is only *after* having thus ascertained that they serve to secrete the urine, that we become enabled to extend and complete our information, and to trace the true relation of structure to function. Even of the muscles, our knowledge has been acquired in the very same way: we observe, in the living body, the concomitance of muscular motion with muscular fibre, and thence infer that its function is to execute motion. Here, then, is the very principle which Gall has succeeded in applying to the elucidation of the functions of the brain; and he was led to its adoption by an accidental observation at school, of the concomitance of a particular kind of talent with a peculiar appearance of the eye, which he found afterwards to be caused by the development of a particular part of the brain. At school, at college, and in many other places, and under wholly different circumstances, the same concomitance of talent with development of brain came under his notice so frequently, as to arrest his attention to the probable or possible success which might attend the application of a similar mode of discovering a connexion between other mental talents and the development of other portions of the brain. In this respect Gall resembled in no small degree the illustrious Newton, who, from the accidental fall of an apple at his feet, was led to the discovery of the law of gravitation. Like Newton, having once obtained the clue, Gall never lost his hold of it as a guide to discovery; and he found it, on trial, to prove like a lamp to his feet, in the investigation of nature.

It was by the persevering application of the method of inquiry which accident had thus suggested to him, and not, as many suppose, by an effort of imagination, that Dr. Gall was at last enabled to place the physiology of the brain upon a solid foundation, by demonstrating, *first*, that the brain is an aggregate of many different parts, each serving for the manifestation of a particular mental faculty; and, *secondly*, that, *all other conditions being equal*, the size of each of these cerebral organs is an index of the power of its function. These two propositions, as will be afterwards fully explained to you by Dr. Weir, constitute the distinctive or fundamental principles of phrenology. The first of them, however, is not new. The impossibility of reconciling the phenomena with the notion of a single organ of mind has, for many centuries, suggested the probability of their plurality; and it is stated, that, influenced by this incompatibility, the great Haller, among others, "*felt a necessity for assigning different functions to different parts of*

the brain;" just as, for a similar reason, many physiologists had long suspected that the nerves of sensation and motion must be different. But it remained for Dr. Gall to *demonstrate* the fact of a plurality of organs in the brain, just as it did for Sir Charles Bell to demonstrate the distinction between the different kinds of nerves; and before the conclusion of this course of lectures, you will be better able to appreciate the merit and consequences of this demonstration than you are now. At present, I need only allude to an objection sometimes inconsiderately made by medical men against the possibility of the existence of any such cerebral organs, on the ground that, on looking at the brain, no visible separation between its constituent parts can be detected, such as we see in the organs of the five senses. On examination, the whole force of this plausible objection is found to depend on overlooking the very different nature and functions of the internal and external faculties. The organs of the five senses require to be distinctly isolated from each other, because, from their being the media of communication with the external world, each requires a distinct apparatus to place it in harmony with the kind of impressions it is destined to receive and transmit to the brain. The eye, for example, being adapted in structure to the rays of light, is unaffected by impressions of sound; and the ear, being adapted to atmospherical vibrations, is unaffected by the rays of light; and hence each of the senses has, and must necessarily have, a specific apparatus for itself, so distinct in its mechanism from that of the rest, as almost to preclude the possibility of the organs being grouped together in close connexion with each other. With the organs of the internal faculties, however, no such necessity exists for their absolute separation. On the contrary, their complete isolation would serve only to impede that consentaneity and harmony of action among several of them which is required in almost every mental operation. Accordingly, the objectors forget that, even in the case of the nerves of sensation and motion, where simultaneousness of action is often indispensable to the due regulation of our movements, a still more intimate connexion of fibres of different kinds, and performing distinct functions, exists for a similar purpose; and that it was precisely this apparent blending of two sets of nervous fibres which so long misled physiologists to the belief that the nerve was a single organ, consisting of fibres serving equally for sensation and motion. This hasty and erroneous inference was arrived at in the face of many opposing physiological phenomena, solely because, on examining the really compound nerve, no visible distinction could be traced between its two sets of fibres; and it remained for Sir C. Bell, in the nineteenth century, to demonstrate their actual existence, and thus to reconcile their structure with the functions which they were ascertained to perform. The objectors forget, also, that a similar peculiarity characterizes the spinal marrow, and was equally the cause of the obscurity in which the distinct functions of its constituent parts were so long involved. In all ordinary circumstances, sensation and motion, irritation and reflex action, are most intimately associated; because the one is the exciting cause, and, in one sense, the director, of the other: but on some occasions, and more especially in morbid or abnormal conditions of the system, their distinct and independent operation becomes so evident as to be explicable only on the idea of a corresponding plurality of nerves.

The very same principle applies to the different cerebral organs which serve to manifest the different primitive faculties of the mind. In most mental operations, associated action of several of the primitive faculties is almost indispensable to the accomplishment of their object; and to admit of this at once consentaneous and combined action of several faculties in themselves distinct, their cerebral organs must be in intimate connexion with each other; and, accordingly, such is found to be the order of nature.

But, it may be argued, if the internal faculties of the mind generally act in combinations of a greater or less number, does it not follow that the brain must, as a single organ, serve for the whole of them, instead of each having a part of the brain appropriated to itself? This conclusion, however plausible it may seem, would be as fallacious as the similar inference of the identity of the nerves of sensation and motion, from the general fact of their combined and consentaneous action. It is true that several of the faculties are generally active at the same time; but their elementary distinctness and independence of each other are shown, not only by their different degrees of strength bearing no constant relation to each other, but by the ever-varying combinations, in number and in kind, in which they manifest themselves. For, if they were all general results, of one general power, operating through one organ, there would

be in all instances a fixed proportion in the manifestations of feeling and thought, and a definite order in their sequence and arrangement in harmony with the unity of action of a single organ. This is not the occasion on which to enter more fully into the objection; but I trust that I have said enough to satisfy you, that it is in reality more specious than sound, and that it is refuted both by direct evidence and by the analogy of other parts of the nervous system, the functions of which are now well ascertained.

Of the truth of the two fundamental principles of phrenology, and of the possibility of applying them successfully to the discovery of the functions of the different cerebral organs which serve to manifest the different mental faculties, it would be easy for me to adduce ample evidence, were this the proper time to do so. That, however, will be afterwards satisfactorily done by your able lecturer. For the present, I must be allowed to assume their truth, and on this assumption to press upon you the necessity of examining both the facts and evidence for yourselves. You cannot with safety continue to neglect this inquiry; because the truth is advancing while you are inactive, and you are not in possession of any other knowledge which can warrant you in condemning the claims of phrenology untried. In common fairness, you are bound at least to make yourselves acquainted with both sides of the question, and to suspend your judgment till you have done so. I may go farther, and urge what to many will seem still stronger grounds for recommending you to give phrenology a fair hearing. Your own interest is deeply concerned in your decision. If phrenology be true, and if you remain unacquainted with its principles and facts, you will soon find yourselves left behind by those who have had the courage and sagacity to follow the guidance of truth. If true, there is no branch of knowledge which can be of more direct practical interest and utility to the physician or to the philosopher. If true, it furnishes a key, not only to the physiology of the brain and nervous system, but to the philosophy of the mind; and, as such, there is scarcely any form of disease, on the nature and consequences of which it is not calculated to throw some light, or in the treatment of which it does not afford valuable aid.

Many suppose that it is only in cases of insanity that a knowledge of the physiology of the brain is of any great consequence to the physician. In the discrimination and treatment of every form of nervous and mental disease, it is indeed invaluable, or rather, I may say, indispensable; but from much experience I may further add, that there is scarcely a case to which a medical man can be called, in which an acquaintance with phrenology will not smoothe down difficulties, and afford him efficient aid; both in regulating the treatment and in dealing with the friends of the patient, so as to secure their hearty and complete co-operation. The afflicted are beginning to make this discovery for themselves; and the day is gone by, when advocacy of phrenology was an objection to a medical man. The bias is now turning the other way; and I have myself received many applications for advice from invalids in different parts of the kingdom, who stated that they were induced to consult me by a belief that phrenology would throw light upon their ailments. In ordinary private practice, also, the utility of phrenology is already appreciated by many; and professional men who understand it are sought after in preference to men of equal skill who remain in ignorance of its value. Here, again, I speak from actual experience; because, since bad health compelled me wholly to relinquish the exercise of my profession, I have repeatedly been applied to by invalids to recommend an adviser who was well acquainted with phrenology. Indeed, it is to the actual experience of its benefits by a former patient, that you are indebted for being now assembled in this hall. The late W. R. Henderson, Esq., devoted much time and attention to its study, and became deeply impressed with the services it was destined to render to mankind. In his own person, and under many drawbacks, he had, both during health and in disease, experienced its practical utility, and thence became more fully aware of the numerous and beneficent applications of which it admits, to the relief of suffering, as well as to the moral improvement of man. Under this conviction, he resolved to do all in his power for its more extensive diffusion. With this view, some years before his death, he devoted part of his leisure to the delivery of lectures on the subject to the working classes of Galashiels, in the neighbourhood of which he then resided. An impediment in his utterance rendered this effort less successful than it would otherwise have been; but to secure the more effectual and permanent attainment of his object, he made a will, by which, after providing annuities for several friends,

he bequeathed all his property to trustees, to be devoted to the more extensive diffusion and cultivation of phrenology; and specially recorded, that he did so from no transient fit of enthusiasm, but from a calm, well-considered conviction of the truth and practical value of Gall's great discovery. * * * Phrenology, considered as the philosophy of the mind, must be deeply interesting to all classes of reflecting and educated men; but to the intelligent and well-educated medical man it offers still more powerful points of attraction, by presenting to him, for the first time, a firm foundation for a true and complete physiology of the brain. In this point of view it will, I am confident, speedily become an *indispensable* branch of knowledge to every physician who desires to keep pace with the progress of science, and to maintain his place either in general society, or among his well-educated brethren. Conscientiously entertaining his belief, I cannot but rejoice that you have been provided with an opportunity of becoming acquainted with the nature and evidences of phrenology, and with its applications to the treatment of disease; and I would strongly urge you not to let slip the facilities which Dr. Weir will afford to you of forming your own judgment, on the only safe ground—that of examination of evidence. Dr. Weir is well qualified to be your guide, and he is not untried. He has been long known to you as a successful teacher of medicine, and as an able physician. He has already lectured on phrenology; and from him you will learn all that is requisite to enable you to prosecute with advantage your own farther researches into the anatomy, and the physiology and pathology, of the nervous system. He will prove to you, what many are anxious to conceal, that Gall's merits are not confined to the physiology of the brain; and that, on the contrary, it was he who, by abandoning the old plan of slicing this organ like a cheese, and adopting the rational method of tracing its elementary structure as it exists in nature, first gave the impulse and the direction which, in recent times, have done so much to improve our knowledge of the anatomical relations of the different parts of the brain to each other, to the spinal marrow, and to the nerves; and that such men as Reil, Blumenbach, Blainville, and Cuvier, did not disdain to acknowledge their obligations to him as an anatomist, even while they doubted his physiological doctrines. Even in Germany, from which phrenology was expelled almost at the instant of its birth, it now rears its head, and gives indications of vigorous and enduring vitality. Germany not only possesses a journal devoted to phrenology, and published regularly at Mannheim, but there is every reason to hope that, in the University of Heidelberg, the very focus of the celebrated Tiedemann's active opposition, a lectureship similar to your own will shortly be established, and given to Dr. Scheve, who has already made himself advantageously known by his labours in the cause. * * *

But while I estimate thus highly the value of phrenology, it is right to warn you that it is of phrenology as it exists in the minds of its well-informed cultivators after years of study and observation that I speak, and not of the fancy which many substitute for it in their own minds, and designate by its name. Of the latter kind of phrenology, nobody can have a lower opinion than I have. It neither is nor ever can be of any use, either to its possessor or to others. The phrenology which I have here recommended to you is a science which cannot be mastered or judged of in a day, in a week, or in a month. Like other sciences it must be studied before it can be known. Many entertain the notion that they have only to read a book or a pamphlet to qualify themselves to estimate its bearings, and pronounce authoritatively on its merits. This is a grand mistake; as well might we expect to become the equals of Liebig or Faraday, by reading a volume on chemistry. Till we become acquainted with phrenology in its details, with its evidences, and with its manifold applications to medicine, education, and morals, we are in truth as incapable of forming a correct opinion of its nature and uses as we should be of those of chemistry while in a similar state of ignorance.

[As we are urgently pressed for space, and as the concluding portion of this able "Address" might be considered by many of our readers to be of a local, rather than of a general interest, we must here close our extracts.—Ed. L.]

"His (Dr. Hope's) studies were of a grave character. Perceiving what unfathomable depths of unattained knowledge lay before him, he arrived at that rare wisdom, inculcated by the Grecian sage, a conviction of his own ignorance. He entertained a very humble sense of his attainments, and forgetting the way that he had already gone, he eagerly pressed forward with the feeling that he had scarcely begun the race."

—*Memoir of the late Dr. Hope.*

FOREIGN DEPARTMENT.

M. RICORD ON THE TREATMENT OF THE SECONDARY AND TERTIARY FORMS OF SYPHILIS.

(Continued from page 32.)

Not only is it necessary to place a syphilitic patient whilst under treatment in the most favourable hygienic circumstances, but care should also be taken to prevent his thoughts from continually concentrating themselves on his disease, a state of the mind which may give rise to syphilophobia. I now wish to say a few words respecting those adjuvants to an anti-syphilitic treatment, to which many practitioners, and nearly all patients, attribute the most marvellous properties—viz., sudorifics. Many medical men would not think they had prescribed, and few patients would think they had undergone, a complete treatment, had not sudorifics, such as sarsaparilla, guaiacum, squina, (smilax china,) and sassafras, been administered; and yet these substances do not possess any anti-syphilitic property. We may safely say, of the whole four, that their reputation is usurped. They no more cure syphilis now than they did a hundred years ago, neither has sarsaparilla greater influence over syphilitic diseases than the other three. It is one of the most fallacious remedies, as an anti-syphilitic, that has ever been lauded in the treatment of venereal disease. It is not of the slightest use, a fact which was long ago recognised by Cullen and Pearson. Those who have followed my practice at the Hôpital du Midi, for some time, know that when we wish to suspend the treatment of a patient for a few days, without his knowledge, we prescribe the decoction of sarsaparilla, without the appearance or progress of the syphilitic symptoms being ever modified or arrested in the slightest degree.

Sarsaparilla is, therefore, inert as an anti-syphilitic remedy. Has it more influence as a sudorific? Certainly not. The warm decoction of sarsaparilla makes a patient sweat, as does the decoction of linden flowers, or warm water; but we defy any one to induce perspiration by giving sarsaparilla in powder. As a general rule, we may say, give your patients whichever of these medicines you may think proper, even sarsaparilla, should they not think they can be cured without it, and this you will daily be obliged to do; but do not fancy that they possess any anti-syphilitic or sudorific properties.

The digestive system should be kept in a certain state of tonic, an indication which may be fulfilled by the administration of bitter infusions and decoctions. The infusion of saponaria constitutes a very proper stimulant for the digestive canal, and acts in the same way as that of hop, dulcamara, bark, &c. Tonics and bitters are powerful auxiliaries in the treatment of syphilis. As we have said long ago, syphilis and scrofula are sisters. The ptisans given to scrofulous patients are equally beneficial when administered in syphilitic cases. Should nature appear to be setting up an action towards the skin in constitutional syphilis, sudorifics may be of use; in which case the cheapest and easiest applied are the best. Under such circumstances, the vapour bath may be employed with advantage. Before concluding what relates to the treatment of secondary syphilis, I must make a few remarks respecting the value of some therapeutic agents which are considered to be capable of supplying the place of mercury—viz., the compounds of gold and silver, and the iodide of potassium.

The preparations of gold have been, and are still, thought, by some practitioners, to possess great efficacy in the treatment of secondary syphilis. The experiments of Cullerier and Bielt, however, prove that they have little or no influence over the diseases of which we are treating. In the great majority of cases in which they are administered, they exercise no influence whatever on the disease, and in the very few instances in which they appear to dispel the morbid symptoms, it is difficult to say whether it is the treatment or nature that has produced this result, for we must not forget that the phenomena of secondary syphilis may disappear without any treatment being had recourse to.

Preparations of silver have, likewise, been employed with the same want of success in the majority of cases, and the same uncertainty as to their real value in the very few in which the symptoms give way whilst they are being administered.

Does the iodide of potassium succeed in the treatment of secondary syphilis? It has been proved that it may sometimes produce rather favourable results. When Wallace published his first facts relative to the use of the iodide of potassium in syphilis, he employed the salt in all the periods of the disease, against all its forms and all its symptoms. He often obtained favourable results, but in some periods of

syphilis, they were so variable that this precious medicine would, no doubt, have fallen into oblivion, if Wallace had been entirely believed. I have contributed my share towards establishing the reputation which the iodide of potassium now enjoys. I was the first to point out when it ought to be employed, and against the symptoms of which period of the syphilis. I have demonstrated, in the most positive manner, that the iodide of potassium is a remedy which cannot at all be depended upon in the treatment of secondary symptoms; indeed, it seldom succeeds in dissipating them. It nearly always fails, and is as weak as mercury is strong. Moreover, it sometimes increases, exasperates the morbid phenomena, and when it is not noxious it causes us to lose valuable time. I do not assert that it has never succeeded, but that it cannot constitute a special and complete treatment.

Hydro-therapia (the water cure) has been praised in the most enthusiastic manner. I have tried it, and repeatedly seen the secondary phenomena disappear under its influence; but this treatment is of all the most momentary, the most fugitive. In a very short time the morbid phenomena again appear. The most useful therapeutic agent is that which overpowers, keeps at bay the longest, the syphilitic diathesis, and which prevents its reappearing the longest, and that mercury does.

THE ROYAL ACADEMY OF MEDICINE AND THE KING OF THE FRENCH.

It is usual for the more important public bodies in France to present to the King, on New Year's Day, an address, to which he generally makes some reply. In accordance with this annual custom, a deputation from the Academy of Medicine was admitted to the royal presence on the 1st of January, when the following address was delivered by the President:—

"Sire,—The Royal Academy of Medicine, through our voices, respectfully unites in the concert of gratitude and affection which rises to the throne from every part of France.

"Happy to think that it deserves the powerful protection with which your Majesty honours it, the Academy pursues with zeal the course of its useful labours. To endeavour to solve the numerous and varied questions which interest public health; to pursue and forward the progress of science; such is the double mission which is confided to the body which we represent. All the labours, all the desires, of the Academy are directed to one object—the faithful performance of the duties with which it is entrusted; and it dares hope that its efforts have not remained quite sterile. If it is true that public esteem and approbation have rewarded the endeavours of the Academy, the thanks of its members are due to your Majesty, who deigns to afford to it encouragement, protection, and support.

"May the Academy, Sire, present you, as to-day, for many years, the homage of its labours, and the tribute of the gratitude which it feels. This is its most ardent wish as it is that of all France, the tranquillity, prosperity, and happiness of which are so intimately connected with the preservation of your valuable existence."

The King answered in the following terms:—

"I am gratified and moved by the sentiments expressed in the name of the Academy of Medicine; I appreciate the importance and the utility of your labours, and I am happy to learn that the protection which I so willingly give to the Academy has contributed to increase the merited consideration which it commands. No one better than I can appreciate the services which you render, of which, indeed, I am myself a good example; for in spite of my seventy-two years, I am in good health, as you see. May you, gentlemen, long continue to serve humanity and science."

ON THE THERAPEUTIC INFLUENCE OF WARM MOIST AIR IN THE TREATMENT OF INFLAMMATION OF THE AIR-PASSAGES.

By GOLDING BIRD, A.M., M.D., Fellow of the Royal College of Physicians, and Assistant-Physician to Guy's Hospital.

(Concluded from p. 38.)

WERE I endeavouring to point out one class of cases more distressing and anxious than another, I would sketch one of pneumonia, or capillary bronchitis, affecting a part of both lungs, and occurring in a child barely emerging from the influence of the poison of measles or whooping-cough. The little sufferer, weak from previous disease, tosses restlessly from side to side, with its head thrown back over the pillow or nurse's lap, to straighten the trachea, snatching short and imperfect slumbers, or rather moments of stupor, only to awake

to fresh distress; the livid hue of the finger-nails and toes, the dusky face, parched lips, distended and parting nostrils, the lustrous, prominent eye, present a graphic picture of impending suffocation; whilst the hurried respiration, the catching at the bedclothes, or throwing the arms over the head, show the effort made by the child to facilitate the distention of the obstructed lungs. If pneumonia be alone present, all these symptoms, it must be recollected, often exist without a particle of cough; the most severe cases of this kind I have met with, have been absolutely free from it, and have been often mistaken for mere fever. It is in this stage that the symptom first noticed by my experienced colleague, Dr. Addison, becomes so valuable in drawing attention to the state of the chest; I mean, the glowing, pungent heat, the *color mordax*, so rarely met with in other affections. It must never, moreover, be forgotten, that whilst in the adult pneumonia is frequently limited to one lung, in children it usually affects both. The possible absence of violent inflammatory fever, also, must never be forgotten, for ignorance of this fact has often caused the disease to be overlooked. The prominent symptoms of the most dreaded variety, or suffocative pneumonia, are, diminished oxygenation of the blood, and depressed state of the cerebral functions. The little patients are often affected with great somnolence, pale and livid complexion; the glowing heat of surface soon disappears, and is followed by cold and often violet-coloured extremities. The respiration is often nearly entirely performed by aid of the abdominal muscles, the action of the diaphragm being violent; a state of things familiar to every physician, and to which attention has of late been especially directed by a German author, Dr. Berg. The distress of the little patient becomes much greater if capillary bronchitis, or inflammation of the lining membrane of the smaller tubes, be superadded; for here, in addition to the consolidation of the hepatized portions of lung, the very route to the cells is first obstructed by the swollen and congested state of the lining membrane, and afterwards by the exudation of a stiff, viscid, gum-like mucus. And if the larger tubes become involved, as is usually the case after whooping cough, the loud and coarse r  le, or wheezing sounds, show how great is the effort required to expand the lungs.

In the treatment of these cases, all the therapeutical remedies at our command are too frequently put in requisition in vain; the mercury, antimony, opium, and depletion, are all called upon for their assistance; and although, fortunately, often with success, still we have sometimes to deplore their inefficiency, and even occasionally to doubt whether, after all, the disease has not been over-treated; and to inquire whether, in our efforts to save, the catastrophe has not been rather accelerated than averted.

It is in these cases that I think we possess a most energetic remedial agent, in the shape of an appeal to the functions of the skin and mucous membrane of the air-passages, which, whilst its effects are always palliative, and often successful, can never be regarded as dangerous. Even the temporary relief afforded by the warm bath, familiar to all practitioners, shows how much is gained by calling upon the skin to do its duty. But even here, too carelessly as this remedy is often used, I think I have seen more ultimate harm than good accrue, by rendering the child more susceptible to the influence of the cold air which it inspires.

In cases of this kind I would urge the practitioner not to consider he has done his best towards saving his little patient, until he has placed the child in an atmosphere, the temperature and moisture of which shall appeal to the skin, and relieve the inflamed tissue. The mode in which I am accustomed to effect this is as follows:—Selecting, if the choice be permitted, a bedroom as small and as free from draughts of air as possible, the windows are carefully closed, and if the casements do not fit accurately, strips of paper should be pasted over the junctures. A stout sheet or blanket should then be fastened with a nail or two to the lintel of the door, outside, so as to hang down and prevent currents of cold air entering the room during the ingress and egress of the attendants, a large fire being lighted in the grate, which should never be allowed to go out during the treatment. A thermometer should be suspended over the patient's bed, so as to be about two or three feet from its centre, and carefully watched. The indications of this instrument must constitute the sole guide for raising or depressing the fire, and a temperature of from 70° to 78° degrees should be constantly maintained. A large kettle of water is placed on the hob, and kept boiling, so that a current of steam may be constantly poured into the room from its spout, which, for this purpose, must be enlarged by the addition of a few feet of gas-pipe, and until this be procured, with a tube of stiff paper or thin mill-board.

By these precautions the room may, without the slightest difficulty, be kept at a nearly constant temperature for the requisite time. Indeed, it is remarkable how little variation is observed in the thermometric indications, when the most ordinary care is taken to prevent the entrance of long-continued draughts of air. Let us now suppose that a child, the subject of capillary bronchitis or pneumonia, be exposed to the influence of a bed-room arranged with these precautions, placed in bed, and supplied freely with diluents, as tea, toast-water, or common water, for which the little patients generally crave, and inquire what are the probable results of this treatment, independent of any other.

The first thing observed, generally, is a slight diminution in the rapidity of the respirations, which, for the most part, soon assume a less panting character. This may be accounted for by the more soothing effect of a genial temperature on the surface of the body, and by the warmer air inspired proving less stimulant to the lung; and, contemporaneously with this, the cough, if present, diminishes in frequency and violence.

In a short time afterwards, the surface of the body, especially the extremities, if previously cold, as in suffocative pneumonia and bronchitis, become warmer; but if previously pungently hot, they become moist, and, in both cases, a free perspiration bursts out, and continues, in most cases, for days. Should this not occur so soon as is wished, enveloping the chest in a large and thick hot linseed-meal poultice will generally turn the scale in favour of diaphoresis. It is here evident that we find the advantage of rendering the air of the room moist by the evaporation of water. If mere dry air, of the temperature of 75°, were allowed to exert its influence on the parched skin of acute pneumonia, it seldom, if ever, excites perspiration; the orifices of the spiral sweat-ducts seem closed against the escape of perspired fluid. It is not uncommon to meet with a sort of false miliary rash, really composed of sudamina, each formed by a drop of sweat imprisoned by the parched cuticle. Thus, the hot moist air produces three definite and direct results. First, by increasing the determination of blood towards the periphery of the body, it diminishes the congested state of the more central organs, and, consequently, of the inflamed viscous. Thus, in the case of the first stage of capillary bronchitis, giving relief by unloading, to a certain extent, the congested vessels ramifying in the submucous tissue, whilst in the red hepatization of early pneumonia, when the cells, as has been happily demonstrated by Dr. Addison, are actually filled with swollen and distended vessels, ramifying in their walls, this production of determination of blood to the surface seems to be of especial value in relieving the congested arterial tissue of the air cells.

Secondly.—The inhalation of warm and moist air must, of necessity, act at least as a soothing and emollient application to the inflamed tissue, a state of things sufficiently well shown by the remarkable diminution of cough where it was previously violent. The diminution of this distressing symptom is also remarkably aided by the more copious and less viscid secretion of the bronchial membrane.

Thirdly.—The excitement of free perspiration, by which the skin energetically performs its important excreting functions; thus compensating for the imperfect condition of the diseased organs, the patient, in fact, breathing by the skin, to the great relief of the labouring lung. Besides, as in all phlegmasi  , the secreting functions are almost universally partially arrested. The immediate consequence, therefore, of obtaining a freely perspiring surface is not only that of compensating for the deficient action of other depurating organs, but of exciting them generally into action,—a necessary result of the appeal to the capillaries of the skin.

These, then, are the necessary and immediate results flowing from the action of hot moist air on the surface of the body, results not mentioned here as theoretical assumptions, but as the often proved effects of this treatment in practice.

The secondary effects, however, of this persistent appeal to the skin are, probably, of even far greater importance, although, perhaps, less susceptible of actual demonstration than the primary results just described.

In the general arrest of secretion accompanying, or consequent upon, acute inflammation, the conditions for capillary exudation equaling, or even exceeding, the normal state, according as the injecting force of the heart equals or exceeds its normal intensity, the antagonism to this action, the function of absorption, must, of necessity, be nearly paralyzed; as, if performed, it can alone be completed at a heavy expense to the integrity of the body. The reason of this is plain—for as fluid secretion is nearly arrested, the blood in the capillary arteries will give up but little of its water, and consequently reach the venous blood-channels

scarcely altered in specific gravity. Hence, for reasons already explained, when discussing the ingenious hypothesis of Dr. Willis, endosmosic absorption of effused plasma or serum could hardly occur, as, if it did take place, it would, on account of their nearly corresponding density, have an equal tendency to become mixed with the venous and arterial blood. Indeed, it may be fairly questioned whether much of the lethargic condition which often closes the scene in bronchitis, may not be owing—at least, in part—to the absorption of effete matters into the arterial current instead of the venous, by which the impurities absorbed would undergo metamorphic change, or be got rid of by the aid of the different depurating glandular structures. The act of pumping off a quantity of water from the skin must therefore be regarded as no mean agent in the treatment of diseases attended with effusion of morbid products into inflamed tissues; if such products have been effused, a powerful endosmosic absorptive power is exerted by the venous capillaries, an action likely to prove of the most salutary character, as it is not only energetic, but leaves us free to the employment of other remedies likely to produce the same end.

I may be permitted to impress upon the Society the fact, that the hypothetical reasoning here adopted is a simple induction from observation, and that if future researches in minute pathology should invalidate the theory, the results of the practice I am recommending remain the same. During the last two years I have tested this practice in some severe cases of inflammatory croup, suffocative pneumonia, and capillary bronchitis, after whooping-cough, and I must plead guilty of having so strong an impression of its success, that had I a case of acute pneumonia in a child to treat, with the understanding that I was limited in my treatment, on the one hand, to depletion and drugs, and on the other, to the plan I have recommended, I think I should, especially in a strumous subject, or one weakened by previous disease, prefer the latter. Within the last few weeks a most illustrative instance of this very position occurred in two of the children of an excellent and respected member of our profession, a fellow of this Society. They both became the subject of double pneumonic and capillary bronchitis, after measles and whooping-cough. In one case all the remedial measures which the experience of a medical friend, who attended, with another physician and myself, could suggest, were unavailingly adopted, and we had to lament their inefficacy. The other little patient, under parallel circumstances, also with double pneumonia, had, from peculiar circumstances, a most guarded—in fact, nearly a nominal—treatment with drugs, without depletion; the plan I have suggested was adopted, and most completely carried out, with all the untiring care which an anxious mother could command; and I have seldom witnessed a recovery more decided or satisfactory from such apparently hopeless circumstances. These are not solitary pictures; I could draw many such from my own experience.

I have not alluded to the general medical treatment of the diseases under consideration, as this forms no part of my present plan. I am only anxious to impress the Society with the importance of a too much neglected or carelessly employed adjuvant to one general and well recognised medical treatment of broncho-pneumonic inflammation.

Before concluding these remarks, I may venture to draw some corroborative evidence in favour of the doctrine I have advanced, from facts observed by others. And, first, I would allude to the very important fact observed by my friend and colleague, Mr. Cock, that, in cases requiring tracheotomy, in which operation he has had great experience, if bronchitis did not exist previous to the operation, it became excited almost immediately on the entrance of cold dry air into the lung through the inserted canula; the external air thus directly entering the lung without becoming moistened, or having its temperature raised by passing along the ori-nasal passages. This, which he very properly regards as one of the most dreaded effects of the operation, Mr. Cock proposes to prevent, and has, I believe, succeeded in doing so, by means of a contrivance by which air previously rendered warm and moist is alone allowed to traverse the canula. By this ingenious suggestion there can be no question that the dangers resulting from opening the larynx and trachea will be much diminished. To take another instance, I would allude to the extraordinary success attending some of the operations for the removal of large ovarian tumours, in which the peritonæum is not only opened, but actually exposed for a quarter of an hour or longer to the air. Yet, in spite of this apparently important element of danger, it is a remarkable fact, that where care has been taken not to inflict a more than necessary injury to

the serous membrane by a reckless boldness or rashness, in the vain glory of removing the tumour or cyst entire, scarcely any evidence of inflammation has resulted, providing every possible precaution had been adopted to cause the temperature of the room, at the time of the operation and for days after, nearly to equal that of the blood. It is to attention to these two facts that I feel inclined to attribute the interesting results obtained by my brother, Dr. Frederic Bird, in the operation alluded to, his success having, I believe, exceeded that of any other operator; for having now laid open the peritonæum eight several times, all his patients are at this moment living, and in good health; thus eloquently attesting the success of the practice adopted. To conclude: in thanking the Society for its patience in listening to much that is, I dare say, trite and tiresome, I can but declare that I shall feel happy if I have succeeded in impressing upon any of my hearers a deeper conviction of the high and important influence of the functions of the skin in health and disease. Believing that the time of the fellows of this Society will not be less profitably occupied in animadverting upon a practice as old as the earliest ages of the Roman empire, than if their attention had been engaged by the consideration of a practice more dazzling from its brilliancy, or interesting from its novelty.

REMARKS ON FRACTURES OF THE THIGH-BONE, AND THE APPARATUS USED FOR THEIR TREATMENT.

By JOSEPH MACLISE, Esq., Surgeon.

In submitting to your notice, and that of your professional readers, the following observations regarding fractures of the thigh-bone occurring at its middle or upper third, and the plan of treatment rationally indicated for the same, we do so, not because we hope to add any one remark to the long list of facts already known in reference to the pathological condition of the soft and osseous structures, but because we have noticed that the apparatus used for the treatment of such fractures, as well in this country as in France, does not fully answer all the purposes required of them.

It is well understood that there is no department of surgery which demands, in addition to a profound anatomical knowledge, a proper mechanical skill, more than the treatment of fractures. This treatment is in fact entirely dependent upon the efficiency of the apparatus; and as to the apparatus itself, all preference is to be given to that one which combines simplicity with mechanical judgment, rather than to that which is only curious from the complexity of its construction.

If there were any one well-approved apparatus for fractures of the femur, one might expect that the use of such would be universally adopted; if this were the only one which could meet all contingencies, it is certain that no surgeon acquainted with its value would (following the conceit of his own originality) prefer another and less efficient apparatus, even though he himself were the inventor of the same. But there is no such apparatus, and hence it is that, in each of the great hospitals of Paris, we see various modes of treating these fractures. At the "Hôpital des Cliniques," the surgeon uses Boyer's long splint; at "La Pitié," the fractured thigh is supported on pillows; at "Val de Grace," the surgeon uses the fracture box, and the apparatus used in the London hospitals are of constructions as various.

When a patient is admitted into the hospital, after having sustained a fracture of the thigh-bone, it will be of little good to that patient if the anatomist only correctly pronounces the nature of the injury received, points out the exact locality of the fracture, how many inches and lines it lies below the articulating head of the bone, at what distance it has occurred below the insertions of the psoas and iliacus muscles, and how the upper fragment rides above the lower one, which latter depends with the weight of the parts attached. This knowledge, uncombined with some mechanical skill whereby he may obviate the false position of the parts implicated, will avail but little.

On the other hand, (and we need not remark upon it,) it is evident that the mere mechanical art, however perfect in itself, if it be unattended with a knowledge of the anatomy, will avail us little; whereas it is from a combination of both that the best mode of treatment is to be expected.

When the thigh-bone happens to be fractured immediately below the insertion of the psoas and iliacus muscles, or even at the middle of its shaft, it is well known that both fragments of the bone are drawn widely apart from each other, owing chiefly to the traction performed by those muscles above named. The upper end of the bone is rotated almost per-

pendicularly to the horizontal position of the body, and the lower end, obeying the contractions of all the larger muscles of the thigh, is drawn up behind the upper fragment; if the fracture has occurred obliquely from behind, downwards and forwards, or if from before, downwards and backwards, then the lower fragment is retracted, and rides upon the upper end. In either case, the plan of treatment indicated is to approximate both fragments, and fit their sundered extremities as closely to each other as possible, and to this end it is that the extension and counter-extension of the limb is made. All apparatus used for this purpose are modifications of the long splint of Désault, or that invented by McIntyre, or the double-inclined plane.

The efficiency of Désault's long splint is mainly dependent upon that adjunct named the perineal band; for it is this band which maintains the extension of the limb, and continues to counteract all muscular traction, which never ceases throughout the long process of osseous deposit and union of the fracture; and it remains to be inquired whether, in the application of this apparatus for such fractures, surgeons have combined mechanical with anatomical principles.

Let us suppose a fracture of the thigh-bone to have occurred at its upper third, and that the pathological condition of the parts was such as that the upper fragment, obeying the traction of the psoas and iliacus muscles, is drawn far apart from the lower fragment, which depends by its own gravity—can we be led to imagine that what is false in theory, may, for even once, be correct in practice? and should we believe that any degree of extension, of horizontal extension, made upon the limb of a patient lying upon his back, can possibly bring the broken ends of both fragments of the femur in apposition? This is not possible, and yet this extension and counter-extension are all the result obtainable by the application of the long splint and perineal band.

The patient is lying upon his back; we feel the distal end of the upper fragment of the femur pointing to the fore part of the thigh, indicating that the axis of this part makes a more or less acute angle with the axis of the lower fragment; we extend the limb in the axis of this lower fragment; we exercise no command over the position of the upper one;—how, therefore, can we expect that the horizontal extension, whatever be the degree to which this is made, can be the means whereby the upper fragment is to be forced into the line of axis with the lower? Désault's splint does not effect this.

Owing to the nature of the parts concerned in such fractures of the thigh-bone, the deviation of the upper fragment from the line of axis of the lower is masked to the surgeon, and it is doubtful whether it be possible to bring both ends of the broken bone in strict apposition by any fashion of apparatus hitherto invented; for to different apparatus there are opposite merits attaching. If we see reason to praise the long splint of Désault for its efficiency in maintaining extension, we cannot ascribe to it a fitness in bringing the fractured ends in contact; and, on the other hand, if we recognise the merits of the double-inclined plane in causing the lower fragment to coincide with the axis of the upper, by following this latter to its new position, we know that, in the use of it, all power of maintaining the necessary extension is lost. Though the fragments lie parallel, they are not placed end to end.

At the Dupuytren Museum, in Paris, may be seen an interesting collection of fractured thigh-bones, united in every possible position which any two freely-moving bodies can be supposed to assume. In this collection there is no example of exact coaptation between the ends of both fragments.

In fractures of the upper third of the femur, it actually occurs, that although, to the outward seeming, the thigh corresponds in length and calibre with that of the opposite sound side, yet the two fragments of the bone may, at the same time, be drawn so far apart, as that the broken point of the upper one may be felt subcutaneous at the forepart of the limb, while that of the lower may rest deeply buried in the centre of the muscles; and we have noticed such a condition of the parts to remain, even after the supposed reduction of the fracture, and the application of Baron Boyer's screw splint, which is a modification of that invented by Désault.

Patients suffer grievously from the long-continued use of the perineal band as an ingredient of the apparatus of Désault, and when it shall be considered how inefficient such an apparatus proves to be for the chief object most desired—namely, the exact coaptation of the broken fragments, it will suggest itself how much of this suffering is uselessly borne.

The use of the perineal band was first devised with the intent that it should be passed round some fixed point of the skeleton, in order that its full operation should be obtained. The yielding muscular structures could not be supposed to

sustain the necessary extension made upon the limb; a band passed round the inner and upper part of the thigh adjacent to the groin must of necessity have pressed upon the mass of muscular substance occupying the angle formed between the head of the femur and the pubis, and so the tuberosity of the ischium was chosen as that part of the skeleton which was to bear all the pressure of counter-extension. Upon this tuberosity it is almost impracticable to make the perineal band hold; every surgeon can bear witness to this, and the torture, in consequence, which patients one and all endure, gives daily proof of the same.

The presence of the perineal band is almost invariably sustained by the mass of muscles lying between the pubis and the thigh-bone; the adductor muscles become deeply indented, and that power which they at first manifested, of sustaining the requisite amount of pressure, gradually gives way; and inasmuch as they yield to the form applied for counter-extension, in so much does the bearing of extension yield also, allowing the retraction of the femoral muscles to take place, and the bone itself to shorten, the fractured ends of which slip side by side of each other, just as if no apparatus had been at all applied; and hereupon we shall offer the few following remarks.

It is most difficult in these cases of fracture of the femur, for the surgeon, by any manner of manipulation, to pronounce that the fragments have been refitted with exactness end to end; the mass of muscular substance which invests the single osseous shaft is the cause of this difficulty; hence, owing to the want of direct proof by touch, it is the reason which must be the guide, and reason suggests that it is easier, and far more effectual, to adapt the apparatus to nature, than stubbornly to endeavour to bend her in agreement with the plan of it. Thus as the upper fragment of the fractured bone does not correspond to the axis of the lower fragment; as any degree of horizontal extension made upon the limb cannot cause their parts to coincide; as it is the lower fragment only which follows the horizontal line of extension, made with Désault's splint, whilst the upper fragment forms a more or less acute angle with this lower fragment; as it is impracticable that, by any mode of pressure made upon this upper fragment, we can force it into the same line of axis with the lower fragment and not incur the danger of causing the broken point to pass through the skin; and lastly, as the pressure of a perineal band endured for four or six weeks sorely galls the patient, at the same time that it does not answer the purpose required;—so, therefore, it would seem that the use of the double-inclined plane, as being free from many of the disadvantages of the long splint, at the same time that it better fulfils the object desired in the treatment of these fractures, is to be preferred. By the use of the double-inclined plane we support the lower fragment to correspond with the new position assumed by the upper end of the bone; but in gaining this advantage, we lose all power of making extension upon the member, and although the axes of both fragments correspond, still the fractured extremities may, at the same time, be overlapping each other.

From what has been above stated, it must appear, that any apparatus which shall combine the advantages of those already in use at our hospitals—the advantage of extension and counter-extension made by Désault's splint, and that of position gained by the double-inclined plane, or by McIntyre's machine—will be preferable to either one or the other, being typical of the union of mechanical and anatomical principles; and if, in addition to this union, it shall also display a more practically efficient means for sustaining the pressure of counter-extension than that served by the perineal band, so far the more complete must it be accounted.

We subjoin three plans of apparatus, the third being fashioned upon the principles of the two first.

Plan the first, explanatory of the principle of Désault's apparatus.—After having ascertained the condition of those structures concerned in fracture of the thigh-bone at its upper third—namely, that the upper fragment of the bone, obeying the traction of those muscles which are inserted into the lesser trochanter, assumes a new position, and points towards the fore part of the limb, making its line of axis to form a more or less acute angle with that of the lower fragment, which latter lies horizontal, and coincides with the level of the body stretched supine—we must view Désault's long splint applied, and take account of the principle of its application, which is, the maintenance of extension and counter-extension, upon which we discover the condition of the fractured bone to be as follows:—viz, that the lower fragment of the femur is borne in the horizontal line of axis of the long splint; and however great may be the extension and counter-extension made in this direction, still it does not

agree with the line of axis of the upper fragment, nor does it affect this latter. The distal extremity of the upper fragment may be felt at the fore part of the thigh, whilst the proximal end of the lower fragment is buried deeply in the centre of the soft structures.

Plan the second, expressive of the principle of the double-inclined plane.—When this apparatus is applied, it may be seen to support the lower fragment in the line of axis assumed by the upper end of the femur, but owing to the want of some power whereby the limb may be extended or counter-extended, the broken ends of the bone may be ascertained to have slipped aside of each other; hence there is shortening of the limb. The want of crepitus is proof that the fractured ends of the femur are not in apposition.

Plan the third, an apparatus which combines the principles of both the above.—The long splint of Désault may be passed through apertures cut in the outer side of the oblique boards of the double-inclined plane, upon which latter the fractured limb is to be supported, whilst, at the same time, the necessary degree of extension and counter-extension may be made as usual by means of the former; a stocking or hose may be applied so as to invest the sound limb as far up as the groin, and having connected to it, before and behind, two straps, with which the counter-extension is to be made in place of the perineal band.

In consequence of the continued pressure of the perineal band upon the locality of the groin, excoriation and (in weak constitutions) very severe sloughing are produced; whereas, by making the counter-extension from this canvas envelop of the opposite limb, not only is this extreme annoyance prevented, but a pressure of tenfold force may be made, if required; all the amount of pressure would be thus diffused.

Russell-place, Fitzroy-square.

CONTRIBUTIONS TO THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF VENEREAL DISEASES.

By W. ACTON, Esq., Surgeon to the Islington Dispensary, and formerly Externe to the Venereal Hospitals of Paris.

SYPHILITIC AFFECTIONS OF THE SCALP.

(Continued from p. 12.)

PROGNOSIS—*Necessity of having a clear conception of the natural history of secondary symptoms; observations on their mild character, but tendency to relapse at the present time; opinions of Brodie, Ricord, and Hennen; author's opinions; impossibility of preventing relapses in all cases. TREATMENT*—*Local treatment of alopecia; shaving the head unnecessary; composition of stimulating liniments; local treatment of lepra, psoriasis, condylomata; objection to ointments in eczema impetiginoides; employment of iodine in gummata and tertiary ulcers. GENERAL TREATMENT*—*Observations on the mercurial and non-mercurial schools; Sir B. Brodie, Sir William Wympress, Mr. Rose, Dr. Williams; author's opinions.*

Prognosis of syphilitic affections of the scalp.—In considering the prognosis of syphilitic affections of the scalp, the surgeon should view the complaint as simply a local manifestation of the general contamination of the system, the natural course of which is gradually to wear itself out, provided simple care be taken to avoid those aggravating causes of disease which are known to increase its virulence. Should, however, the health be impaired, or the constitution ruined, or should the climate be unfavourable, this animal poison, under these circumstances, will, instead of a mild complaint, easily amenable to treatment, assume a form, even in the present day, quite as severe as those epidemics described on the introduction of syphilis into Europe; the only difference being, that these attacks are now combated with proper remedies; formerly, surgeons mistrusted them. Syphilis, then, only shared the fate of many other diseases which depend upon animal poisons introduced into the human system, and the indications of their treatment consist in avoidance of the cause, combating the symptoms as they arise, and not interfering with the powers of nature, but following in her wake, and enabling the constitution to throw off the poison and allay the irritation it creates. I would ask if all our successful methods of treating animal poisons do not resolve themselves into this? Is it not by our sanitary regulations we have got rid of typhus, hospital gangrene, plague, and the fearful ravages of small-pox? Is it not to our improved methods of treatment in checking inflammation at the moment it attacks vital organs, and supports the system generally by various means, that we see our endeavours now crowned with success? whereas our predecessors failed in checking these

plagues when they occurred. We must recollect, that our endeavours are not turned to arrest at once the influence of the animal poison; in some of these complaints this specific poison will only act once on the system, but for this immunity we suffer severely; other poisons are characterized by a liability to return, and syphilis is well-known to be followed by repeated relapses. Read the accounts by Fernel and Fracastor, Ricord,* or Brodie;† all agree in this one fact—namely, that relapses repeatedly occurred in days when a man was salivated, and kept spitting one or two pints per diem for three weeks,‡ or in more recent times when no mercury is given, relapses are acknowledged under both treatments. We may lay it down as a fundamental law of this animal poison, that no medicine will absolutely prevent recurrence of secondary symptoms, and we must anticipate the discovery of some other mild animal poison which, like vaccination, when introduced into the system, may prevent or modify other more severe scourges. Look at all modern remedies for syphilis: their advocates bring them forward as curing the disease, but the cases detailed only prove that relapses are less common under some than under others; unfortunately for science, all have not the candour of Brodie§ to acknowledge the inefficacy of our means of curing syphilis: to believe some authors' statements, success with mercury, or iodide of potash, is invariable, certain, and infallible, and these observations applied to no one school. Allopathists, water-doctors, and galvanists, all conceal the fact of the number of relapses following their special treatment. In the absence of correct data, how can we place dependence on statistics; it is not enough to know that secondary symptoms disappear; what we wish to learn is, the probability or improbability of their return. These are points on which much information is still required. Mercury is acknowledged to cure secondary symptoms quicker than any other remedy, and it may likewise be said to prevent relapses more frequently, but it must at the same time be admitted, that relapses will occur, in spite of its administration, however largely given or long continued. In fine, we may always assure our patient that he will be relieved of his secondary symptoms in a few weeks, but that he must be prepared to see them recur, notwithstanding all the means we can employ. Each relapse will be milder than its predecessor. This is not the fault of the medicine, nor implies ignorance of the surgeon, but depends on the natural effects of syphilis in certain constitutions, a subject it would be well for some of the staunch supporters of the indiscriminate use of mercury to study in the writings of the army surgeons, to whom we are indebted for much valuable information on the natural history of syphilis.

Treatment.—No time should be lost in the local treatment of alopecia. A patient finds much relief from warm baths, particularly when any irritation exists on the scalp. I desire the hair to be cut as short as fashion will allow, but I have never found it necessary to shave the head in the early stages

* "The prognosis of secondary disease should be exceedingly reserved and guarded, inasmuch as the practitioner can hardly ever calculate upon a complete and lasting cure. The symptoms disappear, but relapse is a common rule."—*Ricord's Lectures, Provincial Journal*, vol. vii. p. 444.

† "So frequent is relapse in syphilis, that it may be fairly questioned whether the syphilitic diathesis, if once established, can ever afterwards be completely eradicated."—*Loc. cit.*

‡ Brodie acknowledges the frequency of relapses, but attributes them to insufficient doses of mercury, given internally, and broken-down constitution. "You may often patch up the disease by giving mercury internally; but it will return again and again, and you may cure it at last by a good course of mercurial ointment." "You must exhibit it until the sore has healed, and for some time afterwards; and the same plan must be pursued with reference to the secondary symptoms, or they will return."

§ "If after the disease appears to be eradicated the health is broken down, the disease may return at a considerable distance of time."

"A gentleman had secondary symptoms, and I put him through a course of mercurial inunction for ten weeks. He was confined to the house and most carefully attended to, and took mercury for some weeks after the eruption had disappeared. He seemed to be quite well, and went abroad, and continued so; but at the end of a year, being in Lisbon, he went out, got his clothes wet, and took cold. This was followed by a severe attack of erysipelas, and a Portuguese doctor very indiscriminately bled him to a large extent, and an enormous abscess formed. His health became completely broken down, and he had now a return of the venereal disease, the symptoms being worse than they were before. When his health had improved, a surgeon in Lisbon put him under another course of mercury, and cured him."—*Brodie's Clinical Lectures, LANCET*, vol. i., 1843-4, pp. 676, 78.

Hennen relates a case of secondary symptoms, in which he says, "We had a remarkable illustration of the fact, that they occur after a well-regulated course of mercury, illustrating Mr. Hunter's doctrine, 'that if the disposition to the disease is formed, mercury cannot cure it until it comes into action,' which, in plain language, as Mr. Guthrie has well expressed, means nothing more than that the disease cannot be prevented, in certain constitutions, from running its own course, when it may, at last, be cured."

—*Hennen's Military Surgery*, p. 529.

‡ Le bon degré doit être d'une ou deux pintes de salive par vingt-quatre heures. L'évacuation doit être soutenue dans cette force pendant dix-huit ou vingt jours. *Gautier Dagoty, Paris. Fol. 1773, p. 15.*

§ Lecture on Syphilis in *LANCET*, Feb. 17th, 1844, pp. 675 and 678.

of the complaint, and I question much if this is required, even in the more advanced periods, particularly if proper means be employed to check the disease. They consist in the application of stimulating washes or liniments to the scalp. A very simple and elegant one may be made by mixing equal parts of rectified spirit, eau de Cologne, and castor-oil together. I employ castor-oil, on account of its being the only vegetable oil which is soluble in rectified spirit, and the eau de Cologne covers the otherwise nauseous smell of the oil. If a stronger preparation be required, I recommend equal parts of honey-water* and tincture of cantharides to be rubbed into the roots of the hair every night. The first effect of this spirit-wash will be but slight; in the course, however, of a few days, there will be some redness and irritation, and patients complain of a feeling as if something were drawing their heads, and little blisters will be seen scattered here and there. I need not say the application should be left off before such effects are produced, to be continued at intervals as the case may require. Under this local treatment the hair will cease to fall off, and all tendency to pityriasis disappear, the young hair will be seen sprouting freely; the spirit, however, will make the hair dry and untidy, particularly as the brush cannot be freely applied from the tenderness of the scalp. I have attempted to combine the cantharides with animal and vegetable oils, in which it is readily soluble, but, by keeping, the mixture becomes rancid; this prevents its employment at the toilet. To obviate the effects of spirit on drying the hair, some form of pomatum or hair-oil should be freely used; but this subject I shall allude to in a future paper, when I propose publishing some experiments and investigations, in which I have been assisted by Mr. Jacob Bell, in the analysis of the quack remedies and pomatums adapted for the hair.

The local treatment of the earliest forms of syphilitic affections of the head—that is to say, lichen, lepra, psoriasis, and impetigo, consists in the frequent use of the warm bath, taking care to soak the head well: under this treatment the scales become loose and detached, the skin assumes a healthy character, and the cephalic pains cease; the spots may be covered night and morning with dilute citron liniment, made according to the following formula: olive oil, half an ounce; citrine ointment, one drachm. I am acquainted with no application so efficacious in scaly affections of the scalp: if kept in a well-corked bottle this liniment undergoes no change of colour, said to arise from the nitric acid which is given off when exposed to the air in pots.

In a recent lecture of M. Ricord's, the following pomade is recommended:—Purified beef marrow, sixteen parts; sulphur ointment,† sixteen parts; turpeth mineral, two to four parts; essence of lemons, sufficient to scent it.

The employment of ointment in the treatment of mucous tubercles is very objectionable; cleanliness must be strictly observed; the affected parts washed with a diluted solution of chloride of soda, carefully dried and sprinkled over with calomel. Under this treatment the affection rapidly disappears.

In eczema impetiginoides, and in ulceration of the skin, the hair must be cut close immediately round the affection, and water-dressing applied; or the lint may be dipped in an aqueous solution of opium. Ointment is generally objectionable in all eruptions attended with oozing of fluid, particularly in eczema impetiginoides; the grease, mixing with the secretion, soon becomes rancid, forms a crust, the edges of which become excoriated, and what was the effect, becomes a cause of irritation.

In the instances where gummata and nodes occur on the head, the best local treatment consists in painting them over with tincture of iodine: this is also a good application to the edges of unhealthy tertiary ulcers.

General Treatment.—In bygone days, when every symptom, primary or secondary, syphilitic or pseudo-syphilitic, was indiscriminately treated with mercury, the duty of the surgeon must have been very simple; frictions, or corrosive sublimate in larger or smaller doses, and continued for a period varying with the views of the day, were the panaceas for these complaints. If relapses took place, the cause was said to be self-evident—enough mercury had not been given; and the best practitioner was he who poured in the mineral to the greatest extent.

The non-mercurial school followed, who counted by thousands the cures they performed by their "total abstinence" system. Their investigations were principally confined

to soldiers, who are examined frequently, and in whom primary symptoms are detected early, and treated effectually, in hospitals which are well ventilated, and of equal temperature; but in civil life the same success is not found to attend the non-mercurial treatment. Sir B. Brodie, in *THE LANCET*, (Feb. 17th, 1844,) states, "Sir W. Wynepress, who was surgeon-major to the Coldstream Guards, but has now retired from service, saw a great deal of syphilitic practice, and he told me that he could manage the cases of privates without mercury, but not of officers. When Mr. Rose entered into private practice, he thought that he could apply the same rule there which he had carried out among the soldiers, but he found that he could not, and was compelled, like the surgeons, to give mercury. In cases where he endeavoured to avoid its exhibition, he found that he was continually beset with difficulties." When we find these admissions made by such men as Mr. Rose, we may well be excused from dwelling any longer on the non-mercurial treatment, in a paper professing to recommend the improved modern treatment in private practice.

Within the last few years, public attention has been called to the preparations of iodine; it has been vaunted above measure by some, and considered valueless by others, in the treatment of secondary symptoms. To quote two authorities only, my readers will judge the difference of opinion on its use. The late and much-lamented Dr. Williams, in his "Elements of Medicine," vol. ii. p. 165, in comparing this new mode of treatment with that by mercury, comes to the conclusion that "iodide of potassium must be considered as infinitely superior to mercury in the cure of this once formidable disease." Sir B. Brodie, in *THE LANCET*, in *loc. cit.*, says, "It is now very much the custom to administer the latter (iodide of potassium) in cases of syphilis. No doubt it is an excellent remedy in some cases, and it comes in to your aid when you have reasons for not giving mercury; but if you ask me whether you can rely upon iodide of potassium as well as upon mercury, I say no. You may remove slight symptoms, by giving it for a time, and severe symptoms, by exhibiting larger doses, but in the latter case, so far as I have seen, it does not make a permanent cure, for the symptoms return again. As a prophylactic, it is not to be compared with mercury."

Queen Ann-street, Cavendish-square.

(To be continued.)

GONORRHOEAL RHEUMATISM.

By JAMES KINNIER, M.D., London.

SIR,—In answer to the note of a "Constant Subscriber," in your number of the 15th November, permit me to make a few observations on rheumatism, and particularly on that form to which your correspondent refers. Though no disease is of more frequent occurrence, or has been of late more ably discussed by the faculty, than acute rheumatism, we have still, I believe, much to learn respecting its nature and most appropriate treatment. By acute rheumatism we should always understand an idiopathic fever of a definite character, which must run a regular course, though its danger may be diminished and its duration shortened by medical treatment. In the great majority of cases, it is, as we all know, a sthenic disease, generally caused by exposure to cold, and sudden atmospheric vicissitudes, and for such, the antiphlogistic regimen and energetic practice recommended by Hamilton, of Lynn Regis, and others, of giving calomel, and opium, and colchicum, with alkaline carbonates, is the most successful; but not unfrequently in the enervated denizens of crowded cities, the combination of symptoms which we term acute rheumatism is the result of long accumulating morbid agencies in the system—a cachexia, in which active depletion, or what has been called the heroic plan, would be decidedly injurious. As the latter form of rheumatic fever is necessarily of some duration, our indication should be, not to attempt the sudden extinguishment of the disease, but to aid the *vis medicatrix Naturæ* in its removal.

Occasionally, after the cessation of the pyrexia, the rheumatic irritation settles in the superior part of one of the lower extremities, and closely simulates the disease of the hip-joint. Such cases are very embarrassing as to the diagnosis, and attended with acute pain on the least motion; and though in the few instances which I have hitherto witnessed a cure has been effected, they have been very distressing and protracted, usually lasting five or six months. The treatment which has been found most beneficial in these cases has been, to allay irritability and support the vital powers.

In cachectic habits, rheumatic inflammation will sometimes affect the recti and oblique muscles of the abdomen, termi-

* The composite of honey-water varies, but, like eau de Cologne, is a highly perfumed spirit; honey does not enter into its composition.

† The sulphur ointment of the Venereal Hospital is made of, flowers of sulphur, eight ounces, simple cerate, one pound.

nating in frightful suppuration; and in consequence of exosmosis from the bladder and intestines into the abscess, the practitioner is often led to suspect structural disease of the subjacent viscera, which in reality does not exist. The few cases of this kind which I have seen, all occurred in females; in two during the latter months of pregnancy, and in three others a few weeks after parturition; and though they eventually recovered, they suffered long and severely. In the females affected during pregnancy, parturition was favourable, and their offspring healthy; but in one, though she has since had three fine children, the abdominal cavity has never recovered its normal state, being permanently enlarged, and occasionally painful. These cases demand great patience and attention on the part of the medical attendant; and his object should be, to mitigate the pain and irritability which he cannot prevent, and to assist by every means the system in sustaining a protracted and exhausting disease. After the first stage, which is soon over, opium should be exhibited, to allay the pain, taking care to regulate the bowels, which is generally rather difficult; and the vital powers should be supported by nutritious regimen, quinine, cinchona, ammonia, iodide of potassium, and sarsaparilla; wine and stout must be given frequently in considerable quantity; and in these, as in most other chronic maladies, moral adjuvants are invaluable, and hope and confidence should, if possible, never desert our patients.

I have thrice witnessed asthenic rheumatic fever complicated with alarming intestinal hæmorrhage, which, after nearly proving fatal, yielded to frequently repeated half-drachm doses of oil of turpentine, combined with opium.

I much fear that in the treatment of acute rheumatism in cachectic habits, grave errors have been frequently committed by the inexperienced auscultator; active depletion at the commencement of the disease is soon followed by innervation of the heart, and, as a consequence, some morbid bruit, from which is too rashly inferred the existence of pericarditis or endocarditis; further venesections are resorted to, and thus the danger and difficulty of the case greatly aggravated.

I would, indeed, in almost all cases of rheumatic fever, caution the young practitioner against the use of the lancet, for small abstractions of blood afford no benefit, and though we all, perhaps, occasionally err in mistaking the post hoc for the ergo propter hoc, if there be any fact well established in modern medical science, it is, I conceive, the tendency of large and repeated bleedings in this complaint to produce subsequent cardiac disease. In a great majority of heart diseases which have been under my professional care, I have found, on investigating their histories, that my patients had, at some former period of their lives, suffered from acute rheumatism, for which they had been freely bled. The *saignées coup sur coup*, recommended in this complaint by Bouilland, and some other continental practitioners, have, I conceive, hurried myriads prematurely to the grave. Strongly impressed by this idea, though when rheumatism is complicated with pericarditis, phrenitis, or acute articular inflammation, I recommend leeches to be freely applied, I have for the last twenty years almost abandoned the use of the lancet; and that such treatment has not been very infelicitous may be inferred from my having lost, during the above period, but two cases of the disease, and in both there was pre-existent valvular disease of the heart.

In the great majority of cases of gonorrhœal rheumatism the treatment should be similar to that of other cases of rheumatism; the urethral discharge is of secondary importance, and if it do not yield to the internal remedies prescribed, is in general easily removable by a mild injection of nitrate of silver or acetate of zinc. Notwithstanding the high authority of Sir Astley Cooper, I would not recommend the balsam of copaiba, as I conceive I have more than once seen rheumatic cases which were fairly attributable to the use of this medicine. Urticaria, we know, is very frequently thus induced, which, by the bye, occasionally leads to ludicrous mistakes in practice. Some months ago I was consulted for an obstinate case of gonorrhœa by a young gentleman from the country, for whom I prescribed a mixture containing some of the balsam. I expected to see him again in a few days, but he did not repeat his visit till nearly a month had elapsed, and then apologized for his absence by stating that he had been confined to his bed by indisposition, which had supervened on his taking a few doses of the medicine. The family physician—a gentleman of considerable standing in his profession, was summoned to him—mistook a severe case of urticaria for one of rubeola, and lest the infection might extend to the young olive-branches of the family, recommended their immediate *pro tempore* banishment from the paternal mansion.

In gonorrhœal, as in all the other forms of acute rheumatism, the antiphlogistic regimen should be employed, and rest and abstinence strictly enjoined. Tepid demulcents should be given, and the hot-air bath, as recommended by Dr. Wilson of St. George's Hospital, is, when procurable, often useful. In cachectic habits, which would ill bear what has been termed the heroic treatment, the plan of giving large doses of nitrate of potash plentifully diluted, (as was ably stated by Dr. Henry Bennet, in a late number of *THE LANCET*,) merits a trial. The plan of treatment which I have found most efficacious has been, to give at the commencement a full dose of calomel, and afterwards to maintain a free state of the bowels by a mixture of one of the alkaline carbonates, colchicum, tincture of hyoscyamus, mucilage of acacia and jalap; and, if not contra-indicated, a draught of Battley's solution; or a composition of ipecacuanha powder may be exhibited at bedtime. In acute articular rheumatism I have derived great benefit from a combination of the extracts of colchicum, stramonium, and aconite, and the liberal application of leeches to the affected part. And if after their application the joint should still continue to be acutely painful, I would recommend it to be fomented twice or three times a day with a warm infusion of nicotiana leaves; and as the effects of tobacco in neuralgia have been of late discussed in the pages of your periodical, I take this opportunity of stating that, ever since I commenced practice, I have been in the habit of using externally, with advantage, this remedy, not only in neurodynia and articular rheumatism, but also in painful and irritable ulcers of the lower extremities; and I have never known in any instance from its cautious use a metastasis produced.

The great majority of cases of gonorrhœal rheumatism may be successfully treated by the remedies which have been enumerated; and the only ones which have given me much trouble have been, when, after a cessation of the pyrexia, there has been a fixation of the disease in the carpus, malleolus, or some other joint. Such cases I have found very unsatisfactory and embarrassing in their treatment, and a considerable time usually elapses before the proper function of the joint is restored. The first case which came under my care was, several years ago, that of a wholesale druggist, a young man, who, whilst labouring under gonorrhœa, sprained his wrist in alighting from his chaise. The day after he was seized with acute rheumatism, the symptoms of which, though severe, speedily yielded to the usual treatment, and at the end of a fortnight there was nothing remaining of his complaint but inflammation of the injured joint, which continued swelled and painful for nine weeks after, notwithstanding the repeated application of leeches, and the usual appliances of our art. At length I tried the bichloride of mercury and compound decoction of sarsaparilla, and friction of the affected part with tartar emetic ointment; and under this treatment he recovered,—but whether from gradual exhaustion of the disease, or from the remedies employed, is perhaps questionable. In three similar cases, which have since come under my professional care, I have succeeded by adopting the same treatment; and in two others, occurring in subjects of a scrofulous diathesis, where I was apprehensive of the effects of mercury, I prescribed the sarsaparilla and iodide of potassium; and in these instances the recovery, though slower, was equally complete.

Dorset Crescent, City Road, Nov. 24th, 1845.

REVIEWS.

Shaw's Union Officer's Manual of Duties for 1846. Edited by WILLIAM C. GLEN, of the Middle Temple, Barrister-at-law. Shaw and Sons.

THIS is a very useful little work, and one which all medical men, connected with parish or Union practice, will find of great service; for besides containing a complete "Union list" of England, Wales, and Ireland, it embraces the "General Orders of the Poor-law Commissioners," the "Duties of Union Officers," and "Overseers of the Poor," the "General Medical Order of the Poor-law Commissioners," and abstracts of various statutes relating to important subjects, such as the Lunatic Acts. Investigations on these subjects are so frequently occurring, that the information which this book so concisely affords becomes very desirable to the medical practitioner, whose numerous avocations necessarily preclude references to parish books, or to the numerous publications

through which its matter is distributed. Another recommendation which Mr. Glen's useful volume possesses, is the absence of the verbiage and technical complexity which usually accompany the regulations of the Poor-law Commissioners, and render their meaning often more than obscure; and a still greater one, perhaps, are the legal explanations and comments which are plentifully scattered through the volume in the form of notes.

WESTMINSTER MEDICAL SOCIETY.

SATURDAY, JAN. 10, 1845.—MR. FISHER, PRESIDENT.

MR. WETHERFIELD read a paper on the

EXTERNAL AND INTERNAL USE OF TAR IN SENILE AND OTHER CHRONIC ERUPTIVE DISEASES.

He claimed no credit for novelty, and illustrated the subject by cases of patients who had recovered under the treatment. The first case related was that of a gentleman, aged ninety, suffering under prurigo senilis affecting both legs. The common tar ointment was applied every third or fourth day, the parts being afterwards covered with an elastic roller. Under this treatment he recovered in a few days. Two cases of eczema impetiginoides, the first of eight years', the second of one year's duration. In these cases, the internal exhibition of tar in the form of capsules, each containing ten minims, three times a day, was added to the external application, and, in a month, the disease was removed. Two children were shown to the Society, who had suffered, for five and six years respectively, with eczema capitis, extending, in the form of eczema, over all parts of the body and limbs. The treatment consisted of capsules of tar taken three times a day, and tar ointment applied every day to all parts affected. Under this plan, continued for about two months, they perfectly recovered. Two cases of acne punctata, which had resisted all treatment, allopathic and homœopathic for three years, and had disfigured the parties by the spotted and blotched face which this disease induces, yielded to the same treatment in between two and three months. From three to six capsules were taken daily. A little of the tar ointment was applied at bedtime towards the end of the course, and washed off in the morning, and this only to the larger pustules. Mr. Wetherfield concluded his paper by stating, that his object in bringing this old remedy once more before the profession was to induce them to give it a trial, especially in the capsule, feeling persuaded that it would be found a valuable medicine, whenever it was requisite to excite the capillary system, either in the skin or kidneys.

In the discussion which ensued, it was stated by Dr. MERRIMAN, that Alibert was in the habit of employing tar in several forms of eruptive disease with much success, and that Dr. Seymour employed it in the form of pills in pimples of the face. It was shown that tar differed in its effects from creasote in these cases, as in many instances in which tar had succeeded, creasote had been previously applied and failed.

MR. HAWKESLEY, at the recommendation of Mr. Wetherfield, had used the tar capsules in a case of acne, with great benefit.

DR. CHOWNE had employed it without benefit in cases of pruritus.

MR. WETHERFIELD had used the capsules with a good result in cases of obstinate gleet and of chronic bronchitis; he had used the tar externally and internally, in a case of prurigo formicans, but sufficient time had not yet elapsed to determine that it was quite successful. The tar capsules were easily swallowed, even by children, and the remedy did not disagree with the stomach. It appeared to have a slightly aperient, a diuretic, and diaphoretic effect.

MR. HARDING made some general remarks on skin diseases. Tar ointment was extensively used in some of the provinces. Some skin diseases, as lepra, appeared to have a local origin, and were treated with success by local means, as application of nitrate of silver, or the strong acetic acid.

MR. STEVENS of Gower-street exhibited a "pneumo-anatomical injection apparatus," an instrument intended to be used instead of the syringe, being constructed with a reservoir to contain the injection, and a condensing air-pump for condensing the air in the reservoir, and by its pressure, to force the contents through a flexible tube fixed at or near the bottom into the pipes in use. It is needless to add that by this invention it is not required to have a multiplicity of syringes, there being only two sizes required, that for minute injections—the reservoir being made of glass—and that for the injection of the entire subject—the reservoir being of iron.

BRITISH MEDICAL JOURNALS.

ON THE MANAGEMENT OF FRACTURES IN CHILDREN.—
MORTIFICATION FROM TIGHT BANDAGING.

IN a late number of the *Dublin Hospital Gazette*, Dr. O. FERRAL relates the case of a child in whom gangrene and loss of a thumb were the consequences of the application of a bandage required in the adjustment of a fracture of the forearm. A like result, extending even to the loss of an entire limb, has frequently had its origin in a similar cause. Attention to the subject is of practical importance, and the observation of Dr. O. Ferral deserves perusal. Slightly condensed, they are as follow:—

"Many circumstances contribute to protect the organization of children from what is termed spontaneous gangrene of the extremities. The impulse of progressive development—the predominance of the arterial system—and the absence of those organic changes in the system, which, in age, dispose to mortification—all tend to this result.

"Epidemic or endemic diseases, attended with depression of the vital power, will, no doubt, as in scarlatina, cancrum, &c., occasion sloughing of the parts engaged. These parts are not, however, those most remote from the centre of vascular action. The principle of their failure is altogether different, and is generally dependent on specific influence.

"He knows of but one case of gangrene, considered as spontaneous, in the extremities of a child. It is related by M. Huguier, as occurring in La Charité, in the service of M. Gerdy. In this child, seven years and a half old, the fingers and toes, the tip of the nose and ear, &c., mortified, without any manifest cause. The child recovered, but with the loss of the toes, some of the phalanges of the left hand, and the entire right hand to the wrist. M. Cruveilhier conjectured that it depended on capillary arteritis. M. Huguier, however, does not see any evidence in favour of this opinion, and states that the arteries were pervious and pulsating to the very line of separation.

"There is a cause of gangrene of the extreme parts after fracture, to which the late Dr. Houston drew attention. The cause alluded to, is the laceration of a principal trunk, and the injection of the cellular tissue with blood. This possible cause was carefully sought for, in the present case, but there was no evidence of extravasation, and the radial and ulnar arteries, with their branches, could be felt beating vigorously, and indicating a full supply.

"The gangrene, then, in the present instance, had its cause in some circumstance, independent of previous ill health, epidemic influence, or direct local injury of the mortified parts, at the moment of the accident. There is but one cause to which we can ascribe this unfortunate result—namely, the tight bandage, of which the father of the child so bitterly complained. The exact correspondence between the situations of the lesions of the hand, and the points of contact with the splint and bandage, leave no room for doubt on the subject.

"The excoriations on the hand marked the spots in which the integuments of the part less liable to gangrene than the extremities of the fingers, yielded to the pressure. The point of the finger, pressed strongly against the splint, lost a portion of the integument, which sloughed away. The thumb suffered more severely, and was lost altogether. This is easily explained by the mode, so often adopted, of applying a bandage on the hand and forearm. A slit is made in the bandage, and through this slit the thumb is passed, in order to prevent the disturbance of the roller. In the present case, the thumb, as well as the whole hand and arm, swelled after its application, and the thumb was consequently strangulated. There was no injury to the bones or coverings of the thumb at the moment of the accident. It became strangulated by the sharp edges of the slit in the bandage, and all the distal portions of the part blackened and died.

"He felt bound to guard against censuring the hospital or the assistant concerned in the case. A bandage which fits comfortably to-day, may become dangerously tight to-morrow. A bandage which is suited to a limb kept in the horizontal or elevated position, may be injurious if the limb be suffered to depend.

"In the management of the fractures of children, his experience led him to advise:—First. Never to pass the thumb through a slit in the bandage, since the least increase of volume in the limb must occasion strangulation of the part. Secondly. If, for any reason, it may be advisable to adopt the

plan, always to protect the hand and fingers by a chamois leather glove, over which the slit in the bandage may, with more security, be applied. Thirdly. In all fractures of children, to employ the many-tailed bandage, however troublesome in its application. Fourthly. Fill up the intervals between the limb and the splints with cotton-wool, carefully inserted with a probe or director, so as to protect the salient points of the limb from undue pressure or annoyance. The delicate and fragile tissues of infancy will not bear a compression, suited only to parts of more matured constitution. Remembering this fact, you will avoid the reproach of aggravating an injury, by the unskilful employment of your professional resources."

ON ABSTINENCE FROM DRINKS IN THE TREATMENT OF SOME DISEASES.

The following paragraph may suggest a few useful hints. Its suggestion is but an extension of the "dry treatment of catarrh," a plan which is warmly advocated, and faithfully practised by some of our friends:—

"Dr. BOURGE thinks that the quantity of drink administered in disease is not a matter of indifference; that it ought to be regulated by the medical attendant, and should not be left to the taste of the patient, or the caprice of the nurse.

"Thus, in all affections accompanied by a predominance of the serous or aqueous element in the blood, this physician thinks that we ought to diminish very much the usual quantity of drink, or even to suppress it altogether. Such are, for example, cases of dropsy, profuse sweats, chlorosis, suffocative catarrh, abundant diarrhoeas, diabetes, organic diseases of the heart, and, finally, asthma, whenever this malady owes its existence to a pathological condition of the central organ of the circulation.

"Dr. de Bourge cites, in evidence of his opinion, two cases of pregnancy, with considerable serous effusion into the cavity of the amnios, which were reduced to a normal state by a total suppression of drinks.

"The thirst of the patients may be relieved by lemon lozenges, bits of ice, &c. Care should, however, be taken to diminish the drinks gradually."—*Idem*.

In the *Edinburgh Monthly Journal*, Dr. JAMES WATSON relates a case of idiopathic tetanus, in which the patient recovered. Amidst the variety of treatment it is difficult to assign this result to any agent in particular. Opium and stimulants seem to have taken the chief place. The details of the case are appropriately followed by those of an unfortunate

CASE OF POISONING BY STRYCHNIA.

"A. F.—, aged thirteen, about half-past five P.M., swallowed in jest three pills, which belonged to a paralytic patient in the same ward. Each pill contained a quarter of a grain of strychnia. She has been occasionally in the habit of taking medicines belonging to other patients. Twenty minutes after taking the pills, she said she felt a strange sensation in her head, and became almost immediately convulsed. The arms were found extended and rigid, as also were all the muscles of her body, which was bent backwards at a considerable curve; pupils were natural; pulse was obscured from the rigidity of the muscles, but impulse of the heart was strong; face much flushed and lips livid; breathing rapid and difficult, but larynx free; spasms of diaphragm very marked. Every few minutes she had a fit of general convulsions. The mind was unaffected, and great fear and anxiety for relief were expressed.

"The cause of her illness being at first unknown, six ounces of blood were abstracted from the temporal artery. Cold lotions were applied to the head, and sinapisms to the extremities. Ten minutes after the symptoms began, the owner of the pills told the cause, when a scruple of sulphate of zinc was immediately given, and large draughts of warm water, which were eagerly swallowed by the patient. Vomiting, however, was not induced for about a quarter of an hour, and then sparingly. All this time the opisthotonos and universal muscular twitchings had continued violent; but now, during one of the ineffectual attempts to vomit, the rigidity of the muscles suddenly relaxed, and the spasmodic contractions ceased. The heart's impulse, previously strong, could not be felt, and respiration was for the time extinct. Her face, which, from the commencement of the attack, had continued deeply flushed, became gradually pale, from above downwards, her lips remaining livid. She was laid down, and seemed to recover slightly; her chest heaved slowly, and her heart beat feebly, and at long intervals. The flush also somewhat returned to the face, but with the exception of a few

twitches, she had no recurrence of the spasms. The pupils were dilated, the eyes fixed, and turned upwards. The stomach-pump was suggested, and immediately applied, but without any good effect. In a short time the respiration again ceased, and the heart could no longer be felt. The flush, which had been but slight, again descended and disappeared on the neck. Artificial respiration and galvanism to the phrenic nerve were now tried in vain. The patient was dead. Death took place at three-quarters past six P.M., little more than an hour after the poison had been swallowed, and about three-quarters of an hour after it had produced its physiological effect.

"Autopsy forty-four hours after death.—Face placid, abdomen tympanitic, much lividity of depending parts. Post-mortem rigidity of body in general moderate, but fingers and thumbs very livid, half-flexed, firm, and somewhat elastic. Integuments of scalp bled freely on being cut. Brain and its membranes quite natural, excepting turgescence of velum interpositum and choroid plexus. Spinal cord healthy; its investing membranes rather vascular. Lungs much congested with venous blood. Muscles of heart quite stiff. The right ventricle was flattened into a sharp edge, and was quite empty; the left ventricle was also collapsed and empty. The auricles were in a similar condition. The stomach contained a half-digested meal; its mucous lining was pale and natural. Other viscera normal."

REMARKABLE PROPERTY OF CROTON OIL. [1]

Dr. BAUDET says, in a late number of the *Dublin Hospital Gazette*—

"I have frequently had occasion to observe a phenomenon, which accompanies the employment of the oil of the croton tiglium when used by friction. Very frequently this medicine, when applied to the skin of the neck, or of an extremity, produces an eruption of confluent vesicles, not only on the part which has been rubbed, but also on the skin of the scrotum, penis, and perinæum. I have satisfied myself that in these circumstances the patients have not carried their fingers impregnated with the oil to the genital organs, and thus the transport of the specific irritation due to the external use of the croton oil can only be attributed to the absorbing vessels of the skin."

The editor of the same journal has seen similar effects follow the use of tartar emetic ointment. The wonder is more apparent than real. Dr. Baudet does not state how he guarded against contact of the fingers with the surface which afterwards became the seat of the eruption. In the wards of a hospital, it is not unusual to see the faces of one or more patients covered with an eruption originating in some kind of contact with another patient to whom the oil had been applied. Here the effect could not be "attributed to the absorbing vessels of the skin."

The same journal supplies, by a quotation,—

M. DEVERGIE'S OINTMENT FOR CHILBLAINS.

"Lard, seven drachms and a half; creasote, ten drops; solution subacetate of lead, ten drops; watery extract of opium, a grain. Mix for an ointment."

FOREIGN BODY IN THE TONGUE FOR THIRTY-TWO YEARS.

"A German soldier was wounded in the battle of Gross-Görschen (2nd May, 1813) by a musket-ball, which penetrated the left cheek, carrying away the four last molars of the upper jaw, and, passing through the tongue, made its exit through the left cheek, carrying away several teeth of the left side of the under jaw. The wounds healed in six weeks, and, except the loss of the teeth, no other deformity remained but the cicatrix of the tongue, which did not impede his speaking or chewing. During the spring of the year, at which time the patient was subject to pulmonary and cerebral congestion, severe pains, with slight swelling of the tongue, came on, to which was added, in the year 1829, a small swelling of its right side, which suppurated and discharged thin matter, after which it gradually healed. On the 2nd of May, 1845, a similar swelling made its appearance in the same place, which opened without discharging any matter, and, after some days, what appeared to be a small piece of bone presented itself in the opening, which on being removed, proved to be the second molar tooth, which had penetrated the tongue from the musket-shot thirty-two years previously, and had during the whole time caused no great inconvenience. The roots of the tooth were broken off by the neck, and the whole surface covered by calcareous deposit."—*Northern Journal*, from *Oester. Medizin. Wochenschrift*.

THE LANCET.

LONDON: SATURDAY, JANUARY 17, 1846.

IN the FOREIGN DEPARTMENT of our journal of this week, our readers will find an address to the King of the French, delivered on new year's day by M. ROCHE, the President of the Royal Academy of Medicine, accompanied by a deputation from that body. We have inserted it, along with the cordial answer of the venerable LOUIS PHILIPPE, as another proof to add to the many we have lately given in illustration of the consideration which the medical profession in France obtain from the highest authorities of the kingdom. How different a state of things do we discover in our own country?

If we are to look for an explanation of these opposite conditions, we shall find it in the powerful organization of the French medical community, in the complete separation of the profession of medicine from the retail trade in drugs, and in the high literary and scientific attainments of the great mass of the members who compose it. Not only, as M. de SALVANDY stated in his late eloquent address to the Parisian Congress—not only do the members of the medical profession in France (setting aside the *officiers de santé*) possess the university literary degree which is demanded from all candidates for admission into the liberal professions; but they have also to give an additional guarantee of mental cultivation, by taking out a diploma in physical sciences at the Faculty of Sciences, a grade which is not demanded in connexion with the former in any other career. The result of this regulation is, that, apart from acquisitions in the science of medicine, the doctors in medicine and surgery of the three French Faculties, the actual GENERAL PRACTITIONERS of France, are, as a body, the best educated, the most enlightened men in that country.

The very existence of the Royal Academy of Medicine is a proof of the high estimation in which medicine is held amongst our neighbours by the public authorities. In 1820, the government feeling the want of an incorporated body of eminent persons in medicine and the collateral sciences, to which questions connected with public hygiene could be referred, the Royal Academy of Medicine was instituted. At first it was composed of about one hundred and fifty members, named for life, but the number has been since definitively fixed at one hundred. As it is still considerably above that amount, a nomination now only takes place when there are three vacancies. The members are divided into the following eleven sections:—1. Anatomy and physiology; 2. Medical pathology; 3. Surgical pathology; 4. Medical natural history, and therapeutics; 5. Operative surgery; 6. Pathological anatomy; 7. Midwifery; 8. Public hygiene and legal medicine; 9. Veterinary medicine; 10. Medical chemistry and natural philosophy; 11. Pharmacy.

The nominations to fill vacancies are made by the Academy itself. The section in which the vacancy occurs first meets and prepares a list of candidates, from which the Academy definitively chooses by ballot. The nomination of new members is submitted to the king for his sanction, which is always given. There are foreign associates who are named directly by the Academy. They have not the power of voting in elections.

The Academy, thus constituted, assembles every Tuesday afternoon. Every member who is present at three o'clock receives a small pecuniary gratuity. The duties of the Academy are, to deliberate on, and to answer, the questions of government on any subject that interests the public health, and especially respecting epidemics, epizootics, cases of legal medicine, vaccination, the examination of mineral springs, &c., and to discuss and report on any question connected with medicine and the accessory sciences which may be brought before it.

The first nomination of titular members in 1820 was judiciously made, and comprised most of the eminent men in France. Since then, although the mode of election is clearly objectionable, the Academy itself nominating to supply vacancies, the result has not been so unfavourable as might have been anticipated. The greater part of the illustrious men in the various branches of human knowledge represented by the Academy, appear successively to obtain the vacant seats. The Parisian Academy may thus be said to constitute an areopagus of talent, which must and does obtain the respect of all classes of society. The honour of belonging to it is, consequently, warmly disputed, and highly prized when obtained.

Contrast this state of things in France with the project for connecting the great body of the medical profession in this country with a *new apothecaries hall*—a *twentieth* medical corporation!

We shall return to this subject.

HOSPITAL REPORTS.

UNIVERSITY COLLEGE HOSPITAL.

CASE OF LARYNGITIS.—PHARYNGEAL ABSCESS EXTENDING THROUGH THE POSTERIOR MEDIASTINUM FROM THE PHARYNX TO THE DIAPHRAGM.—DOUBLE PLEURISY WITH EFFUSION.—POST-MORTEM EXAMINATION.

CLINICAL REMARKS BY DR. TAYLOR.

(Reported by Mr. H. Bencecroft, M.R.C.S.E., Senior Physicians' Assistant.)

WILLIAM K—, aged forty, admitted Monday, Dec. 15th, 1845; of average stature and conformation, melancholic temperament, and dark complexion. Has been an out-door labourer all his life; is single; says that he always lived regularly; has been accustomed to drink a pint or two of beer daily; on some days none at all; and on Saturday nights he used to drink three or four quarts, but never got tipsy; a native of Ireland; has been in London for ten years; for some time lately his work has been that of cleaning gutters, and he has been frequently very wet; no hereditary predisposition can be discovered; he has generally had good health; was never laid up in his life; but has been subject to occasional coughs and colds on getting wet, and has for some time had a slight cough in the morning; for the last three weeks or month this has been worse, and for that time he has also had some difficulty of breathing, and has expectorated slightly; he was, however, able to eat and drink well, and to do his work as before. On Monday week he was at work cleaning gutters, and got his feet very wet, and on the following day he went to work as usual, (without anything round his neck.) He worked hard, and about four or five o'clock in the evening began to shiver violently. He then took two or three pints of warm ale, and went to bed. The next day the shivering still continued: he then took some more beer, and from this time up to his admission he continued to drink several pots of beer daily, with a considerable quantity of rum also. The shivering continued all the time, and the cough and dyspnoea became worse; the expectoration also increased in quantity, and he had difficulty in swallowing. On Sunday evening he applied to a medical man, who gave him some opening medicine. This did not operate; and as he continued to get worse, he was admitted into the hospital on Monday evening. On admission he was still shivering, and the skin was hotter than usual. He has been unable to sleep for the last four nights; this he attributes to the oppression on his chest. There is a

wild and anxious expression of the countenance; lips livid; breathing short, catching, and croupy; he can scarcely speak at all, and when he does so, his voice is very harsh and rough; there is considerable swelling and tenderness of the larynx; the epiglottis is not swollen; he has a troublesome cough, and expectorates a small quantity of muco-purulent matter, consisting partly of a serous fluid, and partly of opaque portions; the whole of a dirty-grey colour, without any tenacity, and evidently containing pus; pulse 120, full; tongue furred; he is unable to swallow anything, the attempt to do so giving him much pain; he has no appetite; is very thirsty; feels sick, but does not vomit; complains of some pain and tenderness at the epigastrium, and of a sense of oppression at the chest; bowels open every day; he passes plenty of urine; this is acid, of specific gravity 1033, and contains about one-fifth of its bulk of albumen; he attributes the attack to getting wet. Was seen by Dr. Quain, the house physician, who ordered twelve leeches to be applied over the larynx, and five grains of calomel, with ten of the compound extract of colocyth, to be taken immediately.

16th.—No pain or tenderness about the larynx, nor any swelling of it; noticed some difficulty in swallowing; he cannot swallow solids, there seems "as if there were not room for them to pass;" has some pain at the root of the neck on swallowing; considerable tremor of the limbs; respiration over the larynx is somewhat harsh and sibilant; under the left clavicle it is loud, almost puerile, less loud under the right; behind it is dull on percussion on both sides—dullest on the right; there is not much difference between the upper part of the two sides; respiration is feeble on both sides, most so on the right; pulse 120—rather small.

17th.—No expectoration; his cough is better; there is no pain or tenderness over the larynx; he was delirious all night and is so now; countenance anxious; pulse 144, scarcely perceptible; heat of skin less than it was; no morbid sound about the heart, but its sounds are, if anything, rather feeble, and its impulse rather strong; the dullness in the cardiac region extends to between the third and fourth ribs; it is increased in transverse extent, reaching from the left nipple to the left border of the sternum; the right side of the chest is duller in front and laterally than the left side in the same situation; respiration more abdominal than costal; there is a little muco-crepitant rhonchus in the lower part of the right side in front; on the left side, in front, respiration is rather puerile; the liver reaches to about opposite the end of the sternum, and not much below the ribs; behind there is a little muco-crepitant rhonchus on both sides; both sides are dull, the right duller than the left; there is no marked difference between the intercostal spaces of the two sides; if anything, of the two, those on the right side are most visible; the left side measures half an inch more than the right; abdomen tympanitic but not enlarged; pupils slightly dilated, and contract on the approach of a candle, but rather sluggishly; tongue very dry; a blister was ordered to be applied to the right side of the chest; and he was ordered to take, in the course of the twenty-four hours, eight ounces of wine and a pint of porter; about five o'clock p.m., whilst eating some bread-and-butter, his breathing became very difficult, his lips and face livid, and the pulse scarcely perceptible; he brought up into his mouth some crumbs of bread; a probang was used, and an obstruction about half way down the oesophagus removed, after which his breathing became more free; the pulse again became perceptible, and he was altogether much relieved; he still, however, continued in a delirious state, trembling violently, and continued to sink until eleven p.m., when he died.

Post-mortem examination of the body, fourteen hours after death.—No oedema of the body; some discoloration of the integuments of the abdomen and over the tibia. *Brain:* weight three pounds and a half, about four drachms of serum at its base, also a small quantity in each lateral ventricle; the vessels on its surface tinged; its substance soft; red points rather numerous; the mucous membrane at the back of the larynx and pharynx redder than natural; there is no ulceration either in the larynx or trachea, but the mucous membrane lining these is much redder than natural; the right pleura contains thirty-two ounces of turbid serum; its surface is covered with a layer of soft, dirty-looking lymph, chiefly over the lower lobe; the pleura is more vascular than natural, opaque, and of a dark-red colour. *Right lung* diminished in volume, weight one pound ten ounces, fleshy, contains little or no blood, is brittle, and floats in water. *The left pleura* contains ten ounces of turbid serum; its surface is not so red, nor is there so much lymph on it as on that of the right. *Left lung:* weight one pound six ounces, diminished in volume, especially in its lower two-thirds, and over this part the pleura is thickened and opaque; there

are some spots of ecchymosis on the pleura costalis, but no opacity of it. *The pericardium* contains very little fluid, several white patches on the heart; one between the right auricle and ventricle; weight of the heart ten ounces three drachms; it is tolerably healthy; there is an abscess at the back part and in the muscular structure of the pharynx; this extends downwards, through the posterior mediastinum, as far as the diaphragm, but not beyond it; it contains some well-formed pus, and in some places there is purulent infiltration of the adjacent tissue. *Liver:* large, weight four pounds five ounces; does not reach below the margin of the ribs; surface pale and substance firm in some parts; peritoneal coat healthy; gall bladder large and full of very thin bile. *Right kidney:* weight six ounces and a half; capsule not morbidly adherent; surface smooth; no new deposit can be detected by the naked eye. *Left kidney:* weight six ounces and a quarter; outer surface very vascular, and it contains a considerable quantity of blood.

Clinical remarks.—In this case we shall find ample matter for our consideration. Appearances were observed after death which were not suspected during life; and it is an example of a disease of very rare occurrence—viz., pharyngeal abscess. In noticing the diagnosis formed during life, we may first briefly allude to the history and symptoms of the case. We find that the patient was much exposed to the influence of wet and cold, and that he got very wet, and remained so for some hours on the day preceding the attack. The disease set in with rigors, cough, dyspnoea, and expectoration; these all gradually became worse, and from the first appearance of the symptoms to the time of his admission, (six days,) he continued incessantly drinking a large quantity of beer and spirits. On admission, he complained of oppression at the chest; the respiration was short and rapid; the countenance anxious, and it had a muddy and sallow aspect; lips and cheeks livid; the voice was nearly lost, and there was some pain, swelling, and tenderness of the larynx; the epiglottis, however, was neither swollen nor red; he had a troublesome cough, and expectorated some dirty serous matter, with opaque portions floating in it, and evidently containing pus. These, then, were all the symptoms of acute laryngitis, and from the history of the case, it would appear to be idiopathic. But as we know that this is a very rare disease, Dr. Taylor was induced to seek carefully for some cause for it. Moreover, a suspicion of the existence of some other disease was excited by the general symptoms present—viz., the anxiety of countenance, also its unhealthy, muddy, sallow aspect; the tremors of the limbs, and the character of the expectoration. In consequence, then, of this suspicion, the chest was very carefully examined, and the result of this was, that the following opinion was arrived at:—1st. That there might be tubercles present, which was inferred from the dullness existing in the upper part of both lungs; the habitual slight cough in the morning; the nature of the patient's occupation, and the frequent occurrence of laryngitis as a secondary affection in the course of phthisis. 2nd. That there was some other disease causing dullness and feeble respiration on both sides of the chest, but especially on the right. If this were not of old date, (which fact it was not possible to ascertain,) it might be due to pneumonia. Indeed, the only means by which to account for all the symptoms was, by supposing that there were tubercles in the lesions of both lungs, and that other parts of them were affected with pneumonia. Dr. Taylor left the patient, however, with the impression that there was still something undiscovered in the case. The physical signs, as well as some of the symptoms, will be more advantageously considered when we come to notice the post-mortem appearances. On admission, the patient was seen by Dr. Quain, who ordered twelve leeches to be applied to the larynx, and gave him some opening medicine. On the following day the local symptoms were relieved, but his general state was worse, and on the evening of that day he became delirious. On the 17th, the delirium continued, and he was in all respects worse than before. It was very evident that there was some mystery about the case, and Dr. Taylor could think of nothing that would explain the general symptoms, except the occurrence of pneumonia in an unhealthy subject. Some wine and porter were given to him, but he gradually sunk, and died at eleven p.m. The examination of the body took place fourteen hours after death, and the first appearance demanding our notice is, supuration, or rather, infiltration of pus in the cellular tissue behind the pharynx, and extending from thence, through the posterior mediastinum, as low as to the diaphragm, but not beyond it. The purulent matter seemed to be diffused equally throughout the whole of this extent, and no swelling was produced by it anywhere. The pus was apparently healthy, and when examined under

the microscope, well-formed pus globules were seen in it. On reviewing this appearance, a question arises,—Had the inflammation occupied the cellular tissue as far as pus was found, or had it been seated behind the pharynx only, and the pus gravitated from that point, as we know serum to do? Dr. Taylor is of opinion that the former is the case, his opinion being principally influenced by the following considerations:—The appearance and quantity of the pus was the same in all parts, there being no accumulation of it above, which we might very naturally expect had the parts below been supplied by gravitation from above. The inflammation appeared to differ from the appearances observed in ordinary phlegmonous inflammation, there being no circumscribed boundary or wall to the suppuration, and in no part of the tumour being larger than another. It had indeed all the ordinary appearances observed in the suppuration attending phlegmonous erysipelas of a limb, the pus being diffused equally throughout the cellular tissue. The redness in the pharynx very much resembled that observed in erysipelatos inflammation of the throat. The general symptoms present—viz., the quick weak pulse, tremors, delirium, and black tongue, also seemed to favour the opinion that the disease was erysipelatos inflammation of the cellular tissue behind the pharynx. Cases of this kind are, generally speaking, rare. Some, however, have been recorded in an essay on the subject by M. Mondiere, in the "Encyclographie des Sciences Medicales;" also some others by Dr. Fleming, in the *Dublin Journal of Medical Science*. The former gentleman mentions one case which occurred in connexion with what he terms the retrocession of erysipelas; and another, occurring in the course of typhoid fever, is recorded by Louis. As this is a subject which is very little, if, indeed, at all, noticed in ordinary text-books, it may perhaps prove useful if we merely glance at the symptoms observed in these cases. The disease generally commences with rigors and pain in the throat. These are soon followed by difficulty of breathing and of swallowing. The respiration has a croupy character, and in children the disease has been actually mistaken for croup. The difficulty of breathing is sometimes so great as to cause the patient's death by asphyxia. There is a low kind of typhoid fever present. Œdema of the neck and the larynx is sometimes pushed forwards, projecting considerably. In this case, the chief, if not the only local symptom present, when the patient was seen by Dr. Taylor, was the dysphagia, and slight fulness of the neck. The patient could only swallow liquids; when he attempted to swallow solids, it seemed as if there was not room for them, and the cough was excited by every attempt of this kind. There had been some swelling and tenderness of the parts on the preceding evening, but this had disappeared. The urgent symptoms were the laryngeal ones, and these were most probably occasioned by the extension of the inflammation, in a moderate degree, to the mucous membrane of the larynx. The disease probably commenced in the rigors, which occurred on Tuesday, the 9th of December—i. e., eight days before death. There was no disease in the substance of the lungs, but both pleura were considerably inflamed, and contained a large quantity of turbid serum, the right most. Both lungs were remarkably free from air, did not crepitate, and had the precise appearance that we know arises from compression of the lung by serous effusion. The right was more compressed than the left; there was no evidence of the existence of pneumonia, neither were there any tubercles in either lung. Both pleurae were redder than natural, but this redness was not like that attending healthy inflammation, being of a dark and dusky red colour. Both pleurae were covered with some recent dirty grey-coloured lymph, but there was none of this on the pleura costalis. This inflammation of the pleurae may be supposed to have arisen in one of two ways; either by extending from the seat of inflammation and suppuration in the cellular tissue of the posterior mediastinum, or it may have arisen from the same state of the system, and have been of precisely the same nature as the inflammation in the mediastinum itself.

It seems most probable that the latter was the case, for the suppuration was found to extend more towards the left pleura, than towards the right, and the inflammation and effusion were less on that side than on the opposite one. The pleura, covering the lower lobe of the left lung, was thickened and opaque. This affords us evidence, that a severe attack of pleurisy had existed previously, and had been cured without adhesions following it. This case has a bearing on a remark made by Louis—viz., that he has never seen a case of double pleurisy that was not connected with tubercles, gangrene, or some other organic disease of the lung. It therefore proves that this rule is not without exception, double pleurisy being present, and the substance of the lungs not in any way

diseased. It was not possible to ascertain the precise time at which the pleurisy began. After the occurrence of the rigors, there was some dyspnoea, and this continued in a slight degree up to the time of the patient's admission. The chest had been very carefully examined. There was universal dullness of the right side behind. The left side was also duller than natural—less dull than the right below; but above, the difference was less marked; respiration was feeble on both sides behind; most feeble, however, on the right. All these signs and symptoms might have been due to tubercles in the apices and pneumonic condensation in the other parts of the lungs. Muco-crepitant rhonchus was heard on both sides behind; so we see through how large a quantity of fluid these rhonchi may be heard. It was thought possible that there might be pleurisy, and in consequence of this, the two sides of the chest were measured. The right was half an inch smaller than the left side, and this would make it one inch smaller than natural. Dr. Taylor has, however, seen several pints of fluid in the chest; the side containing it being smaller than natural. The only source of fallacy that we can see is, the possibility of a mistake having been made in the figure on the measuring tape, especially as it was only measured once, and as its results were so much at variance with the post-mortem appearances. There was no marked difference between the intercostal space of the two sides; if anything, those on the right side were more visible than those on the left. There was no orthopnoea, and change of posture did not at all influence the patient's breathing. There was no pain on either side of the chest. This will perhaps account for the absence of any difference in the motions of the two sides of the chest. The absence of pain might have been due to the disturbed state of the patient's intellect. It might, however, be independent of this, as we often meet with cases of pleurisy where there is no pain, without the intellect being at all affected. No bronchial respiration was heard near the spine; so we see that this sign may be absent in pleurisy as well as in pneumonia. The absence of it in the latter disease we have had occasion to notice before. The liver was not displaced. This fact was ascertained by careful percussion during life, and confirmed after death. The heart was displaced forwards, simulating hypertrophy, which, judging from the increased force and extent of the heart's impulse, Dr. Taylor thought was probably present. The dullness was not greater in the lower than in the upper part of the left side: this is remarkable. The dullness above must have been due to the forcible compression of the lung itself by the serum, and perhaps partly to transmission of some of the dullness from the apex of the right lung to that of the left. There was no friction sound present. On the right side the effusion was too great to admit of any being present there, and on the left pleura there was no recent lymph to produce it. Neither the vocal vibrations nor the vocal resonance were examined. Most probably the vocal vibrations would have been found to be entirely abolished on both sides. This, however, would have been of no assistance to us, as we also find it present in disease of the substance of the lung. The extension of the dullness beyond the middle line of the sternum was not examined. In consequence of the presence of fluid in each side of the chest, it does not seem probable that the mediastinum would have been found to be displaced. Neither was the influence of change of posture over the dullness examined. Had this been done carefully, the pleurisy on the left side might have been discovered. The quantity of fluid in the right pleura would have prevented this sign being of any assistance to us on that side. A careful study of these appearances, compared with the symptoms and signs observed during life, tends to show that there were great difficulties in the way of distinguishing whether pleurisy [with effusion existed or tubercles in the upper lobe of both lungs, combined with pneumonia in the greater part of the right lung and in the lower lobe of the left. With all the light we now possess, from the history of the case and the post-mortem appearances, it would not be possible, with certainty, to avoid error, were the case to happen again. The distinctive signs of authors cannot be relied on in such cases. On the heart were several white patches; the size and variable position of these will go a long way to decide a still disputed question,—viz., whether these patches are the result of inflammation or of friction, as is maintained by some. In this case some of them were placed between the right auricle and ventricle, which situation renders it utterly impossible that they could have been the consequence of friction. The liver was enlarged, its colour pale, and its texture firm in some parts, and when examined under the microscope by Dr. Quain, it was found that the quantity of cellular tissue in it was much

diminished. The bile was thin, and contained but little colouring matter. This failure in the function of the liver was most probably caused by the irregular habits of the patient. The kidneys were enlarged. No foreign deposit could be detected in them by the naked eye. The symptoms referable to these organs were consistent with the presence of Bright's disease, but did not prove its existence, albumen being constant in the urine, and its specific gravity high. The brain was merely congested, not so much so as we have lately seen it in fatal cases where there was no head symptom. The symptoms, then, directing attention to this organ—viz., the tremors, delirium, and somewhat large size and sluggish action of the pupil, must be supposed either to be sympathetic of the inflammation going on, or to have been caused by the circulation of morbid matter in the blood. The stomach was healthy. The tongue had been very dry and red. This, we know, is not indicative of the state of the stomach, but of the condition of the system at large, and in this case might have been partly caused by the state of the throat. With regard to the causes of the attack, the exciting cause doubtless was, the exposure to wet and cold, greatly aided by the large quantities of intoxicating liquors taken by the patient during the progress of the illness. These causes, however, would not account for the unhealthy state of the constitution, and of the inflammation that was observed. These will be easily accounted for by the predisposing causes, which appear to have been as follow:—1st, The irregular habits of the patient; 2ndly, Exposure to wet and cold, and perhaps, also, (from the nature of the patient's occupation,) to unhealthy exhalations. These causes we may consider to act by impairing the function of the liver and kidneys, thus leading to accumulation in the blood of morbid matter which ought not to be there. The general symptoms present—viz., anxiety of countenance, sallow complexion, tremors, delirium, dry tongue, rapid weak pulse, and early tendency to putrefaction, greatly resemble those observed in cases of phlebitis and other diseases in which some marked depressing poison is circulating in the system.

ON THE TREATMENT OF CHRONIC DISEASES OF THE SKIN.

By THOMAS HUNT, Esq., of Herne Bay, M.R.C.S.

(Continued from page 33.)

III.—THOSE chronic diseases of the skin which betray neither a febrile condition of the system nor a syphilitic taint, may, for purposes of treatment, be considered under two heads—viz., the contagious and the non-contagious. The chronic contagious diseases are few in number: the itch and the various forms of ringworm (of which it is not the intention of the writer to speak at present) are the chief of them.

The non-contagious disorders of this division, exhibit various forms of eruption. These forms have been artificially arranged by our countryman, Willan, for the purpose of distinguishing them from each other, and his happily-devised nomenclature has long enjoyed the suffrages of the profession. Very recently, an accomplished contributor to this branch of medical science* has suggested and carried out, with a degree of success which does him infinite credit, the philosophical idea of a natural system of arrangement founded upon the minute anatomy of the skin. As yet, however, but a feeble light has been thrown upon the constitutional origin of these diseases, a right appreciation of which must lie at the foundation of all rational and satisfactory practice in treating them. Indeed, if one were called upon to account for the slow progress of dermatology, when compared with the railroad advance of general pathology, one would feel disposed to attribute it chiefly to our having paid too little regard to the distinction first pointed out by Hippocrates, and never absolutely rejected by medical writers. The father of physic did not fail to observe that some of these diseases have a purely local origin, and that others spring from a morbid state of the constitution; and that while local applications were, for the most part, competent to the cure of the former, the successful treatment of the latter must involve a knowledge of something wrong within.

To this latter division the diseases now under review all belong. The eruption is not the disease, but only one of many modes by which its existence may be made manifest. It is highly probable that there exists, in the majority of these cases, (various and complicated though they be,) a constitutional derangement, like in kind, and common to them all; the particular form of eruption being determined in each case, re-

spectively, by the accidental circumstances of age, climate, or idiosyncrasy. So that we may have in one instance psoriasis; in another, lepra; in a third, eczema; in a fourth, prurigo; in a fifth, acne or sycosis; in a sixth, lupus,—all depending upon one and the same cachectic condition of the general system, and all susceptible of cure, therefore, by a similar plan of treatment. Now, although it be the height of empiricism to propose any one remedy for a large class of diseases, unlike each other in reality as well as appearance, yet it would scarcely be philosophical to reject the testimony which the actual (and generally uniform) success of one remedy in a given number of diseases would afford towards establishing the identity of their origin and character. In what this identity consists it is not the author's business, as it is beyond his comprehension, to understand or explain. His is the more humble task of calling the attention of his brethren to the power of a well-known remedy to arrest and ultimately eradicate these diseases. That remedy is arsenic, which, should it prove upon trial as successful in other hands as it has been in his own, will be henceforth regarded as a specific for these cutaneous affections, in a sense as extensive, at least, as quinine for ague, and mercury for syphilis. Arsenic, however, like mercury, requires nice management, else it will not only fail, but may do mischief. To explain and illustrate the mode of administering this very useful mineral with satisfaction and success, is the chief object of the present communication.*

Arsenic is not only a virulent poison in a large dose, but it is known to exhaust the springs of life with equal certainty, when small but deleterious doses are incautiously repeated for an undue length of time. An acquaintance with this astounding fact has probably deterred many discreet practitioners from persevering in the exhibition even of safe doses. Those, however, who have become experimentally acquainted with the medicinal qualities of arsenic by long continued use, are generally the most forward to advocate its safety within proper limits. Dr. Duffin, of Edinburgh, who certainly did not administer it with excessive caution, asserted, in the year 1826, that he had then prescribed it in very nearly four hundred cases, and had never seen it do any mischief. And it is a remarkable fact, that the curative powers of this medicine appear to reside only in doses too small to be mischievous.

The many failures in the exhibition of arsenic in chronic skin disease may be traced to one or other of the following sources:—Some practitioners administer it during the febrile stage, in which it is apt to aggravate the disorder. Others direct it to be taken on an empty stomach, and are soon obliged to abandon its use. Some prescribe it in doses too large, and at intervals too distant. And all writers direct it to be given, at first, in small doses, gradually increased till it produces pain in the stomach, and then discontinued for a time, or rejected altogether, as unsuitable to the case. The general result is, that, not having a fair chance, it fails so frequently that few prescribe it with confidence or perseverance. If mercury were always exhibited in a like timid and unsystematic manner, the reputation of that invaluable medicine would be doomed.

Arsenic has not yet had a fair trial. It has certain properties, as a medicine, which are not generally appreciated. The most important of these is its cumulative influence in the system. This is a well-known property of certain other poisons. Every judicious practitioner, in prescribing digitalis and colchicum, (which may be selected as instances,) commences with a full dose, reducing it as soon as the effect becomes manifest; otherwise they act as poisons, and become dangerous. Other poisons, as opium, tobacco, and spirituous liquors, lose their effect by degrees, as the system becomes habituated to their use. Arsenic belongs to the former class, and should never be administered in increasing doses.

Again: certain medicines are known to act remedially by slow and imperceptible degrees. Quinine and other tonics act in this way. Other remedies must be brought to bear against the citadel, as it were, by storm. John Hunter taught that to produce the proper effect of mercury in certain diseases, a given quantity must be introduced in a given time, after which, the gums being sore, smaller doses will suffice to keep the disease under arrest. This fitly illustrates the action of arsenic in diseases of the skin. A full dose must first be administered at intervals, until the conjunctiva becomes tender. At this crisis the disease is checked, and the healthy action in the skin becomes visible on the very day that the

* The tone of confidence which pervades this article may perhaps be excused, when the reader is informed that the author has availed himself of increasingly extensive opportunities of watching the effects of arsenic in cutaneous diseases, for upwards of thirty years.

eye becomes suffused with tears, and the conjunctiva injected. The dose should now be reduced, and again reduced if necessary. A very minute dose, regularly administered, will, in some cases, suffice to keep the eye tender and the skin healthy, until at length the very disposition to diseased action appears to die away under the influence of the poison. An apparent objection to the use of arsenic presents itself occasionally in subjects in whom alvine irritability or dyspeptic symptoms are complicated with chronic disease of the skin. In such cases arsenic will be found useful, not only in restoring the skin, but in quieting the bowels, giving tone to the stomach, and improving the general health. Two cases strikingly illustrative of this result have recently come under the author's notice.

Some individuals are remarkably susceptible of the influence of arsenic, and cannot long bear even the minimum average doses. Happily, this circumstance is no impediment to its successful administration; for arsenic invariably arrests disease in doses too small to be injurious, and an exceedingly small dose will, in such cases, suffice to exert an influence over disordered vascular action which has once been suddenly arrested by a competent dose.

The most difficult cases for management are those in which arsenic has been indiscreetly administered in doses so large as to affect the nervous system, rendering it highly intolerant of the poison; so that months must in some cases elapse before it can be resumed with safety and success. This circumstance protracts, but does not prevent, the cure. This will hereafter be more fully explained.

The preceding observations will be practically illustrated and embodied in the following aphorisms for the administration of arsenic in chronic diseases of the skin:—

1. It should never be commenced, while signs of active cutaneous inflammation are present.

2. It should be well mixed with the food or drink, and never taken on an empty stomach.

3. It should be given in three or four doses in the twenty-four hours, and with exact regularity.

4. Five minims of the liquor potassæ arsenitis is generally a sufficient dose to commence with—i.e., fifteen minims daily. As soon as the conjunctiva becomes affected, this dose may be reduced, but it is desirable to reduce it gradually.

5. During the administration of the minimum dose, should conjunctivitis supervene, the dose should be further reduced. If it should be necessary, it may be wholly discontinued for a very short period. This will retard the recovery, but it will incidentally demonstrate the amount of control which the medicine is exerting over the disease, as well as determine the minimum dose—both points of importance;—the latter tending to inspire the practitioner with confidence, and the former serving as a light to his path.

6. The minimum dose (i.e., a dose which, given continuously, affects the conjunctiva in the slightest possible degree) should be persevered in with unremitting regularity for as many months after the final disappearance of the disease as it had previously existed years. This is often necessary to prevent a relapse.

7. Should the disease appear to advance, instead of receding during any period of the minimum course, the course should not be interrupted on this account. Leeches or purgatives in the sthenic, and quinine, with a generous diet, in the asthenic cases, will generally be sufficient.

In order to test more strictly the value of the medicine, the writer has occasionally intermitted the course, and with a most uniform result—viz., a relapse of the disease. For the same purpose he has abstained from all external applications, (leeches excepted,) and has never found them necessary to the cure.

The diseases in which the opportunities for trying this plan of treatment have been the most numerous, are, the different idiopathic forms of lepra and psoriasis. It has also succeeded in eczema, acne punctata, acne rosacea, prurigo, and lupus. Nor has it failed in any of these diseases in a single case when fairly and fully tried.

It is proposed, in a future paper, to demonstrate the truth of the above remarks by a selection of cases in each of the diseases just cited; and also to add a few observations explanatory of the medicinal operation of arsenic on the system.

DR. COLLIER AND MR. HORATIO DAY.

To the Editor of THE LANCET.

SIR,—At this festive season, when family groups are everywhere turning night into day, how hard it is that you, the stern, uncompromising, inexorable, and disinterested censor

of the medical profession, publicly impose upon me the task of turning Day into night.

He who hath an appetite for inquisition into the accuracy of Mr. Horatio Day's statement, may learn from my employer, Mr. Jackson, the father of our late patient, that I took every precaution that professional delicacy could suggest, and that I had no more expectation of meeting Mr. Day than I have now of restoring the Dey of Algiers. "Is the general practitioner now in attendance; if so, I cannot see your daughter without arrangement for an interview?" Such was my query, and the answer was distinctly in the negative.

Mr. Jackson is no pauper, but a tradesman living at Turnham Green, and a copyholder of tenements in the county of Middlesex. I wish all my professional brethren had as snug an independence.

If the inquisitor will extend his investigation, he will find in Isleworth a chemist of the name of Vine, indicated to me by the patient's attendants at bedside. I wish he may find him more easily than I did. I went from the ferry through the entire village, gazing about for a pharmacist, and inquiring my way from passers-by, as Mr. Day's partner can testify, who met me with the prescription in my hand. The said Vine will tell him that the medicine was not left by me, and the attendants will testify, that, on leaving the village, I called to inquire whether the medicine had been promptly left, (by Mr. Vine's own messenger, of course.) If my heart, or my fancy, had dictated such a step, however, I would have left the medicine with my own hands. Humanity is above etiquette: I've heard a bird whistle to that tune before now. I'm a physician, and no conjurer. God help me! nobody would take me for one. But I can imagine that when philanthropy has a frown on her brow, and holds behind her back a bill in her fist, she may succeed in securing for herself a mare's nest.

Now for turning the tables. I shall call upon Mr. Warren, of Isleworth, and Mr. Day's partner, for their testimony in favour of a certain physician, who took upon himself to secure for his patient the services of a surgeon, when that physician was called in without the knowledge of that surgeon; and if I have occasion so to do, I will recount the full particulars of a wholesome lecture inflicted by a sensible lady on a rebellious general practitioner.

To you, Sir, the general practitioners fly as to a parent, under whose wings they find shelter. Upon you, perchance, may devolve the task of framing a new Bill out of the discordant elements not badly typified in this professional rencontre, unless, like the fox, you are deterred by the foot-prints all looking towards the cave of destruction. I will suggest to you the only clause that would satisfy such gentlemen as your correspondent, begging to retract the opinion I gave in favour of his common sense in my first note, showing the rashness of conceding such an attribute upon tick.

"And whereas an animal gradually becoming obsolete—the megatherium of the EIGHTH HENRY—is still occasionally seen in the suburban villages, and more rarely in the interior provinces, (vulgarly cyleped a London physician,) to the annoyance, distress, and manifold mortification of the general practitioners of England, now be it enacted, that hereafter &c. &c. it may be lawful to any or all of the newly-incorporated general med.-chirurg.-obstet.-physico graduates to shoot any such animals as *feræ naturæ*, without inquest or further inquiry."

Just succeed in getting that through the House, and all other difficulties will evanesce.—I remain, with the compliments of the season, your obedient servant,

Spring-gardens, Dec. 30, 1845.

G. F. COLLIER.

DR. MARSHALL HALL'S DISCOVERY OF THE REFLEX FUNCTION.

To the Editor of THE LANCET.

SIR,—As the physiological views of Dr. Marshall Hall on the Nervous System seem to be but imperfectly understood, and are very important, I think he would confer a great obligation on the profession generally, were he to publish, in the widely-circulated LANCET, a series of articles explanatory of them, and their application to pathology.

Your obedient servant,

X. Y. Z.

Aberdeen, January 12th, 1846.

* * Dr. MARSHALL HALL has already fully written on the pathology and therapeutics of the spinal marrow, particularly in his work on "Diseases and Derangement of the Nervous System," and in his course of able lectures on the "Nervous System," which appeared in THE LANCET.—ED. L.

THE STATE OF THE MEDICAL PROFESSION
IN LONDON.*To the Editor of THE LANCET.*

SIR,—Would it not be possible, in your parliamentary struggle to save the surgical profession from the degradation threatened by the National Association, to devise some punishment for those of its members who disgrace us by such productions as the enclosed?—Wishing you every success in the battle you are so nobly fighting, I remain, &c.,
A SURGEON.
Maida Hill, Jan. 14th, 1845.

[A CARD.]

"MR. WILLIAM RICHARDS,
SURGEON ACCOUCHEUR, ETC.

13, Hall Place, Maida Hill, Paddington."

[A CIRCULAR.]

"MR. RICHARDS, Member of the Royal College of Surgeons, London, and Licentiate in Midwifery, announces to the Public that he attends Confinements for Five Shillings.—Vaccination One Shilling.

The best and purest Medicines given, but no charge made."

IS BLEEDING A SURGICAL OPERATION?

WHAT say the surgeons? The following case shows how the lawyers must in future advise, that it is *not*, but merely a matter appertaining to the practice of an apothecary. *Proud and others v. Mayall*, decided last term, was an action brought by a firm practising at Wolverhampton, for the recovery of their professional bill, and tried in August last, at Stafford, before the under-sheriff. The only plea of the defendant was, that "he was never indebted." This being the case, and some of the items being in respect of attendances in the character of surgeons, the plaintiffs' attorney (who raised the point for the sake of caution) was advised, that the expense of putting in, and proving the certificates of his clients as apothecaries, (which, as it was before the passing of the late act, would have materially increased the costs,) need not be incurred on the grounds,—first, that since what is called the "New Rules of Pleading," no question but what is put in issue by the defendant's denial need be proved; and, secondly, because a verdict would at least be safe for whatever items might be proved for medicines and attendances incurred in the department of surgery.

At the trial, every item and charge in the bill was clearly established; but, except on the point of bleeding the defendant, no surgical attendance was positively proved. On the closing of the plaintiffs' case, the defendant's advocate submitted that they should be nonsuited on two points; but one only required to be previously argued, and which was, the omission to prove the plaintiffs' certificates as licentiates of Apothecaries' Hall. The under-sheriff decided in the plaintiffs' favour by directing the jury to find a verdict for them to the amount claimed; but gave the defendant leave to move the court above to set it aside, and enter a nonsuit instead.

Accordingly, in last Michaelmas term the motion was made, and a rule to show cause obtained, which was afterwards argued before a single judge (Mr Justice Patteson) in the Bail Court; and although he was pressed with the fact of an item for bleeding being at the least clearly in evidence, and hesitated some time before giving judgment,—he yet, to the surprise, it is presumed, as much of the lawyers as it will be to your readers—considered that such an operation was not of a surgical nature, and made the rule absolute for a nonsuit. By this decision, the new rules of pleading are made to have no effect in this case; but, what is more material to surgeons, it declares that the operation of bleeding a patient pertains to the practice of an apothecary, and renders the production of a licentiate's certificate necessary on a trial for the fee, although it is notorious that such an exercise of the craft was, in former days, the peculiar and characteristic office of the ancient incorporation of "the Surgeon-Barbers." That a nonsuit should have been directed, under these circumstances, permitting wrong to overbear right, not only on a doubtful technical point which arose on an almost obsolete statute, but by straining a point in order to force the operation of bleeding out of the practice of surgery, is the more to be wondered at, because the judge was evidently posed by the case. Surely there were sufficient grounds for giving the benefit of the doubt to those who had unquestionably the right. Had his lordship but slept upon the matter, he would have given a different judgment in the morning; but he did not, and the plaintiffs were cast.

It will be observed that this case was heard by a single judge, and not by the full Court—an unfortunate event; and a further misfortune was, that by the press of business it did not come on till the last day of term, which debarred the plaintiffs from obtaining a rehearing of it by the rest of the judges, which, there is little doubt, would have resulted in a discharge of the rule. As it is, there is now no appeal, the ruling of the single judge is final—that is, there is no appeal at law; one is, therefore, made to the judgment of yourself, Mr. Editor, on behalf of a profession which the legislature and the law courts seem leagued to harass and wrong for the benefit of quacks and unprincipled patients.

THE THEORY OF RESPIRATION.

To the Editor of THE LANCET.

SIR,—In a work by Dr. Wilson and Dr. Gully, entitled, "The Dangers of the Water Cure Examined, &c.," at p. 58 the following passage occurs:—

"Whilst from the food thus changed, two elements, carbon and hydrogen, are derived, these are carried round with the blood and meet with oxygen introduced at the lungs and through the skin, and combining with it in those places, carbonic acid and watery vapour are formed and expelled from the body."

I confess that I was a good deal surprised on meeting in a work of the present day a theory so long exploded—that of the combustion of the carbon and hydrogen of the body by the venous blood to the lungs, there to enter into chemical combination with the inspired oxygen.

I was still more surprised on finding, in a marginal note, that Liebig was referred to in support of this theory; but on turning to "Liebig's Animal Chemistry," I could not find a single passage bearing on the subject which was not diametrically opposed to this obsolete hypothesis. For instance, at p. 30 we read as follows:—

"The singular idea that the nerves produce animal heat has obviously arisen from the notion that inspired oxygen combines with carbon in the blood itself, but, as we shall hereafter see, there cannot be a more erroneous conception than this." Again, at p. 60:—"The globules of the blood which can be shown to take no share in the nutritive process, serve to transport the oxygen, which they give up in their passage through the capillary vessels. Here the current of oxygen meets with the compounds produced by the transformation of the tissues, and combines with the carbon to form carbonic acid, and with hydrogen to form water." And in his chapter on the theory of respiration, he states, that "the carbonic acid thus formed combines with the iron of the globules, deprived of their excess of oxygen, is carried by the venous system to the lungs, when the globules taking up the oxygen they have lost, the carbonic acid is separated, and, with the vapour of water, is exhaled."

The mistake which Messrs. Wilson and Gully have evidently made, is not, perhaps, calculated materially to affect their arguments in favour of cold water. It appears strange, however, that Liebig should be so egregiously misquoted on a subject involving one of the most important doctrines of animal chemistry, by authors who found their strongest arguments in support of their propositions on the theories he has advanced.

I am, Sir, your very obedient Servant,

London, 31st December, 1845.

P. A. BRADY.

THE "FIVE-YEARS' APPRENTICESHIP SYSTEM."

To the Editor of THE LANCET.

SIR,—Allow me, through the medium of the far-famed LANCET, to make some remarks relative to the formula of medical education required by the Apothecaries Hall.

At a time when every science and every art is pushing on to the utmost; at a time when inferiority is not tolerated, and when mediocrity is left to sink; and when the science of medicine throughout the civilized world is daily gaining the respect and confidence of the well informed; still does an apothecary's shop in the city presume to govern and direct the medical profession of England. Some say they perform their task well: this assertion I venture to deny. When five years, out of the allotted seven, are required to be passed in the drudgery of an apprenticeship, and three given for going through the whole scientific and practical course required of the candidate, none, surely, can have the hardihood to sanction any senseless praise of such an anomalous system. Thus has a youth the education of a mere mechanic given him up to the age of twenty or twenty-one, and then, with a mind untrained to investiga-

tion, and by five years desuetude almost unqualified for any exertion of thought, he commences the study of science, and ends his three years of baffled toil by a course with the grinder.

Does any one suppose that the student, in these three years, gets any but the most superficial knowledge of the greater part of his studies; and after conquering the more elementary parts, has he time enough to follow out, at the hospital, a patient course of clinical investigation?

It is, I believe, in the present day generally acknowledged, that for a liberal profession, a liberal education is required, one that embraces a respectable knowledge of the dead languages, with a mathematical training in the ordinary abstract sciences. The question asked—what is the use of Latin? what is the use of Greek? is found but in the mouth of fools, while numbers regret the early want of them. That knowledge is power, and that ignorance is not only weakness but misery, is daily becoming forced upon our minds. Is our profession, then, or by far the largest body of it, to be behind in the great race? Does not the vast field of investigation in medicine require well-prepared minds? Do not the public, again, require and prefer gentlemen of classical training? But what training does the young surgeon get? In what state is his education at the age of sixteen or seventeen, or at a time when more favoured ones are just entering the colleges? Barely enough, perhaps, to pass the miserable farce of his Latin examination at the Hall. And then the *five-years apprenticeship!* what does he learn in that time? The art of compounding medicines, a mystery which might be acquired in three months by any ordinary intellect. Now, I appeal to every one to bear witness to me if I speak not the truth in saying, that ninety-nine out of a hundred of our youths learn nothing but this during their five-years apprenticeship, and that, in the generality of cases, they are kept so closely to the pestle and mortar, that they have no opportunity for ever improving their minds, even by the desultory reading that an undirected mind falls back upon. Now this is the crying evil, that five precious years, in the seed-time of youth, should be thus sinfully sacrificed, by a law so disgraceful, that it at once presents itself stamped as a mixture of folly and fraud, upheld by the strength of avaricious interests. My consolation is, that it cannot last long; it is too preposterous. But the question is, how long? And this question I would peremptorily ask, in the name of the thousand injured youths who are yearly suffering from its baneful effects.

I remain, Sir, respectfully yours,

Euston Grove, 8th January, 1846.

DELTA.

THE TRANSLATION OF THE SECOND EDITION OF THE WORK OF M. LOUIS, BY DR. WALSH.

To the Editor of THE LANCET.

SIR,—Will you do me the favour to insert the following statement in one of your early numbers?

I have the honour to be, Sir, your very obedient servant,
W. H. WALSH, M.D.

London, January 12th, 1846.

Shortly after the Sydenham Society published my translation of the second edition of M. Louis' work on phthisis, a note appeared in THE LANCET from Dr. Cowan, complaining that a want of professional courtesy and candour had been exhibited towards himself in the omission of any reference to the fact of his having published a translation of the first edition of that work. The complaint was merely stated, and not distinctly addressed against M. Louis, the Council of the Sydenham Society, or myself. I had no reason to consider it pointed at me: Dr. Cowan had not, according to the received usages of society, made any communication to me privately, before uttering his charge publicly; nor, independently of this, was I conscious of having committed any breach of etiquette towards him. I consequently took no notice of the matter. But I have, by accident, just seen, in the last volume of the Provincial Transactions a restatement of the complaint; and in this restatement (although I am still without any private intimation from Dr. Cowan) I appear as the person against whom his charge is distinctly urged. Being unwilling that the readers of this journal should suppose me capable of discourtesy or want of candour towards any member of the profession, I conceive myself called upon to make a few brief observations upon the subject.

Dr. Cowan completely forgets, in his very unaccountable irritation, that I had nothing to do with the appearance of the book in question—that its publication was wholly the act of

the Council of the Sydenham Society. I, in truth, simply performed the humble labour of rendering the original into English for the uses and purposes of that Society. So far, indeed, was I from in any wise seeking to influence the Council in the selection of M. Louis' work for translation, or in any degree urging any of its members to appoint me as the translator, that the very first knowledge I ever had of the existence of the Society as an acting body, came to me through a letter, (received in Paris, in November, 1843, when on my way home from Italy,) containing an official request, on the part of the Council, that I should undertake the task of translating the volume. And, further, (I may be allowed, under existing circumstances, to add this,) far from being indecorously anxious to avail myself, to the detriment of Dr. Cowan or any other person, of any real or presumed advantages to be derived from the offer of the Society, I hesitated much to accept it, and should finally have declined it altogether, had I not desired to link myself by an additional tie to my former teacher, M. Louis.

And, may I now ask, what want of professional courtesy or candour did I display towards Dr. Cowan? Upon what notion, or upon what plea, (even if the thought of doing so had occurred to me, which I affirm positively it never in the remotest manner did occur,) was I to have undertaken to make it known, that he had produced an English version of the first edition? Had I published, on my own part, a translation of the second edition, and thereby impeded the circulation of Dr. Cowan's translation of the first, I should have felt an explanation due to him, and such explanation I should not have failed to tender. But had I, in the particular relationship in which I was placed with respect to the book, done this, the proceeding might, and probably would, have been construed into a censure of the conduct of the Council of the Society.

It may not be without its utility, for reasons not directly connected with the present statement, to mention that the first and second editions of the original treatise differ from each other so widely as to constitute almost wholly distinct works. In truth, not only does M. Louis himself say, in briefly recapitulating the changes and additions he has introduced in his last edition, "thus my first researches are *more than doubled in extent*," (Advertisement, p. xiv.) but the doctrines professed in regard of those most important subjects, Curability and Treatment, are almost diametrically opposed in the two volumes."

THE LAWLESS SECRET COMMITTEE.

WHO ARE TO BE THE NEXT DUPES?

THE following letter has just been circulated:—

"The National Association of General Practitioners in Medicine, Surgery, and Midwifery.

"Office, 294, Regent-street, Jan. 7, 1846.

"SIR,—I am requested to forward to you the following account of receipts and disbursements, and beg to direct your particular attention, at the present period, to the importance of carrying on the necessary negotiations with the Government, and of continuing the vigorous exertions so essential to the final settlement of Medical Reform, and the protection of the general practitioners,—in conformity with the following resolution:—

"That a circular letter be sent to each member of the Association, containing an account of the receipts and expenditure during the past year, and stating, that in order to meet the heavy expenses that will be incurred by the renewed labours of the Committee in maintaining the cause of the general practitioners, and carrying on the important question of Medical Reform during the next Session of Parliament, the enrolled members are respectfully called upon to contribute to the funds of the Association."

"The Committee have not hitherto deemed it requisite to press the members for donations to their funds, since the spontaneous contributions received during the last year were found sufficient to meet all necessary claims; but, having now arrived at the commencement of a new session, and finding that their labours must be continued with unabated vigour and watchfulness, they respectfully urge upon the members, and especially those who have not hitherto subscribed, the necessity of further contributions; and beg to express a hope, fully warranted by the efforts already made, that a willing disposition will be evinced to assist the Committee in the prosecution of their labours.

"The members of the Association are reminded that in the event of any new effort being made by the Government or the Colleges to pass a Bill that does not adequately sustain the interests of the general practitioners through the Houses of

Parliament, the utmost exertions of the Committee will be again required to defeat such an attempt, and considerable expense will thus necessarily ensue; and that should a satisfactory Bill be obtained, much expense will be incurred by the Committee in assisting to carry the same through the Legislature.—I am, Sir, your most obedient servant,

"GEORGE ROSS, Secretary.

"N.B.—Donations to further the objects of the Association and to defray the expenses of the Transactions are received by the joint treasurers, John Dodd, Esq., Portman-street, Portman-square, and Edward Tegart, Esq., Pall Mall; also by the members of the Committee, and the honorary local secretaries. It is requested that post-office orders be made payable at the Branch Post-office, Old Cavendish-street, to one of the treasurers, and that the name of the gentleman who is to receive the amount be mentioned in the letter of advice.

"AN ACCOUNT OF RECEIPTS AND EXPENDITURE,
From December 7th, 1844, to January 6th, 1846.

Dr.	£ s. d.	Cr.	£ s. d.
Amount received to first audit, May 3rd, 1845	969 14 8	Printing and paper	523 13 6
"	"	Postage	357 6 10
"	"	Advertisements	176 13 10
Ditto to second audit, August 12th, 1845	255 8 5	Stationery	16 18 4
Ditto to third audit, January 6th, 1846	547 0 10		1074 12 6
		Rent and furniture, Messrs. Donaldson and Martin	214 15 0
		Public meetings	32 2 0
		Salaries, secretaries, and clerks	250 0 0
		Law expenses, and to law stationers for copying documents	28 9 6
		Sundries for coats, lighting, servants, &c.	83 16 6
		Balance in hand	88 8 2
			£1772 3 11

"Audited and approved, this 6th day of January, 1846.

"PETER HOOD,
JOHN MILES,
EBENEZER SMITH."

Nearly two thousand pounds expended in twelve months in betraying the cause of the profession! And then to ask their dupes for more money!

THE ADDRESS OF THE SHROPSHIRE AND NORTH WALES ASSOCIATION.

To the Editor of THE LANCET.

SIR,—I have just been reading the excellent address of the committee, and agree with most of the suggestions. There are, however, a few points in it, which seem to me worthy of discussion. My argument will be considered the more impartial, since I, as a foreigner, can have no bias to either side.

The committee, and I believe almost all other persons who have been writing on the subject, wish to make a difference between members who passed before the granting of the charter, and members since 1843; the latter are to be fellows only by examination. All this seems plausible at first; but if you look close to it you will find it is nothing but simple sophistry. The member of 1844 is (according to common sense) as good a member as the gentleman who passed ten years ago, or if there is a preference, it is certainly not in favour of him who passed in 1834, when the study of surgery was accomplished in a year or a year and a half. But in what is the member of 1844 inferior? Has he not passed the same exa-

did? He might certainly pass the fellow-examination; but so might the older member; the latter scorns to do so; then why should the former? But I assert you actually destroy your structure at the very moment you are raising it. Your object is harmony and unity, and yet you would lower the member of 1844, and introduce a new distinction. My idea is, remove the fellowship altogether, and give to every member the franchise. Why a new-fangled title, which is not of the least value when it is common to all? Let the council pay back the small sum of money to the sixty odd gentlemen who paid for their new honours.

The committee say, "no fellow to be eligible to the council who dispenses his own medicine."

What is there wrong in dispensing medicine, in making up the medicine for one's own patients? I would agree with the committee if they had said, who keeps an open shop, instead of who dispenses his own medicine.

The whole case might be simplified if the surgeon were to be remunerated for his visits alone, and receive nothing for the medicine. In such a case he need not pass Apothecaries' hall, (if I am not mistaken,) since he does not sell any drugs. But you will allow me also to state, such a change will benefit both the patient and the surgeon; the former will then not be obliged any longer to swallow draughts, merely that the latter may legally charge for his attendance; the latter will no longer be mistaken (as it frequently happens) with a common quack, but will be more able to display his talents. By doing away with the retailing of drugs, you will benefit the chemist, and oblige him to pass a proper examination.

One word more, and I have done. Why do the committee not speak of an improved system of examination, since it is so well known that the examination is not so strict and practical as it ought to be?—I am, Sir, your obedient servant,

EU DEUTSCHER.

MR. ISAAC B. BROWN'S CASE OF OVARIAN DROPSY.

To the Editor of THE LANCET.

SIR,—In your number of last week, (Jan. 10th, 1846,) I read the report of a case of ovarian dropsy, treated by Mr. Isaac B. Brown, and said to have been cured by pressure, mercurials, and diuretics. Now it does appear to me a strange inference of Mr. Brown to suppose that either of these remedies (unless, perhaps, the former) had anything to do with the cure of this case. Does Mr. Brown imagine that these remedies are capable of curing ovarian dropsy without the operation of tapping? or does he make use of them for the purpose of producing suppurative inflammation in the cyst after the operation? If the latter, he certainly succeeded in the case of Miss F. R—, and the result was fortunate; but no one can read the particulars without being alarmed at the perils to which this young lady's life was exposed. Few, I believe, would survive the formation of ten pints of pus in the abdomen. (Mr. Brown calls it pus; I imagine it was serum mixed with pus.)

I have tapped ovarian dropsies myself, and have witnessed the operation done by other surgeons many times, and have several times seen suppuration in the cyst follow the operation, where every means had been taken to prevent it, a circumstance always followed by great constitutional disturbance, and frequently by death. I certainly should be very reluctant to make use of the pressure Mr. Brown did in this case, and to continue and increase it, in the face of such an amount of pain, fever, and constitutional disturbance, as appears to have followed the use of it in the present instance.

The result of Mr. Brown's case was fortunate; but looking at the details of it, I should not, nor do I think your readers generally would, be disposed to pursue a similar plan of treatment in a similar case; nor do I think it goes to support, in any way, the plan of treatment recommended by that gentleman.

I am, Sir, your obedient servant,

F. E. HICKS, M.R.C.S.,

Late House-Surgeon to St. George's Hospital.

Henrietta-street, Cavendish-square, Jan. 13th, 1846.

A PLACARDING QUACK IN BIRMINGHAM.

To the Editor of THE LANCET.

SIR,—As your columns are always open to the abuses allowed by the College of Surgeons, permit me, as one of its members, to state a most flagrant imposition on the public, which is now practised in this town. A notorious quack, following the same line as the authors of the "Silent Friend," is posting placards mination as the older member? or does he pay less than they

on the walls of this town and in the surrounding counties extensively, and circulating hand-bills, styling himself "A Licentiate of the College of Physicians, London, and Member of the College of Surgeons, London." If this imposition pass unnoticed, of what value is its diploma, or the licence of the College of Physicians, when an illiterate pretender can assume those titles with impunity, and reap the emoluments arising from a knowledge of the profession? Will you, sir, in the next number of your truly valuable journal, inform your readers whether there is any power, by either body, to stop this imposition; or whether there is any law than can reach it?

I remain, Sir, yours respectfully,

C. WILKINSON.

Birmingham, Dec. 26, 1845.

** In the existing state of the law, the colleges and the profession are alike incapable of inflicting any punishment on such impostors—ED. L.

THE STATE OF THE APOTHECARY TRADE IN LONDON.

To the Editor of THE LANCET.

Sir,—There is an advertisement in the *Times*, Jan. 8, 1846, "Wanted a surgery lad, by a gentleman in private practice, one who can dispense neatly, and is willing to make himself generally useful. For address, apply at Arnolds, 72, Berners-street, Oxford-street." Did ever you see such a disreputable attempt to lower the character of the general practitioner in the eyes of the public? What opinion can the public have of medical men, when they see them commit their prescriptions to the care of an uneducated surgery lad? Incompetent he must be; for none other, unless a pauper, or a charity-boy, would take such a situation. Pray call the attention of the profession to this public announcement of their beggary. It is indeed time that there should be a divorce between the profession of medicine, and the trade in drugs.

Jan. 9, 1846.

AN ASSISTANT.

GRIFFIN'S PROBLEMS.

To the Editor of THE LANCET.

Sir,—The Medico-Chirurgical Reviewer notices the disgraceful printing of Griffin's Physiological and Medical Problems. There is something yet more disgraceful: Part 1st of the work was published in 1839—no second part is advertised, but the unhappy purchaser is obliged, in order to complete his work, to pay again for part first. Nothing so dishonest has yet occurred with regard to medical publications, and such conduct in publishing will effectually damn all works in "parts."

A SUBSCRIBER.

THE LONDON MEDICAL DIRECTORY FOR 1846.

THE spirited editors of the LONDON MEDICAL DIRECTORY have just issued a new edition of their extremely useful work. In addition to a carefully revised list of the various classes of practitioners resident in London, and within a range of five miles, along with what may be termed a brief professional biography of each individual, we find this year: an Obituary, containing a full account of the lives and writings of the principal members of the medical profession who have died during the past twelve months; a list of the medical referees of the Metropolitan Assurance Companies; a copious and accurate British and Foreign Bibliography; the regulations of the Universities, Colleges, East India Company, Army and Navy Medical Services; a list of the Metropolitan Hospitals, Dispensaries, and Medical Societies, and of their various office-bearers, with the hours of attendance or meeting, &c., &c.

The mass of interesting medical information thus comprised in the compass of a small octavo volume will, no doubt, soon cause it to find a place on the study table of every medical practitioner in the metropolis. We cannot but congratulate the editors on the enterprising spirit which they have shown, and on the great improvements which they have introduced in their work. We have given the Directory our support from the first, because we thought that a work of the kind was much wanted, and because we also thought that it was edited in a spirit of fairness and impartiality, which entitled it to the support of the profession. Not only is the book, as we

have already said, an extremely useful and valuable work of reference, but we think it calculated to do great good, both in a social and in a professional point of view. When medical men find their scientific position thus laid bare to public scrutiny, they will shrink from practising without proper qualifications, even in the absence of penal laws.

EXCLUSION OF "ADVERTISEMENTS" FROM THE BOUND VOLUMES OF THE LANCET.

AFTER the present week, the price of the numbers of "THE LANCET" will be, unstamped, *Sevenpence*, stamped, *Eightpence*. In connexion with this trifling addition to the present price of the enlarged journal, "advertisements" will be altogether excluded from the bound volumes.

We certainly shall endeavour, for a time, at least, thus to comply with the requests of numerous correspondents, who have repeatedly and urgently addressed us on the subject, but we certainly cannot pledge ourselves to a permanent adoption of this arrangement. Should we be obliged, after a short trial, to relinquish the practice of excluding the advertisements from the bound volumes, the present price of the journal will be restored. The supplements and indexes will be published without any additional charge.

NEWS OF THE WEEK.

BARON LIEBIG AND THE FRENCH CHEMISTS.—

In the next number of THE LANCET there will appear, from the pen of PROFESSOR LIEBIG, an elaborate criticism on the state of Organic Chemistry in France.

CHESTER.—Dr. McEWEN, late House Surgeon to the Chester Infirmary, has been appointed surgeon to the County Gaol.

APOTHECARIES' HALL, LONDON.

Names of gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, 8th January, 1846:—Nicholas Henry Littleton, Saltash, Cornwall; Allen Perring Schuyler, Plymouth, Devon; Alfred Lacey, Moxley, Derby.

CORRESPONDENTS.

To the Editor of THE LANCET.—SIR: I have been amusing myself these last few evenings by turning over the leaves of my diary in hopes of meeting with the date of the last volume issued by the Sydenham Society. I have carefully referred back, to goodness knows where! but have not yet arrived at that entry. To gratify this very laudable curiosity, I have been stimulated to turn over an exceedingly huge number of old leaves; if the Council of the Society would set the example of turning over a new one, it would tend much to diminish the, at present, rapidly accumulating disgust of Commercial-road East, Jan. 9, 1846.

A MEMBER.

Senex.—The provision was in the first Bill.

A Surgeon.—The medical practitioner is not legally entitled to payment of his fee unless he is legally summoned. The members of the profession are often annoyed in such cases, owing to the stupidity of many of the constables. The Act of Victoria requires that the summons of the medical witness should be signed by the coroner.

A Surgeon (Leeds).—The arrangement is partially adopted. The price of THE LANCET, before it was enlarged to double its previous size, was eightpence, unstamped. The price of the enlarged LANCET, stamped, will be only the same amount. We hope to maintain the distinction of publishing "the cheapest and best medical journal now extant." We cannot undertake to continue to exclude advertisements from the "bound" volumes.

The Report of the case of Chylous Urine, cured by the bark of rhizophora racemosa, shall be published in the next LANCET.

P. J. T. (Newcastle upon Tyne).—They are not exempted by the Militia Act.

An Old Subscriber.—The announcement of the alteration in the price of the Medical Gazette appeared in that journal as a notice to correspondents on Friday, Dec. 26th:—

The "notice" was as follows:—"In commencing the Second Volume of the New Series, we beg to announce that the price of each number of the journal will be, in future, eightpence unstamped, and ninepence stamped."

A Subscriber.—There would be no danger in postponing the time until May.

Communications have been received from Dr. J. Hall Davis, Mr. Meeson, Phoenix, A Bristol Apprentice, Medicus Jun., Argus, A Practitioner, Dr. Henderson, Mr. Presbaw, A Country Surgeon, Mr. John Gray, Mr. Archibald Blacklock, Mr. Paterson.

A COURSE OF FIVE LECTURES

ON

FRACTURES AND DISLOCATIONS:

EXPLAINING

NEW MODES OF TREATMENT, FOUNDED ON ANATOMY
AND PHYSIOLOGY; AND THE LAWS
OF MECHANICS.

By GEORGE O. JARVIS, M.D.

SURGEON TO THE FREE-STONE QUARRY, PORTLAND, CONNECTICUT,
ETC. ETC.

UNITED STATES,

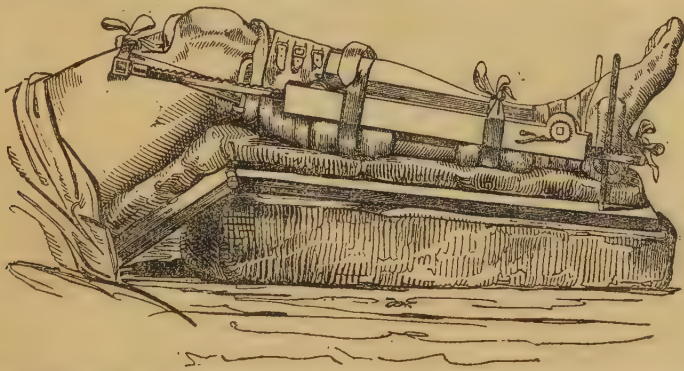
*Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,
London, November, 1845, and sent to THE LANCET by the Lecturer.*

Illustrated by Engravings.

Division of the muscles of the thigh into classes—Mechanical actions of those muscles in fractures of the bone—Usual violation of the laws of mechanics in the treatment of such fractures—Necessary attention to fixed points in applying force to reduce luxations.

WE will this evening endeavour to finish our remarks on fractures, and also on the dislocations of the inferior extremities. I will now call your attention to a fracture of the leg. But, before we proceed, allow me to remark, that we find the same anatomical arrangement for mechanical action—if I may be allowed the expression—in the muscles of the leg,

which we found in the thigh; indeed, all of the long bones have the same general arrangement of muscles: we, however, cannot stop to classify them, nor, indeed, will it be necessary; your knowledge of anatomy will readily furnish you with this very natural division. First, of muscles passing over the bone, and yet are not attached to it at either end; second, those attached to it at one end, the other end being attached at some point above; and the third class, those attached, in like manner, at one end, while the other descends, and are attached below it. There are other muscles than those—for instance, where two bones lie parallel, as in the bones of the forearm, yet they do not materially affect this division, nor do they in the least interfere with the principles to illustrate which this division was made. It must be apparent, however, that much depends on this arrangement of muscles with the bone in placing it in a favourable position for coaptation; and by giving attention to this it will readily be seen what position the bone should occupy, when fractured, to preserve coaptation most readily. But we will proceed to apply the instrument as to a fracture of the leg. It is always to be applied in the same manner, let the surgeon adopt what position of the limb he may; for, be it remembered, with this instrument the surgeon applies extension and counter-extension independently of position; position is one thing, and extension and counter-extension is another thing, and they should ever be left free and independent for the surgeon to apply at his pleasure; both are important principles in surgery; the one should, therefore, never be sacrificed for the other; and if right methods are adopted, it never becomes necessary.



Apply the bulbous part of the pads (fig. 8) one on each side of the leg, below the head of the tibia, and around them and the limb a belt with a loop on each side of the leg, and standing upward over the bulbous part of the pad. Arm the two loops with tapes; a belt may now also be applied to the ankle with tapes in it, but I much prefer a fracture-shoe instead of a belt round the ankle, (especially if there is any inflammation or swelling of the leg.) The double-inclined plane being arranged with a suitable mat, bandages, &c., and the instrument being properly arranged as to length, the arm of the jointed-fork, (fig. 6,) which will not be required for use, being removed from the fork, and the socket K of the fork being applied to the counter-extending bar D, let the tapes from the upper belt be tied to the arm, which remains in the fork, immediately above the knee, and the foot of the rack made fast at the sole of the foot; lay the limb and instrument thus arranged on the double-inclined plane, make the necessary extension, and apply the dressing, minding to place between the instrument and the plane, and under the bandage, rolls of cloth sufficiently large to support the instrument against the middle of the leg; proper splints should be applied on each side of the leg, and on the side at which the instrument is placed, the splint should be placed between the instrument and leg. I am inclined to think the dextrin bandage might be advantageously used with this instrument, in some cases, as a splint; apply the bandage, with the limb nicely adjusted, and when dry, split the bandage lengthwise over the tibia, and cut away a piece about an inch wide through its whole length; then, over the whole, apply tapes, at suitable distances. I have never used the dextrin in this form with the instrument, but its operation would be simple. I think I cannot be mistaken in the opinion I have formed of it; indeed, I think it equally applicable in some fractures of the thigh; of its use, however, in some of the cases in which I have seen it applied, especially

the manner in which it was applied, I cannot too strongly deprecate. The leaving a limb enveloped for days in this unyielding casement, during the inflammatory stage of a fracture, is hazarding the limb of the patient and the reputation of the surgeon beyond all bounds of prudence. Nor, indeed, as far as I have seen, has there been less deformity in the limb resulting from its use; yet there has undoubtedly been less trouble to the surgeon. And the practice of frequently cutting it off, and re-applying it, is necessarily attended with evils of the worst consequences; for every time the dressing is reapplied, coaptation and the fractured ends must be greatly disturbed. When provisional callus has formed around the fractured ends of the bone, and yet the limb requires support, I have not the same objections to this use of the dextrin bandage. In such cases I think it highly useful when properly applied.

I will now call your attention to a fracture of the patella. It is not usual, however, that any mechanical means are required in this injury, other than to place the limb perfectly straight, and to elevate the foot so as to relax the rectus femoris and vasti muscles; indeed, any attempt to approximate the two fractured portions by an apparatus about the knee, generally results in a greater separation of the fractured portions, than to leave it as above described. Yet this is not always the case. There are instances in which it is desirable to overcome, in some measure, the extreme contractility of the three muscles above named. This may be done in the following manner:—Place the bulbous part of each pad against the fractured portions—one above, the other below, and around each and the limb apply a belt, with a loop lying over each bulb; pass a tape through the loop, and tie moderately tight; but through the upper loop pass a long tape, an end of which is to pass down on each side of the leg; apply the instrument, as in fractures, at the neck of the thigh-bone,

but without any splints or bandages; let the ends of the tape be tied to the foot of the rack, crossing the sole of the foot, and on each side of it. Thus, by making extension with the instrument, the upper portion only is acted upon, and may thus be brought in contact with the lower, without applying the least force to it,—a point much to be desired, if we must needs have recourse to mechanical means.

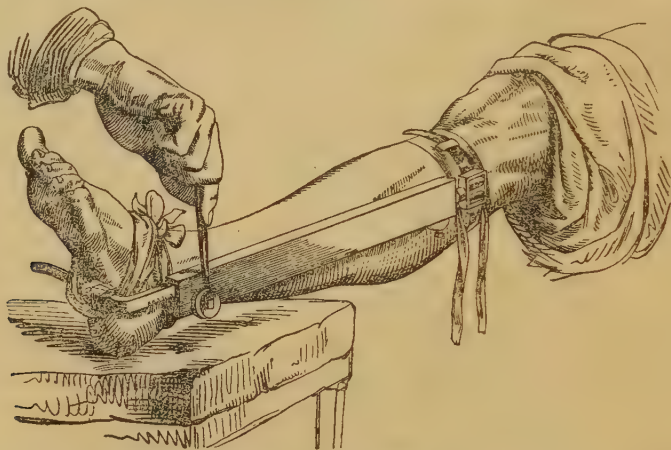
We here close our remarks on fractures. We will now call your attention again to dislocations; and particularly, this evening, to dislocations of the knee and ankle, beginning with the knee.

The knee is subject to luxations every way, though, fortunately, they are not frequent. When they do occur, the injury is apt to be so extensive, that amputation is required; yet, in general, it is in those cases where reduction is most difficult, that the surgeon should, by all means in his power, endeavour to save the limb. It is not our business, however, to lecture either upon diagnosis or pathology,—ours merely

relates to treatment. I will at once, therefore, explain how to reduce a luxation of the knee by this apparatus. There are two ways, and the surgeon is to select that one which applies to the kind of luxation which he has to reduce.

First method.—Let a belt be applied immediately above the knee, with a loop low over the patella; another belt round the ankle, armed with strong cords, the instrument being arranged as in fractures of the leg: pass the arm of the jointed fork through the loop above named, and tie the foot of the rack, crossing the sole of the foot, to the lower belt; make extension and free motion if necessary.

Second method.—Apply a large silk handkerchief, by a dove-hitch, immediately below the knee, the knot lying on the tibia in front; put the instrument on the limb as in fractures of the thigh, except that the foot of the instrument is to be securely fixed to the limb by the silk handkerchief: apply extension, motion, &c.



To reduce a dislocation of the ankle, buckle a belt round the leg, immediately below the knee, with one loop in front, on the tibia, and looking towards the foot; another one directly at the back of it, on the posterior side of the leg; pass the two arms of the jointed fork through the two loops above named, insert the end of the counter-extending bar into the socket of the fork, and to make fast the extending point of the instrument to the foot, let the following method be adopted:—Let the back of the limb immediately above the heel rest on the middle of a large silk handkerchief in form of a roll, the foot of the rack lying across the hollow of the foot; bring the ends of the handkerchief down on each side of the heel, and cross them over the sole of the foot and foot of the rack; carry them forwards and cross them again on the top of the foot; pass each end, as respectively inclined, under the handkerchief, lying on the side of the heel; bring the end forward again to the top of the foot, and tie them closely and firmly down.

In a dislocation where the foot is thrown either outward or inward to a great extent, to prevent the sole of the foot from being drawn too suddenly under, another handkerchief may be

thrown around the foot and tied to the foot of the rack, so as to prevent the foot from turning until the surgeon thinks he may have sufficiently extended the foot to admit the two points of the bones to pass each other, when he may suddenly loose the last-named handkerchief, when all the force will fall upon the handkerchief first applied, and the surgeon can manipulate the limb.

I conceive it quite possible, that in some cases an additional instrument might be required, to also make extension lengthwise of the foot, in which case, or when the force is required between the tarsal and metatarsal bones, the jointed fork being attached to the instrument, and the instrument placed to the sole of the foot, let a strap pass from arm to arm of the fork in front of the leg, at the instep, and, with a band applied round the metatarsal bones, in the form of a dove-hitch, the knot lying on the under side of the first metatarsal bone, attach the foot to the foot of the rack. This is the mode in which I reduced a dislocation of the metatarsal from the tarsal bones, at Hôpital Cochin, as reported in the *Gazette des Hôpitaux*, of October 2nd, 1845.

ON THE PRESENT STATE

OF

ORGANIC CHEMISTRY IN FRANCE.

BY BARON LIEBIG,

M.D., PH. D., F.R.S., M.R.I.A.

PROFESSOR OF CHEMISTRY IN THE UNIVERSITY OF GIESSEN.

Two chemists in France, during the last year, have been attempting to establish a kind of dictatorship over the domain of chemistry, and constituting themselves supreme arbiters in all questions belonging to the science. Their former labours having by no means been received with that amount of favour which, in their arrogance, they assumed to be due to them; but, on the contrary, finding many of their opinions and theories neglected, their facts and assertions controverted, they resolved to be in future better appreciated. Setting up a flag of their own, they summoned all chemists to range themselves

under it, and, as prophets of a new faith, commanded all to bow before them, and swear allegiance, threatening with destruction all who should disregard their decrees, or oppose their behests. Now as long as the absurd pretensions of these gentlemen were confined to their own small sphere, it was scarcely worth while to enter upon any opposition to them; but lately, a highly respectable journal (the *Journal de Pharmacie*) has opened its pages to their impertinences, and thus has given them an extensive circulation and a factitious importance. I deem it therefore now necessary to show, by a few plain facts, what is the true value of their labours; what claim they possess to found a new dynasty, and reign over chemistry and chemists.

M. Gerhardt, professor of chemistry in the University of Montpellier, states, in No. 21 of the nineteenth volume of the *Comptes Rendus*, that upon dissolving brucine in nitric acid, nitrite of oxide of ethyle (nitrous ether) is formed. The formation of this compound from a substance which contains neither alcohol nor ether, appeared to me so remarkable, significant, and important, in the history of the ether compounds, with the study of which I had formerly been much occupied, that I resolved,

during the last winter, to repeat M. Gerhardt's experiments. I found, indeed, that brucine, when acted upon by nitric acid at a gentle heat, dissolves with evolution of a gas, which burns with a greenish-blue flame, and is readily absorbed by hydrochloric and nitric acid. The severity of the season, at the time I made this experiment, enabled me to condense a portion of this gas. Nitrite of oxide of ethyle boils at 61.7, and floats upon water. The fluid which the gaseous product of the brucine formed upon condensation, was not miscible with water, and sank to the bottom when mixed even with dilute nitric acid; it was consequently of greater specific gravity than water; it began to boil at 158—167°. All these properties show, evidently and plainly, that the product of the decomposition of brucine by nitric acid cannot well be confounded with nitrite of oxide of ethyle.

According to the *Comptes Rendus* of 1841, page 262, M. Dumas communicated to the Royal Academy at Paris a note of M. Gerhardt, in which that chemist stated, that he had succeeded in producing valerianic acid by the action of potass upon indigo. "The process, says M. Gerhardt, is very simple. Indigo is projected in small portions into hydrate of potass in a state of fusion; the indigo dissolves in the fusing potass with copious evolution of ammonia and hydrogen gas. The residue contains carbonate and valerianate of potass. Fourteen equivalents of water (says M. Gerhardt) accede to the elements of the indigo, and transposing with the latter, form one equivalent of valerianic acid, six equivalents of carbonic acid, one equivalent of ammonia, and six equivalents of hydrogen." Large portions of valerianic acid may thus be prepared in the course of an hour, according to M. Gerhardt's statement.

Now this experiment has been repeated by several chemists, and among others by Dr. Muspratt, (*Wöhler und Liebig's Annalen der Chemie und Pharmacie*, vol. li. p. 271.) with the greatest care and attention, and upon the very purest indigo; and these experiments have proved that not the slightest trace of valerianic acid is to be produced from indigo, and that the action of potass upon indigo does not give rise to the evolution of ammonia. These two discoveries of M. Gerhardt are characteristic of the man. The odour of the product which the brucine yields upon its solution in nitric acid, suffices to satisfy M. Gerhardt that he has produced nitrous ether! He deems it altogether unnecessary to subject the new product to the test of a careful analysis, although the mode of its pretended formation is so extraordinary and mysterious; and, with respect to the formation of valerianic acid from indigo, this excellent chemist dispenses even with the odour of that acid: the formula which he gives must in itself suffice to prove the correctness of his supposition!

It is quite evident that M. Gerhardt is extremely easy and indulgent in the demands which he proposes to himself to prove the correctness of his own views; but we shall immediately see how exacting this gentleman grows, when the views and assertions made, and even the very plainest facts stated by other chemists, are submitted to his critical inspection.

The formation of nitrous ether from brucine seemed very singular to M. Gerhardt, as might readily be supposed. That his own conclusions should be erroneous was quite impossible! yet the fact required some explanation. Well, M. Gerhardt hit upon an exceedingly simple way to set at rest the doubts of other chemists; he denounced as a mass of positive error the whole of the observations made and the facts advanced on the subject of nitrite of oxide of ethyle. "There exists no such thing," says he, "as nitrite of oxide of ethyle; the formation of this substance is invariably attended with that of aldehyde, and it is therefore impossible to effect the resolution of this body into alcohol and nitrite of potass by treating it with potass; the formation of nitrite of potass has never been observed in the process of decomposition. M. Liebig, I grant, says he, has produced nitrite of oxide of ethyle free from aldehyde, and this chemist states, moreover, that this substance is decomposed by the action of potass into nitrite of potass and alcohol; but he does not say that he has actually made the experiment. I look upon the decomposition which he affirms to take place, when the nitrite of oxide of ethyle is acted upon by potass, as a mere supposition, to which his peculiar views on the ethyle compounds have led him."

In my paper, (*Annalen der Chemie und Pharmacie*, vol. xxx. page 144,) I stated that the pure nitrous ether prepared, according to my own method, is decomposed, by an alcoholic solution of potass into nitrite of potass and alcohol, and this without the fluid acquiring a brown tint, as is the case when the nitrous ether contains an admixture of aldehyde. Now every one must see at once that the decomposition by potass was

used here as the very means to prove the absence of the aldehyde. If I add to this, that the sole and exclusive object for which I endeavoured at that time to produce nitrous ether free from admixture of aldehyde was to investigate the deportment of potass with this substance, since I deemed it not altogether impossible but that the action of the potass upon the nitrous ether might give rise to the formation of cyanate (fulminate) of potass, I do not think the correctness of my observation will require any further asseveration on my part.

When, resting upon these facts, I maintain that M. Gerhardt has advanced his assertions with inconceivable levity, I do not by any means go so far as one of my friends, who told me lately, when we were discussing this matter, that he, for his own part, considered M. Gerhardt a fabricator of falsehood, and, indeed, it must be admitted, that if M. Gerhardt is unable to justify and clear himself with respect to his alleged discovery of the formation of valerianic acid from indigo, and of nitrite of oxide of ethyle from brucine and narcotine, and also with respect to his assertions about the constitution of nitrous ether, there is a good deal of truth in my friend's opinion. I think these examples will suffice to characterize M. Gerhardt's discoveries, and I will now proceed to examine his mode of investigation.

In his first notice on the composition of chinoline, (*Ann. der Chemie und Pharmacie*, vol. xlii. p. 312.) M. Gerhardt assigns to this base the formula, $C_{12}H_{22}N_2O_2$, whilst, subsequently, he gives the formula, $C_{28}H_{40}N_4$. According to the first formula, chinoline contains oxygen, whilst, according to the second, it contains none. These are things, of course, which may happen to any chemist; but what follows here is highly characteristic of M. Gerhardt's method of proceeding in his investigations.

His first formula rendered it a rather difficult and intricate task to explain the formation of chinoline from chinine cinchonine, &c. Well, now for the way in which M. Gerhardt got rid of this difficulty. His own analyses of chinoline were, of course, faultless; the existing want of correspondence between his formula of this substance and the formulae of chinine cinchonine and strychnine was simply to be imputed to the defective analyses which other chemists had made of the latter substances: nothing was more easy than to prove the incorrectness of these analyses. "At any rate," says M. Gerhardt, "the formula which Regnault assigns to chinine is incorrect; I have, however, reason to believe that his analyses are correct. Now, from these analyses, I calculate the formula for chinine as $C_{38}H_{44}N_4O_4$. My recent analyses confirm those of Regnault; I simply correct his formula, $C_{36}H_{44}N_4O_4$." By the application of this exceedingly simple and ingenious process, M. Gerhardt managed to explain the formation of the chinoline: the correctness of his formula could no longer now be called in question.

But after this appeared the new formula, which assigns more carbon and no oxygen to chinoline. How did M. Gerhardt proceed now? He restored the old formula by the simple waving of his magic wand. Chinine is now no longer $C_{38}H_{44}N_4O_4$, but, just as I myself discovered eleven years ago, $C_{40}H_{48}N_4O_4$. Strychnine is no longer $C_{40}H_{44}N_4O_4$, but $C_{44}H_{48}N_4O_4$!

Now what can be said of a mode of investigation like this, particularly if it be taken into account that even the new formula which M. Gerhardt now gives for chinoline has been corrected by Dr. Bromeis, in the proportional amount of hydrogen which M. Gerhardt assigns to it.

In another communication which M. Gerhardt made to the Royal Academy upon the subject of mellon, the following remarks occur:—

"Whilst occupied with the preparation of my *Précis de Chimie Organique*, I had occasion to investigate the remarkable substances which Liebig obtained upon the dry distillation of the metallic sulphocyanides. This investigation has led me to the discovery of several errors which have found their way into all chemical writings upon this subject, and tend particularly to confuse the history of this body.

"Mellon does not perform the part of a radical; it dissolves in caustic potass without evolution of hydrogen, and acetic acid precipitates from this solution white flakes of the hydromellonic acid of Gmelin. But this acid contains oxygen as an integral part. The dry lead salt of this acid likewise contains oxygen. It is impossible, besides, that this should be otherwise, since the mellon enters into direct combination with the elements of the potass, just as is the case, for instance, with isatine upon its transformation into an isatinic acid, or with camphor upon its transmutation into camphorate of Delaude.

Hydromellonic acid . . .	$C_3 H_2 N_4 O$
Potass salt	$C_3 (H K) N_4 O$
Lead salt	$C_3 (H Pb) N_4 O$

"That hydromellonic acid does really not possess the constitution which the theory of the compound radicals would assign to it, is proved by the fact, that this substance, when heated in a glass tube, yields mellon and water, and likewise hydrocyanate of ammonia. We have accordingly here, $C_3 H_2 N_4 O = C_2 N_4 + H_2 O$. Let us now consider the deportment of sulphocyanide of ammonium when subjected to dry distillation. This salt leaves a greyish residue, to which Liebig has assigned the name of *melam*. My experiments prove this substance to be simply a mixture of mellon and melamine."

These statements of M. Gerhardt I could consider in no other light but as an exposition of results which this chemist obtained during an actual investigation of the mellon compounds. I had the less reason to doubt this, as M. Gerhardt alleges that the results of his *experiments* led him to the conclusion, that the body to which I have assigned the name of *melam* is simply a mixture of mellon and melamine. Now this conclusion seemed to me at once to throw a very suspicious light upon the rest of the inferences and deductions contained in M. Gerhardt's communication to the Royal Academy; for melamine is readily soluble in hot water, whilst *melam* is not so; and again, the latter substance dissolves completely in hydrochloric acid, whilst mellon resists the solvent action of this acid. Yet, notwithstanding this, M. Gerhardt's statements on mellon and mellon compounds, induced me again to investigate these substances. In vol. 50, p. 1, of the *Annalen der Chemie und Pharmacie*, I gave a description of the order in which the chemical changes attendant upon the fusion of dry ferrocyanide of potassium, in conjunction with sulphur, occur, and stated that the process of transformation passes through three distinct periods. In the first period, sulphocyanide of potassium is formed, and protocyanide of iron separates; in the second period, sulphoprotocyanide of iron is formed, and in the third period, at a red heat, sulphuret of carbon is evolved, and sulphocyanide of iron formed, and the fused mass contains now mellonide of potassium. The mellon of the mellonide of potassium is derived here from the sulphocyanide of iron; sulphocyanide of potassium, by itself, suffers no alteration, even at the most intense red heat; it evolves no sulphuret of carbon; it yields neither sulphuret of potassium nor mellonide of potassium. As far as our present investigations will enable us to judge, the ignited ferrocyanide of potassium contains neither hydrogen nor oxygen, nor have we yet been able to discover the presence of either of these elements in sulphur or in iron. None of the products formed by the mutual re-action of these substances can therefore contain hydrogen or oxygen.

Now let us see what M. Gerhardt says to these experiments. Since January, 1844, M. Gerhardt has undertaken to publish a general report of the progress of chemistry, more particularly in foreign parts. The first number of these *Comptes Rendus* contains a promise to the effect that they shall fully deserve the epithets, "*complets, sérieux, et concis*." Well, strange to say, M. Gerhardt, in his report of my investigation of the mellon compounds, in these *Comptes Rendus* *complets*, gives only two of my methods for the production of mellonide of potassium, omitting the third and principal method altogether: this omission is, of course, simply *accidental*, I suppose. In a note to this report, M. Gerhardt states that none of my methods proved successful with him, although he made his experiment upon a whole pound weight of substance, and acted strictly according to my instructions; and moreover, that two other well-known chemists failed equally in this attempt. I do not wonder at this at all; far from it; yet I think I may venture to ask, *which* method did M. Gerhardt pursue to produce the mellon compounds, the analyses and formulæ of which he communicated to the Academy? Either he *did* succeed with one of my methods, and *did* really produce the salts which he professes to have subsequently analyzed, or he *did* not succeed with any of my methods, and consequently did *not* produce the salts nor analyze them. I can draw no other inference from his note. M. Gerhardt's report (*complets, sérieux, et concis*) of the formation of mellonide of potassium, and of the notions and views which I have formed respecting this substance, is as follows:—

"The results of these two methods (instead of three, as already stated) have led M. Liebig very naturally to the supposition, that sulphocyanide of potassium is resolved, at a high temperature, into mellonide of potassium, sulphuret of carbon,

and sulphuret of potassium." [Then follow the formulæ which illustrate this transmutation.]

"All this, although not proved, may be perfectly correct," says M. Gerhardt; "but does M. Liebig not bring another body into action in this process? Does he not dissolve his product in water! Without making the slightest alteration in the facts observed, we may replace M. Liebig's by the two following equations:—The sulphocyanide of potassium is resolved into sulphomellonide of potassium, ($C_6 N_4 S_2 K_2$) sulphuret of potassium, and sulphuret of carbon. Sulphomellonide of potassium, transposes with two atoms of water to double sulphuret of hydrogen and potassium, and mellonide of potassium, which latter, according to my [M. Gerhardt's] formula, contains the elements of mellon, water, and potass."

I have taken great trouble to find where the facts existed, which, without requiring the slightest modification, have led M. Gerhardt to the development of *his* views on the formation of mellonide of potassium, according to his formula; but I must confess, to my great regret, that my paper on the mellon compounds contains not one word of what M. Gerhardt makes me say on the formation of mellonide of potassium. I never found that sulphocyanide of potassium is resolved, at a high temperature, into sulphuret of potassium, sulphuret of carbon, and mellonide of potassium. I never asserted the existence of a sulphomellonide of potassium. I never observed the formation of sulphuret of potassium, nor of a double sulphuret of hydrogen and potassium, in the course of the process, nor did any other chemist!

What wonder that the same friend whom I have already mentioned should maintain that M. Gerhardt has tried knowingly and wilfully to mislead the chemists of France with regard to my observations and data. (My friend made use of even a far harsher term than "mislead.") Let M. Gerhardt endeavour to justify his conduct in this affair; if he fail to do so, it must be granted that my friend has very reasonable grounds for his strong remarks.

"The formation of the mellon salts," says M. Gerhardt in his *Comptes Rendus, complets et sérieux*, (page 27, January,) "does not enable us to decide this question. Let us see whether the analyses will do so."

"Were the mellonides free from oxygen and hydrogen, they ought to yield no water upon analysis."

"But all the recent analyses of M. Liebig prove that they *do* yield water. True, the salts of silver and potass yielded a somewhat less amount than my formula would require. This difference, however, may be fairly imputed to the incidental errors and defects of observation common to all analyses."

Now my paper on the mellon compounds states, upon this point, that mellonide of potassium contains altogether five atoms of water, of which four escape at 212° , and the fifth at $248-302^\circ$; that the escape of the last atom of water is attended with slight turgescence of the salt, which, when in fusion, forms a liquid of thick consistence, and solidifies to a crystalline mass upon cooling, contracting, at the same time, considerably, so as to form small crypts in the interior, which are filled with crystalline needles; and, finally, that mellonide of potassium when heated beyond its fusing point in close vessels, evolves nitrogen gas and cyanogen gas, and leaves a residue of cyanide of potassium.

I had consequently convinced myself that the dry mellonide of potassium, like the dry mellonide of silver, does not yield a trace of water. Now, while effecting the determination of the carbon, I had perceived the appearance of water upon the ignition of the mixture in the combustion tube; this might proceed from water contained in the examined compounds, or it might be hygroscopic water, the absorption of which it is impossible to avoid altogether in these analytical processes. The balance alone could decide this point, and I did not neglect to submit the matter to this test.

1.242 grammes of mellonide of potassium yielded, under these circumstances, eight and a half milligrammes of water; in a second experiment, 0.814 grammes of the same salt, yielded twenty-two milligrammes of water.

Were mellonide of potassium composed according to M. Gerhardt's formula, the first quantity should have yielded seventy-two milligrammes, and the second quantity fifty milligrammes of water.

2.194 grammes of mellonide of silver yielded thirty-one milligrammes of water, instead of ninety-eight milligrammes, which it should have yielded, were this salt composed according to M. Gerhardt's formula. These differences may, in M. Gerhardt's opinion, be fairly imputed to the incidental errors and defects of observation which are common to analyses of this kind!

"Finally," states M. Gerhardt, "M. Liebig's analysis of

hydromellonic acid likewise furnished this chemist with figures which controvert his theory. This analysis yielded—

1.—To 100 of carbonic acid, 19.62 of water.

2.—To 100 of " " 27.26 "

According to his own view, M. Liebig ought to have obtained only 6.82 of water to 100 of carbonic acid, whilst, according to my [M. Gerhardt's] view, the result should have been 13.64 of water to 100 of carbonic acid; but, instead of either, M. Liebig has obtained 19.62 and 27.27!"

Now, it happens frequently in life, that the most crafty deceit and the most ingenious wiles are brought to light by the merest accidents. The present is a case in point. Certain typographical errors have crept into my paper on the mellon compounds; the figures which I gave for the relative proportions of water and carbonic acid, produced upon the combustion of hydromellonic acid with admixture of potass, were misprinted. It results from my own journal that I obtained actually—

1.—To 100 of carbonic acid, 9.62 of water.

2.—To 100 of " " 7.26 "

I am firmly convinced, that the whole structure of perverted inferences and *invented* analyses which it has pleased M. Gerhardt to erect, is based simply upon these misprints; so that, in this instance, I have every reason to feel obliged to the carelessness of the corrector.

M. Gerhardt continues thus:—"Despite of all my objections, M. Liebig insists still upon the correctness of his original view. He may possibly be able to support his opinion by facts and reasonings which his paper does not contain, but this much must be obvious to any chemist, that the analyses which M. Liebig gives in his paper do not by any means support the correctness of his deductions. I intended to have delayed these remarks until after the termination of some experiments which I had commenced; but M. Völkel's attacks upon my note, (communicated to the Academy,) and the eager haste with which two French chemists have seized upon them—and this not without totally perverting their intended scope and bearing—have rendered it incumbent upon me to publish the truth immediately, and at once."—(*Comptes Rendus, complets, sérieux, et concis*, p. 29, Jan.)

At the same time that M. Gerhardt had thus brought to light the true value of my experiments, I received a letter from him, in which he entreats me to look upon his proceedings towards me in no worse light than they really deserve. He affirms, in this letter, that he deems these things mere trifles to me, and that he never intended to enter the lists against me, but simply to refute the malignant attacks of MM. Millon and Reiset. Of course I did not reply to this production, but I must confess, the way in which M. Gerhardt has chosen to protect himself from attacks appears to me of a novel description. To punish two estimable and clever chemists for presuming not to suppress, in their annual report, some adverse remarks of M. Völkel, upon one of M. Gerhardt's communications to the Academy, M. Gerhardt must needs select his own master—the man from whom, in the whole course of his life, he had received nought but kindness—as the butt whereat to aim his attacks. The results of the experiments which M. Gerhardt alludes to, (*Comptes Rendus, complets, sérieux, et concis*, p. 29, Janvier,) were subsequently communicated to the Academy by Messieurs Gerhardt and Laurent. (*Comptes Rendus, de l'Académie*, p. 680 September, 1844.)

I cannot let this occasion pass without offering a few remarks on M. Laurent, who has thought proper to associate himself with M. Gerhardt.

I consider M. Laurent one of the most talented and ingenious chemists of the present time; but, unfortunately, nature has also bestowed upon him so high an ambition, desire of power, and such jealousy, especially of his own countrymen, that he disdains even the most splendid results of his own labour, if he cannot shape them into instruments to deprive others of the honours which they are justified to claim as the reward of their conscientious labours; the successful labours of others are meritorious only in as far as they may contribute to his personal glory, whilst he looks upon their failures and mistakes as crimes for which no punishment can be deemed too severe. All the productions of his mind seem to have for their object to detract from the merit of others, and to cover himself, at their expense, with tinsel, like a stage hero. He considers the whole science centred in himself. And what is the result of his vain efforts to compel all other chemists to bow to his infallibility, and to circumscribe the exercise of their own faculties and judgment within the narrow limits that he would fain assign to them? His egre-

gious pretensions neutralize completely all the beneficial results which his labours would otherwise not fail to produce.

It is to this truly lamentable bias of M. Laurent's mind that we are indebted for the successive series of physical laws with which this chemist has pleased to enrich our science, and which are mutually opposed to one another. We German chemists have long since felt surfeited with these laws, and it is not so easy to induce us to swallow any more of them.

How dim appear even the brightest stars in the chemical horizon by the side of the refulgent luminary that shed its lustrous rays over M. Laurent's birth! Where are the physical laws discovered by Laplace, Berthollet, Gay-Lussac, Dulong, Chevreul, Dumas, Pelouze, Frémy, Malaguti, Péligot? They all sink into utter insignificance when compared with the immense wealth which M. Laurent has already showered, and still continues to shower upon us, from the inexhaustible mine of his wisdom! But alas, who can avoid his fate! Whilst M. Laurent endeavours to arrogate to himself an exclusive supremacy in science, he finds even his just claims and real merits altogether disregarded by other chemists. The one is, no doubt, just as wrong as the other; but such are the dispositions and passions of the human mind.

Thirsting thus for excessive admiration, ambitious, envious and jealous of others, M. Laurent discovered in M. Gerhardt a man of similar disposition, and the conclusion of an alliance between these two chemists was the consequence.

M. Laurent makes experiments which irrefutably prove the correctness of M. Gerhardt's observations and deductions, whilst M. Gerhardt, on his part, proves the infallibility of M. Laurent's dicta. The chemist of mixed descent (half German half French) undertakes the slaughtering of the Germans; whilst the other, of pure French blood, makes *autos da fé* of French heretics. It might be imagined, perhaps, that, to balance matters, M. Gerhardt favours the French, and that M. Laurent, on his part, smiles benignantly upon the Germans. But any such supposition would be altogether groundless. Thus, for instance, in my work on "Organic Chemistry," which M. Gerhardt has translated into French, I intended to acknowledge the great merits of certain French chemists. The following passage occurs at p. 1004 of the German edition of that work, in the chapter on fatty substances:—"The principle upon which organic investigations are based at present—viz., to subject a substance to a series of changes and modifications, to investigate the mutual connexion and relations of the latter, and to infer, finally, from the results of this investigation, the nature of the examined substance—this principle, I say, we owe to Chevreul. This principle led Chevreul upon the true path to numerous discoveries, and kept him safe from error at a time when there was nought but error and confusion in organic chemistry. At that time, when the high importance and value of this principle remained still unappreciated, observations and analyses were indeed made, but none that could serve to throw light into the impenetrable darkness. It was as late as 1824 when Dumas and Boullay applied this principle to the examination of the compound ethers, that its application to organic investigations gave the first impulse to the extraordinary development which chemistry has since then attained."

Now this whole passage M. Gerhardt has thought proper to suppress in his translation, without asking or caring whether this extraordinary mutilation was likely to be acceptable to me or not. The consequence of M. Gerhardt's conduct was, that I lost the friendship of one of the best and most noble of men.

The paper of MM. Laurent and Gerhardt (*Comptes Rendus de l'Académie*, tom. xxi. p. 679,) reports as follows:—

"A few months ago I had the honour to lay before the Academy a law on those organic compounds which contain nitrogen, arsenic, and phosphorus.

"This law is

"The sum of the atoms of nitrogen and hydrogen is, in all organic compounds, invariably divisible by four.

"Proceeding from this law, I was induced to repeat the analyses of several substances, the formulae of which seemed opposed to it. My experiments have proved its perfect correctness.

"I beg to call attention to the fact, that, with the exception of the mellonides, all other bodies, of which the purity was unquestionable, corresponded with this law.

"Now, M. Gerhardt has proposed the application of new equivalents, which have led him to controvert the correctness of the formulae given for the mellonides by M. Liebig. The latter chemist hereupon submitted these substances to a new examination, which has led him to maintain the correctness of his formulae for the mellonides.

"Mellon contains $C_{12}A_z$. This substance comports itself like cyanogen. The action of potass upon mellon causes the formation of mellonide of potassium, $C_{12}A_zK$, from which salt hydromellonic acid, $C_{12}A_zH_2$, is produced, by the action of acids. Hydromellonic acid, when heated, is resolved into mellon and hydrogen.

"This is the analysis of the able chemist of Giessen. If these formulæ are correct, it is impossible to conceive the formation of mellonide of potassium by the action of potass upon mellon; moreover, we have no instance of so singular a reaction as that which the hydromellonic acid shows at a high temperature. According to M. Liebig's formulæ, the mellonides contain neither hydrogen nor oxygen. The results at which we have arrived differ totally from those of M. Liebig, and correspond perfectly with the reactions of the mellonides.

"The mellonide of silver, dried at 266° , contains exactly one equivalent of hydrogen. This salt, and likewise the mellonide of potassium, contain two equivalents of oxygen. Finally, hydromellonic acid contains two equivalents of hydrogen and two equivalents of oxygen.

"The formulæ of these substances are as follow:—

"Mellonide of potassium . . . $C_{12}A_zH_2K O_2$ at 356°
 Mellonide of silver . . . $C_{12}A_zH_2Ag O_2$ at 266°
 Hydromellonic acid . . . $C_{12}A_zH_4 O_2$ at 356°

"We have, accordingly,

" $C_{12}A_z + H_2K O_2$ mellonide of potassium,

Mellon. Hydrate of potass.

at a high temperature,

" $C_{12}A_zH_2O_2 = C_{12}A_z + H_2O_2$.

"The correctness of these formulæ might, perhaps, be called in question. A single fact will suffice, however, to prove their correctness, and, consequently, the fallacy of M. Liebig's formulæ.

"If hydromellonic acid had the composition which M. Liebig assigns to it, it must lose, by the action of heat, one equivalent of hydrogen—i. e., one per cent. in weight. If, on the contrary, our formula is the correct one, this substance must lose from fifteen to sixteen per cent., by the action of heat.

"Now, hydromellonic acid, dried at 356° , loses in reality from fifteen to sixteen per cent. when exposed to a higher temperature, and the substance evolved in the process is not hydrogen, but water.

"If the great number of analyses which we have corrected be taken into consideration, and likewise the fact, that all these corrections confirm the equivalents of M. Gerhardt's and my law on the nitrogenous bodies, they will certainly be admitted at once, and thus we shall get rid of a multitude of hypotheses, which have too long impeded the progress of chemical science."

Now, a simple comparison with page 98 of the same *Comptes Rendus*, will show that these formulæ are the very same which M. Gerhardt had found by himself, nine months previously to this joint communication of MM. Laurent and Gerhardt, with this difference simply, that the addition of the temperature of $356^\circ - 266^\circ - 356^\circ$, at which the respective mellon compounds are stated to have been dried, impart an authentic character of actual facts to these statements.

Now, this communication of pretended facts and analyses may fairly be classed with such as my friend would brand at once as wilful forgeries, and as such they must be looked upon, unless MM. Gerhardt and Laurent be able to show where I ever stated that mellonide of potassium may be produced by dissolving mellon in potass ley; or that hydromellonic acid is resolved, by the action of heat, into mellon and hydrogen! These are mere inventions of MM. Gerhardt and Laurent!

The following remarks will serve to illustrate the degree of correctness which the formulæ of MM. Gerhardt and Laurent may lay claim to. In my paper, it is stated, at page 353, that 1.371 of mellonide of potassium yielded 1.012 of fused nitrate of potass, which corresponds to 28.51 of potassium.

Were the mellonide of potassium composed after MM. Gerhardt and Laurent's formula, this analysis would have yielded only 25.2 of potassium.

In my analysis of mellonide of silver, I obtained, by the ignition of the dry salt, 53.03 per cent. of silver. If this salt contained the silver in the state of oxide, and, moreover, one equivalent of water, as MM. Gerhardt and Laurent would make us believe, it would have been impossible to obtain more than 49.9 per cent. of silver from it.

But what proves most clearly that MM. Gerhardt and Laurent never made a single experiment upon mellon and its compounds, are their statements with respect to hydromellonic acid.

I could not give an analysis of this compound in my paper, since I failed in my attempts to obtain, free from admixture of potass, the white substance which is precipitated from mellonide of potassium by the action of acids, and which I have described under the name of hydromellonic acid. Now, disregarding altogether the fact that their substance is an acid salt, composed of $C_{12}N_{12}H_2K$ } this body is yet the only one that

MM. Gerhardt and Laurent could possibly allude to when talking of hydromellonic acid. But this substance dried at 356° , loses, when exposed to a higher temperature, not one per cent., nor fifteen or sixteen per cent., but eighty-three per cent., and the evolved portion does not consist of hydrogen, nor yet of water, but is a mixture of hydrocyanic acid, cyanogen gas, and nitrogen gas; the residuary seventeen per cent. consists of cyanide of potassium.

Had MM. Gerhardt and Laurent actually produced (as they affirm) the substance which has hitherto been taken for hydromellonic acid, I deem it altogether impossible that they could have failed detecting the potassium which this substance contains.

Besides this acid salt, $C_{12}N_{12}H_2K$ } there exists still another salt, which may be readily prepared by adding to a concentrated

hot solution of neutral mellonide of potassium, dilute hydrochloric acid, until the white precipitate, which forms at first, is re-dissolved. The salt in question crystallizes subsequently in minute scales; it contains 22 per cent. of potassium. If we attempt to withdraw from the so-called hydromellonic acid the whole of the alkali, by the protracted action of acids, this substance is resolved into new compounds which are soluble in water, the process of decomposition being attended, moreover, with the formation of ammonia. If, therefore, the analyses of the mellon compounds, which MM. Gerhardt and Laurent have corrected! be taken into consideration, together with the fact that all these corrections do not confirm the equivalents of M. Gerhardt, nor M. Laurent's law of the nitrogenous compounds, chemists may still hesitate to admit these corrections, and must manage with the old hypotheses, which accelerate the progress of the science by affording to the latter some security against hasty and fallacious deductions and conclusions. The law of MM. Gerhardt and Laurent, or rather what these gentlemen are pleased to call by that dignified name, is utterly wanting, in every essential quality of a true physical law.

What is an atom of nitrogen, phosphorus, arsenic! We are altogether in the dark upon this point; and as to the equivalent of nitrogen, this is still a matter of doubt and dispute among chemists. These things are mere assumptions, upon which no physical law can possibly be based. If Berzelius, instead of his laborious investigations, had pursued the same short and easy road as these gentlemen; if, instead of devoting years of toil to the task of advancing and establishing the science, that great chemist had contented himself with arbitrary alterations of Richter's and Wenzel's results, where would MM. Laurent and Gerhardt be! That there may be a grain of wheat hidden in the dunghill they have raised, I willingly believe, and I deem it very meritorious to endeavour to find and bring it to light; but it is truly pitiable to see these co-partners strutting about on the dunghill like conceited cocks, and to hear them cackle forth to the listening crowd of simple chickens a marvellous tale about the beauty, magnitudo, exquisite flavour, and other excellencies of the said grain. The most rapid growth in nature proceeds silently. The truly wealthy speak least of their possessions.

These so called laws are at best but rules, which may stand until exceptions are discovered. I now leave M. Laurent, and return to M. Gerhardt.

To expose the system of action he has adopted fully, I deem it necessary to call the attention of chemists to the remarkable work which M. Gerhardt has published under the title of "Précis de Chemie Organique." Paris. 1844.

Subtract from this precious "Précis" the beautiful ideas of Persoz, and what remains!—a monument of the grossest fallacies that have ever appeared in print, and withal of the most audacious and unbounded licence. Every page furnishes proofs of this assertion: let me select a few.

At page 430 of the French edition, M. Gerhardt treats of allanturic acid, to which he assigns the composition $C_3H_4N_2O_4$; and to this he appends the following annotation: "The formula of M. Pelouze— $C_{10}H_{14}N_8O_{10}$ —corresponds to the formula $C_3H_4N_2O_4$, which I, by converting the decimals into units, express by $C_3H_4N_2O_4$."

The reason for which M. Gerhardt makes this alteration is explained in the next page—

"MM. Liebig and Wöhler describe, under the name of mykomelinic acid, a product of the action of ammonia upon alloxan: this product is, to all appearance, identical with the allanturic acid of M. Pelouze. If this supposition be correct, as we believe it is, we may assume that the action of ammonia upon alloxan produces first water and allantoin, and subsequently urea and mykomelinic acid— $C_2H_4N_2O_3$."

I have just now shown how M. Gerhardt manufactured his formula for allanturic acid; by the same trick he has succeeded in translating our (Professor Wöhler's and my own) formula for mykomelinic acid, $C_8H_{10}N_8O_8$, into $C_2H_4N_2O_3$! Two things may be learned from this—viz., 1, the art of getting at correct formulæ; and, 2, an easy method of proving the identity of two substances.

To find the correct formula for a substance, it is simply necessary to divide by any given number the proportions calculated from the analysis of the substance in question, and should this lead to fractions, to convert the latter into units. The process of proving the identity of two substances is now of marvellous simplicity; it is a close imitation of the shoemaker's system, whose shoes fit everybody alike: if the feet happen to be too large for the shoes, he cuts off the toes and heels, and if too small, he stuffs the superfluous space with straw. That allanturic acid is colourless, and deliquescent in the air, (*Précis*, i. p. 431,) whilst mykomelinic acid is yellow, and insoluble in water, has, of course, nothing whatsoever to do with the matter, according to M. Gerhardt's notions.

This, perhaps, may suffice for a picture of M. Gerhardt; but I will still add a few finishing touches.

In the same manner in which M. Gerhardt manages to prove the identity of allanturic acid with mykomelinic acid, he converts the formula of ammelide, $C_6H_2N_2O_3$, as found by myself, and confirmed by Knapp, into $C_3H_4N_4O_2$. ("Précis de Chimie Organique," vol. i. page 442.)

A short time ago, Professor Wöhler and myself described a peculiar process of decomposing urea, in which we obtained a substance that, like ammelide, was resolved by the action of alkalis and acids into ammonia and cyanuric acid, but differed in its composition from ammelide.

To the report which M. Gerhardt gives of this new substance in the *Comptes Rendus*, *complets, concis, et sérieux*, he appends the following remarks:—"MM. Liebig and Wöhler look upon this substance as new; this supposed new substance is, however, simply ammelide. I have made several experiments upon it, and, among others, I have produced and analyzed the silver salt of Knapp, which is composed of $C_3(H_2Ag)N_4O_2$. Had MM. Liebig and Wöhler looked to the formulæ for ammelide given in my work, they would have seen at once that the properties of their supposed new body correspond perfectly with those of ammelide. I shall shortly take occasion to prove the identity of the two substances in a paper on the mellonides which I intend publishing."

Finally, M. Gerhardt adduces the following experiment:—"If urea is exposed to the action of a gentle heat, pure ammonia and carbonate of ammonia alone are evolved, and the residue consists of pure ammelide."

But it most singularly happens that our new substance is produced by distilling urea very rapidly, and at the highest possible temperature. With regard to M. Gerhardt's statement concerning the composition of Knapp's silver compound, it has evidently escaped his memory that he had already, at page 442 of his "Précis," found his new formula of ammelide, by dividing by 2 my formula of this substance, and converting the fractions subsequently into units, and that he had thus already arrived at the discovery of the ammelide which is produced by the decomposition of urea.

Dr. W. Hofmann, in his paper on the investigation of the organic bases in coal-tar, (*Annalen der Chemie und Pharmacie*, vol. xlvii. p. 18,) after stating that he had felt inclined to consider leucol as identical with chinoline, remarks, that this view is opposed principally by the deportment of the former substance with chromic acid.

Whereupon M. Gerhardt, in his *Comptes Rendus*, *complets, concis, et sérieux*, p. 31, January, asserts at once, "I have also reason to believe that the leucol of Runge is identical with chinoline;" of course without making the slightest mention of what Dr. Hofmann had stated on this point.

Dr. Hofmann has, since then, found means to clear the objection which the deportment of leucol with chromic acid raised against the assumed identity of leucol with chinoline. He has not, as yet, published his recent observations, and thus M. Gerhardt has still an opportunity left him to vindicate his conduct in this affair, by fairly stating the reasons that induced him to believe in the identity of leucol with chinoline.

Every chemist knows M. Wertheim's excellent paper on the oil of garlic, (*Annalen der Chemie und Pharmacie*, vol. li.) and, likewise, Dr. Will's paper on the oil of mustard, (*Ibid.*, vol. lii.) At the conclusion of his paper, Dr. Will points out the relations existing between the oils of garlic and mustard, in the following words:—"Wertheim's investigation contains, as I believe, the key to the constitution of the oil of mustard: if we consider this oil as a sulphocyanide of allyle, we shall get the following series:—

Allyle	C_6H_5	
Oxide of allyle	C_6H_5O	{ (produced by Wertheim.) oil of garlic.
Protosulphuret of allyle	C_6H_5S	
Sulphoprotocyanide of allyle	$C_6H_5S_2Cy$	oil of mustard."

These remarks speak for themselves; every body must see at once what Dr. Will intended to convey by them. This chemist would have spoken more explicitly had he succeeded in his attempts to convert the oil of mustard into oil of garlic, by means of potassium. But this discovery was reserved for M. Wertheim, who has thus enriched chemistry with one of the most beautiful proofs of the existence of compound radicals.

M. Gerhardt's *Comptes Rendus*, *complets, concis, et sérieux*, contain an account of these investigations of MM. Wertheim and Will; but in this veracious report, every allusion to the relation which Dr. Will points out as existing between the oils of garlic and mustard is most carefully avoided. M. Gerhardt had then already resolved to use the existence of this relation between the two substances as the foundation of a discovery of his own; indeed, the very next number of his *Comptes Rendus* contains the announcement of this discovery. "En faisant réagir du potassium sur l'essence de moutarde, j'espérais enlever le cyanogène ainsi qu'une partie de soufre et mettre l'essence d'ail en liberté. Mes prévisions se sont entièrement réalisées. C'est une jolie expérience de cours."

If we subtract the formula of the oil of garlic from that of the oil of mustard, there remains sulphur and cyanogen in this proportion, that potassium ought to form sulphocyanide of potassium, on the one hand, (with the sulphur and part of the cyanogen,) and cyanide of potassium, on the other hand, (with the rest of the cyanogen.) The oil of garlic C_6H_5S contains 66.31 per cent. of carbon.

The proofs which M. Gerhardt adduces in support of his assertion, that he did actually succeed in converting the oil of mustard into oil of garlic, appeared to him quite irresistible. One of these proofs is, that the product of the distillation of the oil of mustard with potassium yielded only 58.8 per cent. of carbon, instead of 66.31 per cent.; (no mention whatsoever being made of a determination of the sulphur;) and another of these proofs is, that the residue contains neither sulphocyanide of potassium nor cyanide of potassium.

It will be seen from this, that M. Gerhardt's discovery of the transformation of the oil of mustard into oil of garlic is surprisingly simple; with the exception of the proof furnished by M. Gerhardt's organ of smell, all other proofs speak directly against his assumption; but what do such proofs signify when the subject in question is to verify one of the most important facts in chemistry!

M. Wertheim has recently published his experiments on the transformation of the oil of garlic into oil of mustard, and, *vice versa*, of the latter into the former: these experiments suffice to determine the real worth of M. Gerhardt's experiments.

With respect to the manner in which M. Gerhardt has ventured to treat M. Berzelius, (*Comptes Rendus*, *complets, concis, et sérieux*, Feb., p. 64,) I am altogether unable to find words sufficiently strong to express my indignation.

M. Gerhardt's conduct, for the last few years, has appeared to me that of a freebooter, who, from his ambush, (the *Comptes Rendus*, *complets, sérieux, et concis*), falls upon and plunders the quiet traveller, and then decks himself in his spoils. But this cannot be allowed to proceed further. In another paper I intend to discuss M. Gerhardt's theories, and I will here only add in a note the reclamation of Professor Mitscherlich, of Berlin, which will give some notion of M. Gerhardt's right to claim as his own those parts of his theories which are of real value.*

* M. Gerhardt reproaches me with having taken from him the idea of the elimination of the water atoms and persistence of other atoms in their original position. Now the fact is, that I announced and developed this idea even as early as 1834, in Poggenдорff's "Annalen," vol. xxi., and subsequently more fully in many places of my Manual, and more particularly at p. 269, third edition, 1837. I shall feel greatly obliged to you, if you will have the kindness to make this answer to M. Gerhardt's charge against me known to the readers of the "Annales de Chimie," who might else, perhaps, remain in the dark in this matter.—*Extrait from a letter of Professor Mitscherlich to Monsieur Dumas, Annales de Chimie*, vol. xv. p. 503.

ON THE CAUSES AND TREATMENT OF CHOREA.

By WILLIAM SMITH, Esq., Surgeon, Bristol, Fellow of the Royal Medical and Chirurgical Society of London.

CHOREA is a disease frequently presenting itself to the medical man, and sometimes exceedingly obstinate and unyielding in its relations to curative measures; but in this country it rarely terminates fatally. Our treatment here is to some extent empirical, but yet, if examined upon the slender knowledge which we possess of the efficient causes of its singular symptoms, we must allow that it is highly rational. Chorea seems to be generally co-existent with an extremely irritable state of the nervous system. It most frequently occurs in children verging on puberty, and in whom the sensorial development bears an undue relation to the glandular organization. We shall be better enabled to examine the subject if we consider the temperament or habit which should be found in childhood, and the artificial condition which civilization has unfortunately too frequently produced. It may be observed, that a certain temperament, in the widest sense of the word, can be assigned to each epoch of life. On the Continent, especially in Paris, death sometimes occurs in chorea, and the state of the brain, revealed by the post-mortem examinations, quite bears me out in the view of the disease which my prior observations induced me to take. In fact, I consider the disease as one of increased nervous action, deriving its source directly from too much stimulation of the nervous system and brain especially, or indirectly, from want of that normal excitement which should be found in the glandular and secreting apparatus in childhood. And this leads me to make a few remarks on the peculiar temperament of children, and on the gross deviations from it, the result of a mistaken education, which frequently occasion this and many other more fatal diseases. In infancy and childhood, the lymphatic temperament may be said to predominate. The complexion, even in those who have been exposed to atmospheric influence, is less tinted than at any other period of life. The eyes and hair are, during this period of life, of a lighter colour. The glandular system is largely developed, in proportion to other parts of the frame. Growth and nutrition are the chief cares of provident nature in this season of life. The pursuit of trifles, where even disappointment brings but momentary regret, feelings of little intensity, passions of but shallow depth, these fill up the measure of the thinking and feeling being of infancy and childhood. This mental and moral quietude, unvexed by thoughts save those which arise in the pursuit of innocent pleasures, and unannoyed by the painful pangs of after-life, leaves to the mere vegetative and animal existence a broad field for development, and time and opportunity for the creation of form and beauty.

These facts lead us to some important practical considerations. Thus, to attempt either by violent bodily or mental exertion to rapidly develop the physical or mental functions is very injudicious; for the nutritive and visceral activity, if circumscribed and arrested by the forced development of the locomotive apparatus, and of the brain and nervous system, must suffer. It leads to debility, atrophy, and disease; and hence, in infancy and childhood are often laid the foundations, not merely of chorea, but of prolonged and severe diseases. Do we not every day witness the most distressing instances of the worse than foolish attempts, on the part of parents, to develop the minds of their children at a premature age? If a spark of wit flash from the lips of the precocious infant, it perceives that its parents are in ecstasies of joy, and they are not slow in rewarding its proficiency. If reasoning, worthy the acuteness of a sophist, gladden the ears of the father, the ill-reasoned "sharpness" of the child meets with a reward, instead of a check. If the memory be rendered vastly retentive, by adding line on line, and date on date, the delighted friends glory in the imagined future, when the mental stores of their offspring shall have rendered him illustrious. Alas! that future rarely ever comes. A literary gladiator and practised debater, before infancy is over—or perhaps already "crammed" with sufficient chronology, arithmetic, and "useful knowledge," for two much older heads—the child has forgotten that it is such, and all the innocent pleasures of this epoch of existence are merged in a spirit of rivalry and emulation. With this forced development of the intellect, the passions endeavour to keep pace, and all the pangs and cares of manhood crowd on the monstrous abortion.

The parents see, at length, the feeble limb, the hectic cheek, the disordered stomach, and the irritable temper of the young hypochondriac. They conceive that their child is like all

other geniuses, "an original," but still, this will not account for the positive ill-health. The proper treatment now would be to let the unhappy creature rest, to endeavour to check the determination of blood to the head and nervous system which your education has produced, and again to restore to the nutritive system the tone and vigour it has lost. Symptoms of chorea may come on, but rational treatment will soon overcome them. Even epilepsy or fatuity may be partially or entirely recovered from. But is rational treatment usually appealed to? No! Instead of quiet and judicious moral and therapeutic measures being employed, a new species of excitement is brought into play. The "physical education" system is called in—the calisthenic and gymnastic exercises are substituted for the catechisms of sciences and the grammars of languages. The feeble limb and unresisting muscle are stretched and tortured; the poor child does not take the amount of exercise to which Nature impels it, but emulation and harsh command supply the place of that wise and kind instructress. The consequences are obvious: the little vital store which the excited brain and nervous system have not pilfered from the organs of nutrition, is stolen by the inflamed and lacerated muscular tissues. The work of destruction is rendered doubly sure, and all the healthful progress of mind and body arrested. From such a system, nothing can result but a race of imbecile and irritable men and women, who will propagate, for the curse of other centuries, progenies still more feeble.

But frequently they are not allowed to linger out even this miserable existence: sometimes epileptic convulsions, but more frequently phthisis, commencing with an ill-conditioned state of the mucous membranes, particularly that of the stomach, destroy them on the threshold of life.

As a fruitful source of chorea must this system of education ever be considered. To illustrate slightly the morbid conditions of this disease, and to afford still greater proof of the excitement of the brain, which generally accompanies this disease, as well as from the important sketch of the symptoms which they contain, I shall here direct the attention of your readers to two cases of chorea terminating fatally, extracted from the *Journal für Kinderkrankheiten*, of February, 1844.

"Chorea, in its worst form, is nearly always fatal, and every year, in the Parisian hospitals, young girls die of it. It commences with frightful symptoms, generally suddenly, and without appreciable cause. Of the two cases detailed below, one occurred at the Hôpital Cochin, under the care of Dr. Blache, and the other was observed by Dr. Trousseau, at the Hôpital Necker. Both cases were reported by the latter gentleman.

Louise L.—, aged fifteen and a half years, a domestic servant, was admitted to the Hôpital Cochin, on the evening of the 21st of January, 1840. She is nearly fully formed, and although small, is tolerably strong and well made. She has never suffered from any serious illness, and has been perfectly exempt from headache, or inflammatory attacks of the brain. She has menstruated for one year, but only twice during that period, and the last time was on the 12th of January, and then but very sparingly. She has generally been cheerful and lively; but for the last week an alteration has been remarked in her speech, and an inaptitude for her usual employments.

On the morning of the 18th she was attacked with headache and vomiting, of the later of which she had before complained. Soon afterwards she was unable to direct her steps, and her illness being evident from the singular movements, which were continually occasioning fright and derision to other children, she was removed, on the 21st, to the hospital.

The symptoms of the disease were now fully manifest, and presented the following appearances:—Continual movements of the extremities, of the tongue, and muscles of the face; the eyelids open and shut, and the eyes are constantly revolving in the orbits; the mouth shares in the motion of the rest of the face; and she bites the sides of her lips alternately. Her answers to questions are painfully slow; the intellectual faculties are unaffected; the appetite is good; there is no soreness on the course of the spine. On both sides of the body the movements appeared with equal rapidity and irregularity; the arm, if supinated, became quickly pronated; the hand and fingers were flexed, but moved rapidly, as if playing on a stringed instrument. Ten leeches were applied to the anus, and an aperient clyster administered. The movements continued during the night, and were so violent that the bed shook. It was difficult to imagine that the patient had slept, although she asserted that she had. During the day she felt a great lassitude, especially in the muscles of the face.

She was placed in a sulphur bath, of the temperature of 27° Reaumur, (93° Fahr.) After this, she was for some time

tranquil, then the convulsive movements became more violent, and at length complete paroxysms ensued.

On the 26th, the following clyster was administered, and the whole body was washed in cold water: infusion of valerian, four ounces; the yolk of an egg; assafetida, one drachm: mix. In the evening, the movements became very violent. A mixture of camphor and musk was given, but in spite of this, the symptoms increased in severity.

On the 27th, the patient slept for an hour, during which the movements ceased, yet she was highly delirious during her sleep, frequently calling to the other patients, and woke from it in a state of great excitement. She wished to eat, and after taking a few spoonfuls of food, she experienced momentary tranquillity. She is unable to drink: after many painful efforts, if she at length bring the cup to her mouth, the fluid is passed to the fauces, but no effort of deglutition succeeds. The next morning, the poor child presented a pitiable spectacle. The whole body was bruised and excoriated, from the continual motions. She uttered screams indicative of great suffering, although she did not complain of pain, but of general lassitude and weariness; she spoke of a choking sensation, but could now drink, which she did with avidity. She was placed in a bath of the temperature of 24° Reaumur, (86° Fahr.), and then the cold affusion was again used; this being the third time it had been employed. A transient amendment was observed after each time. After putting her in a strait waistcoat, to avoid, if we could, any further self-inflicted injuries, she was placed back in bed. No relief was experienced. Five hours afterwards, without giving her any notice, she was plunged into a cold bath, lifted out, and again plunged six times consecutively; but in spite of this active treatment no permanent benefit was observed. An hour afterwards, twenty leeches were applied to the inner part of the thigh; as soon as these began to suck, she became more tranquil, and enjoyed some sleep during the night.

On the 28th, a marked improvement manifested itself. In the evening, a douche of three buckets of cold water was employed, after which she became tranquil. The improvement lasted during the 29th, on which the douche was repeated. This state of quiet continued, and the patient only complained of a sore throat.

On the 30th, the same treatment was continued, with the same favourable results. The following mixture was also ordered to be taken:—Tartrate of antimony, four grains; camphor emulsion, six ounces; mix, and take a table-spoonful every hour. The tranquil condition continued during the evening, the patient stating that she was quite comfortable.

Some anomalous movements were again observed on the 31st, together with great soreness of the throat, hoarseness, and stiffness of the muscles of the neck.

February 1st, she became somewhat feverish; the pulse low.

On the 3rd, the movements recommenced in all their severity, and during the bath, became so powerful as to render it necessary to hold her. Her night was passed in a very restless condition, with some delirium. Sixteen leeches were applied to the thigh: these drew a large quantity of blood, without any visible amelioration in the symptoms. During the next night she screamed loudly. A draught, containing two grains of tartarized antimony, was given her, which produced copious vomiting, and evacuations by stool.

On the 8th, the movements again attacked the face and eyes. A draught, containing four grains of tartrate of antimony, was given. She vomited twice, but no purging ensued.

On the 10th, the symptoms increased in a very alarming manner. During the night, the fever became very marked; in the morning she sobbed and cried, but this could not be considered as indicative of pain, as none seemed to be present. During the day, she took four pills of extract of belladonna, each containing the fifth of a grain. The symptoms, however, increased in severity, and the grinding of the teeth, with the convulsive movements of the cheeks and lips, produced literally foaming at the mouth. In the evening, a draught containing half a grain of musk was given her.

On the morning of the 11th, she was more tranquil; the features, however, had a sunken and contracted appearance; the irritation increased during the day; the features became much distorted, and the screams were fearful; this excited condition lasted during the whole night; the intelligence is not, however, affected.

On the 12th, perfect prostration was evidently commenced; the countenance was livid and distorted; the eyes fixed; some marked movements are still observed in the face and hands; there is a loud rale in the trachea, and a sub-crepitant rhonchus heard at the lower part of the chest; the lungs are evidently congested; the pulse is tolerably quick, but yet not

depressed; the skin is still warm; the sensorium is unaffected; she answers rationally; the tongue is moist, and deglutition easily performed; complains much of thirst. A large blister was applied to the chest, and sinapisms to the legs. A draught containing two grains of kermes mineral was given. The excitement produced by these means recalled for a short time the departing powers of life, but without permanent good effect, as she died in the middle of the day.

Post-mortem examination.—*Cranium:* the membranes are highly injected, and are adherent to the cerebral surface in their whole extent; the veins of the pia mater are distended with dark-coloured blood; there is a distinct effusion of blood on the pons Varolii; no portion of the brain was ulcerated or absorbed, notwithstanding the complete adhesion of the pia mater; the convolutions are rather flattened, and a red tint is observable in the cortical substance, which increased on the access of air. Not the slightest alteration could be perceived in the medulla spinalis or its membranes, although examined with the greatest care.—*Thorax:* the inferior portion of the left lung is the seat of undoubted congestion; in one very circumscribed spot, pneumonia, in the first stage, is perceptible.—*Organs of generation:* the hymen is present; the os uteri is of a whitish colour; the posterior surface of the aperture of a reddish-brown hue; the cellular tissue of the body of the uterus is hyperæmic, and in places reddened with infiltrated blood; the left ovary exhibits the mark of a slight ulceration on its outer surface; internally, the Graafian vesicles lie at various depths, one lying very near the surface. The stomach and viscera do not appear to have been examined—an omission much to be lamented.

CASE 2.—*Maria M*—, aged sixteen years, has menstruated since her fourteenth year; has felt herself unwell for the last eight months from the suppression of the menses, in consequence of a cold which she caught at that period. In December, 1842, without any other previous illness, she was attacked with irregularity of articulation, and rapid spasmodic movement of the lower jaw. In the same manner the whole of the left side began to be affected with chorea, the movements being particularly observable in the fingers and toes. Eight days subsequently the right side was attacked, although with less severity; the hearing became obstructed, especially on the left side; double vision occurred, and the left eye became very weak; she speaks with difficulty; the sensorium is unaffected; she halts with the left side to a great extent. The left leg seems, in fact, quite unable to support its share of the weight.

Treatment.—A bath; three pills to be taken during the day, each containing one sixth of a grain of strychnine.

January 12th.—For three days the patient has taken the half of a grain of strychnine in the three pills, without any other effect than a slight numbness in the lame side, and a little diarrhoea. This day she took two-thirds of a grain in each pill, and, after the second dose, she was seized with tetanic spasm, which lasted an hour, and during which she suffered great pain. The next morning the abnormal movements were lessened, and on the left side scarcely any could be perceived. At the same time, neither the sight nor the movements of the jaw have returned to a healthy condition, and the hesitation in the speech continues. The former quantity of strychnine was ordered in the three pills. By the middle of the day the chorea had so improved, that when I stood at the bed-side of the patient I could perceive no movements. It is worthy of remark, that the double vision totally disappeared immediately after the tetanic symptoms occurred, although the rolling of the eyes, and the movements of the eyelids, continued till this morning.

18th.—All the natural functions are performed without disturbance; the movements have ceased entirely. The strychnine was now discontinued.

The result of our treatment up to this period was as remarkable as it was satisfactory. In a few days, one of the severest cases of chorea had ceded to the action of the strychnine. The disease had, in fact, totally disappeared, and we were far from anticipating the melancholy career which it had yet to run.

On the 21st, I found our little patient again tossing to and fro with the peculiar movements of chorea. It had recommenced with a fright caused by the death of a woman in the adjoining bed. This had occurred the day before. During the night, the excitement had considerably subsided. Strychnine was again employed, and the chorea disappeared even more easily and quickly than on the former occasion. All went on well till the 27th, when the patient received a very distress-

ing letter from some friends. A more marked attack supervened than either of the previous ones. For the four following days the movements continued, and the strychnine seemed to have lost its controlling powers. I therefore considered it best to suspend its employment, a determination which I have since regretted. I ought to have persevered with it, after witnessing the favourable results which had twice followed its employment. As opium, however, had in many cases done essential service, I no longer hesitated to give it a trial. I commenced by ordering three grains of the sulphate of morphia in two ounces of simple syrup; about half a tea-spoonful to be frequently taken, till tranquillity and sleep should have ensued. On the third day we found that the excitement had increased, and not a moment of rest or sleep had been obtained. Six grains of the sulphate of morphia were now ordered in the two-ounce mixture, and as no improvement was manifested at the third dose, the quantity was increased to ten grains. On the fourth day, the motions were still more alarming. The skin of the elbows and arms is excoriated. Other parts of the body, from being dragged hither and thither on the bed, are much reddened. Meanwhile, the morphia has procured two hours' sleep, during which, however, the movements continued without the slightest improvement. Encouraged, however, by the appearance of the sleep, I increased the narcotic salt to one scruple, yet, in the course of the day, the movements augmented to a fearful extent; the arms much swollen, bleeding, and bruised, and looking as if attacked with phlegmonous erysipelas. She dashes her limbs against the bed-posts with tremendous force; the body suddenly arches backwards, so as to form a convexity in front, exhibiting that form which in tetanus would be denominated "opisthotonos;" but this condition is only transient, and the very reverse, or "emprosthotonos," takes place. The head is incessantly rolled from one side to the other. If anything be given her to drink, she endeavours to seize it, being very thirsty, but she has lost all power of directing it to her mouth, and strikes with her forehead, nose, eyes, or lips against the vessel which is offered to her. Her tongue is bruised and lacerated by frequent bites with her teeth.

A sulphur bath was ordered, with subsequent cold affusion, and the dose of morphia to be increased. It required the strength of four strong individuals to hold her in the bath, and they did it with difficulty.

After the bath, the patient slept for a short time; but immediately afterwards the excitement became worse than ever. The skin, throughout its entire extent, is excoriated and red. The incessant movements, in a single day, completely destroyed a bed-covering of very strong linen. As the convulsive movements continued with the same intensity on the following day, and as life could not long endure such suffering, I changed the opium for antispasmodics. In the evening, a restless sleep commenced, which was followed by great nervous excitement and delirium. The patient imagined that she was oppressed by some heavy load, and frequently called out, "I am suffocating!"

A loud râle was now audible over the whole chest; the face was pale; the skin hot; the pulse full, and of moderate frequency. Soon afterwards, she fell into a deep coma, and died the next morning.

Upon examination, there was found great excoriation of the skin, and infiltration of blood into the sub-cutaneous cellular tissue. There were sloughs on the left ankle and right elbow. In the brain, there was a slight congestion of the vessels of the pia mater, with distention of the sinuses. No fluid in the ventricles; the membranes are healthy; and after a minute examination of all parts of the brain, no other morbid appearances can be discovered. Nothing abnormal could be discovered in the spinal cord or its membranes. There is a slight congestion of the posterior portion of the lungs, and a quantity of mucus in the bronchial tubes."

In a case which not long since fell under my observation, the patient was a little girl, aged seven years, of extreme intellectual powers for one of such tender years. Her replies to my questions were so remarkably sharp as completely to astonish me. The bowels were inactive; the tongue flabby and pale; she suffered from slight headach; the forehead was extremely prominent; it was feverishly hot. The treatment in this case consisted in the employment of gentle purgatives,—of sulphate of zinc in small doses, both from its stimulating effect on the mucous membrane, and from its general tonic character—a very useful drug in this disease; of cold water, especially applied to the head, from which, also, blood, in very small quantities, was sometimes subtracted by a leech or two. The patient speedily recovered.

Treatment.—The treatment, therefore, in this complaint, must be directed to the following points:—

1st.—Mental and moral quietude. All attempts to excite the intellect or feelings to be avoided. The extreme excitement about the brain to be subdued by occasional slight local depletion,—by the application of cold water, and by keeping the hair short.

2ndly.—The normal activity of the intestines and stomach to be restored, first, by an emetic of sulphate of zinc, to be followed by the employment of brisk purgatives of castor oil, and oil of turpentine; subsequently, small doses of sulphate or oxide of zinc.

3rdly.—General tonic measures. Amongst these, cold water holds the highest place. It should not, however, be applied so as to give a violent shock to the nervous system; but applied either with a sponge or gentle shower-bath.

4thly.—All measures which would have a tendency to congest the brain are to be avoided. Hence, I would not advise opium, except in cases where all tendency to congestion of the brain, or its membranes, is clearly absent. Even in these cases, camphor, in grain doses, may be advantageously substituted.

As before observed, cold water must not be employed in the terrifying and violent manner which was evidently its mode of employment in the cases translated from the foreign journal. All its beneficial effects may be obtained by a gentle shower bath; or if this cannot be borne, by sponging, or friction, for five minutes, in a wet sheet. Warm-water pediluvia must not be neglected, as the state of the feet bears an important relation to the condition of the brain. The exercise should be such as nature prompts, and that only. No "physical education" quack should be permitted to rack the feeble muscular fibres; and above all should be observed the golden maxim of the great Latin physician, that the exercise should be "citra fatigationem."

As a general rule, spirits, beer, and wine, from obvious reasons, should be avoided. In one case which I attended, I found the mother gave the patient, a very young child, strong beer, and spirits and water, "to brace the nerves," as she expressed it. This, of course, augments the cerebral excitement to a great extent. Sometimes, however, a little ale may be given with advantage. Strychnine may, when used with great caution, produce beneficial results; but when other means will succeed, we are not justified in the employment of such a powerful poison.

Additional remark.—I would beg to call the attention of your readers to the second case of chorea which I have translated, as to the cause of the two relapses—a fright and an unpleasant letter, both powerfully affecting the feelings. Upon some future occasion I trust to bring before their notice a sketch of a peculiar temperament, the "neurotic," and its great connexion as a predisposing cause of this and other diseases of the nervous system.

Bristol, January, 1846.

REPORTS OF CASES OF DISEASE OF THE HEART AND OF ANEURISM.

By SAMUEL FENWICK, Esq., Surgeon, North Shields, Lecturer on Anatomy and Physiology at the Newcastle-upon-Tyne School of Medicine and Surgery.

TUBERCULOUS DISEASE OF THE HEART.

CASE 1.—A man, aged 45, suffered from symptoms of typhus fever. When I saw him, nine months afterwards, his appearance was strongly indicative of phthisis. He complained of cough, with copious expectoration, œdema of the legs, and great emaciation, which had affected him ever since his recovery from the fever. The pulse was frequent and feeble, and he had once spit blood. The chest was, from accidental circumstances, but hastily examined. The sound, on percussion, was much duller on the left anterior chest than on the right at its upper part. On the right anterior chest, a dull sound commenced at the fourth rib, and extended downwards to the lower edge of the liver, which was felt projecting below the costal cartilages. Posteriorly, the resonance of both sides pretty equal and natural, excepting that dulness commenced inferiorly on the right side at the same point as on the front. Mucous râles existed on both sides, excepting over the dull part of the right chest, where respiration was absent. The heart's sounds were not noticed, nor its extent ascertained by percussion. He sank a few days after the examination.

Diagnosis.—From the general symptoms, it was concluded that the patient was affected with phthisis, and this view was

apparently confirmed by the comparative dullness on the upper and anterior part of the left chest, accompanied by mucous râles.

Autopsy.—The left lung was firmly tied to the chest by adhesions, requiring considerable force to separate them. Anteriorly, at the part where the dullness on percussion had been observed, there was a mass of false membrane, about three lines in thickness, and at various parts throughout the substance of this membrane were oval patches of tuberculous matter. The right lung was also adherent as low as the fourth rib, below which, the cavity of the pleura was filled with serum containing flocculi of lymph. This lung had no covering of false membrane. The substance of both lungs was healthy, excepting a few scattered tubercles, mostly hard, and of old formation. The heart was covered anteriorly by a layer of false membrane, of the same description as that which existed upon the left lung. The cavity of the pericardium was completely obliterated. Tuberculous matter was deposited in large masses beneath the lining membrane of the ventricles, and throughout the thickened pericardium, but none was apparent amongst the muscular structure, although it in many parts encroached on the walls of the ventricles. Valves all healthy. Liver rather enlarged, and of a nutmeg appearance. Spleen adherent to the surrounding parts, but otherwise healthy. Other viscera healthy.

Remarks.—First. It is probable, either that the cardiac affection was produced by the fever, or that what was termed typhus had been latent pericarditis, and that the patient being of a scrofulous diathesis, the deposition of tuberculous matter had taken place in the false membranes, in the same way as phthisis often follows congestion or inflammation of the lungs in such persons. I have, however, in other cases, seen deposits of tuberculous matter in the heart, where no other appearance of disease could be detected. 2ndly. The general symptoms were those of phthisis, and when taken in connexion with the local dullness and bronchitis, were quite sufficient to induce the diagnosis of that disease. This case is an exemplification of a class of cases we not unfrequently meet with in scrofulous constitutions, in which gradual thickening of the pleura takes place, with very slight disease of the lungs themselves. Bronchitis is almost always present along with the general symptoms of phthisis, and were it not for the friction sound in an early stage, and the usual position of the dullness in the posterior and inferior part of the chest, it would be exceedingly difficult, if not impossible, to diagnose it from tubercular deposition in the lung.

CARDITIS AND ENDOCARDITIS.

CASE 2.—A man, aged 30, of sanguine temperament, had been ill for two or three weeks, and at the time I saw him was labouring under great dyspnoea, cough, copious frothy expectoration, general œdema of the body, and fever. There was great anxiety in the expression of his face, the pulse was extremely weak, irregular, and intermittent, and he was frequently attacked with alarming syncope. He had been affected with rheumatic fever six years before, and at that time had suffered from violent pain of the side and other symptoms, apparently arising from pericarditis. Since that period he had been subject to palpitation of the heart, dyspnoea on exertion, œdema of the legs, &c. Percussion over the heart gave a very extensive degree of dullness, but it extended chiefly towards the sternum, and not high up, as in hydro-pericardium. No undulatory impulse. The heart had a violent struggling action, with occasional intermittence; the sounds very obscure, and unattended with any abnormal murmurs. No dullness on percussion over the lungs, but mucous râles universal. He died a week after the examination, in one of the attacks of syncope, and spit blood during the last two or three days of his life.

Diagnosis.—From the struggling action, the absence of fluid, and the general history of the case, adhesion of the pericardium was supposed to exist. The lateral increase of dullness, and the previous symptoms, indicated enlargement of the heart. As no soufflet could be distinguished, it was imagined that no sufficient grounds existed for supposing valvular disease; and in absence of this complaint, the general distress, the state of the pulse, and the obscurity of the sounds, could only depend upon softening of the structure of the organ, with the probable formation of polypi in its cavities, both of which were therefore diagnosed.

Autopsy, thirty-six hours after death, (latter end of November.)—Body generally œdematous, and putrefaction of the skin already commenced. On cutting into the right chest, a quantity of very fetid gas escaped with a whizzing noise. None in the left chest. About a pint and a half of dark

bloody fluid existed in the right, and a little clear-coloured serum in the left pleura. Both lungs apoplectic, especially the right; the upper lobes were principally affected, looking like bags of blood. Pericardium seemed as if too small for the heart, which was greatly increased in size. Adhesions existed at its upper part, and also in different points of its lower surface. The adhesions, however, seemed old formations. Heart exceedingly soft; left ventricle vastly dilated and hypertrophied; mitral valve thickened, of a dark-red colour, and looked like a tumid ring; chordæ tendinæ knotted and thickened; adherent polypi in the cavity of the ventricle; aortic valves thickened, and covered with lymph; left auricle of enormous size, but not much hypertrophied; right auricle in the same condition; right ventricle dilated, and the tricuspid valve affected in the same manner as the mitral, but in a less degree. Pulmonary valves soft, but otherwise healthy. Liver congested and soft. Kidneys break down into a pulp, as though they had been macerated for a week.

Remarks.—This case presents two principal points for investigation—1st. Did the softening of the heart exist during life, or was it the result of decomposition? The presence of fetid gas in the pleura and the state of the skin seem to support the latter, but if the hæmoptysis, the continued struggle, frequent attacks of syncope, and peculiar state of the pulse, be considered, the former view will seem most probable. 2ndly. Why did no murmur exist with such a diseased condition of the valves? This may be explained by the exceedingly weak and imperfect contractions of the heart impelling the blood either in very small quantities or with a very slight degree of velocity. The absence of a murmur, however, is not dependent upon these conditions alone, as, in other instances, I have heard a bruit alter its character, intermit, or be absent altogether, even when the heart acted freely, and the valves were considerably diseased. At the post-mortem examination, and consequently after the diagnosis was written, Mr. Owen, to whose kindness I was indebted for the opportunity of seeing this patient, stated that he had ascertained the existence of a murmur previous to my examination. As a contrast to this case I have selected the following:—

DISEASE OF THE AORTA.

CASE 3.—A seaman, aged forty-four, had been for some years subject to violent pains of the shoulder, vomiting, and symptoms of dyspepsia. When he came under my care, he was affected with ascites, and œdema of the lower limbs and scrotum. The œdema first commenced, but had been removed by diuretics; the ascites remained, and after the lapse of a month or two the anasarca re-appeared; skin and conjunctivæ yellow; violent pains of the abdomen, and other symptoms of diseased liver; the extent of dullness in the heart's region was greater than usual; the action irregular and intermitting; first sound loud and ringing at the apex, and obscured at the third rib by a loud rasping murmur, which decreased downwards; it sounded very near to the ear all along the upper part of the sternum; second sound loud and clear; pulse full, but rather jerking.

Diagnosis.—Pericardium natural; no effusion; heart enlarged; left ventricle hypertrophied and dilated; structure natural in consistency; mitral valve perhaps a little thickened, but able to perform its functions; aortic valves thickened, but close perfectly; aorta possibly dilated; it will be found extensively incrustated with bony matter; right ventricles and auricles enlarged.

Autopsy, forty-four hours after death.—Heart enlarged; structure rather flabby; pericardium natural; left ventricle affected with dilatation and hypertrophy; mitral valve slightly thickened, but closes perfectly; columnæ carneæ hypertrophied; aortic valves quite healthy; aorta healthy, excepting two small depositions of ossific matter at its origin, the larger not more in diameter than a fourpenny-piece; both auricles rather dilated; right ventricle dilated, but both the tricuspid and pulmonary valves healthy; liver enlarged, knotty externally, and internally of a fibrous texture; other viscera healthy.

Remarks.—From the perfect state of the second sound at the third rib, it was pretty evident that the aortic valves were able to perform their function, but the thickening of their texture was erroneously inferred from the greatest intensity of the murmur, with the first sound, being immediately over them. The chief point of interest, however, connected with the case, is the very small amount of disease which was sufficient to cause so loud an abnormal sound, and had not the symptoms of hepatic disease been exceedingly obvious, it might have led to as much mistake in treatment as it did in diagnosis.

ANEURISM OF THE LEFT AURICLE.

CASE 4.—A maltster, aged forty, had, for a considerable period, suffered from cough and expectoration, when, on lifting a heavy sack of malt upon his shoulder, he experienced a sudden pain of the side, accompanied by faintness and sickness. Nine months afterwards, his symptoms were cough, great dyspnoea, general oedema of the body and blueness of the face, but this latter not to any very great extent. The heart's space, on percussion, was found extensive, and irregular in shape, but did not extend so high as in hydro-pericardium. Both sounds of the heart deadened, and the first accompanied, near the apex of the heart, by a bellows murmur, which was only audible over a space the size of a five-shilling piece. As the weakness of the patient increased, the murmur gradually altered its character, so that, shortly before his death, it was noticed as an almost continuous sound, most audible during the ventricular systole.

Diagnosis.—From the sudden attack of faintness during exertion, it was imagined a rupture of some internal part had occurred, and the bruit at the apex of the heart seeming to indicate regurgitation through the mitral valve, disease following rupture of that part was diagnosed. From the extensive dullness on percussion, and the deadness of the sounds, hypertrophy was supposed to exist.

Autopsy.—I was unfortunately prevented from seeing this examination, but learned from Mr. Stephens, under whose care the patient was, at the time of his death, the following particulars. The pericardium was natural; the heart generally enlarged; the valves healthy. Projecting from the side of the left auricle was a tumour, the size of a small orange, which, on being cut into, was found communicating with the cavity of the auricle, and almost completely filled with the fibrinous coagula usually found in arterial aneurisms.

Remarks.—This case is exceedingly interesting in three points of view.—1st. From its rarity. Mr. Thurnam, in his collection of seventy-four cases of aneurism of the heart, mentions only one of the sacculated description as having occurred in the auricle. 2ndly. On account of the healthy condition of the mitral valve, it having been hitherto invariably found, that aneurism of the auricle has been connected with a contracted state of that valve, preventing the ready exit of blood from the auricle. 3rdly. On account of the difficulty which would be experienced in the diagnosis of a similar case. The bruit with the first sound had been caused by the flow of blood through the neck of the sac during the diastole of the auricle, but being conducted by the parietes of the heart, was most audible at its apex. As the sac, after death, was found almost filled with coagula, the continuous sound was probably produced by the friction of the particles of the blood against the fibrinous clots during both the contraction and dilatation of the auricle. None of the general symptoms would be sufficient to afford us any guide in detecting a future instance of the disease, as they are merely those which usually arise from obstructed circulation. Although a soufflet is not unfrequently found localized near the apex in mitral regurgitation, yet its gradual change into an almost continuous sound of a different character might lead us to suspect some more rare affection of the heart. If, in addition, we should discover irregular enlargement on percussion, and the sudden faintness during or after violent exertion, aneurism of the auricle might be presumed to exist.

ANEURISM OF THE THORACIC AORTA.

CASE 5.—A bricklayer, aged forty-two, was attacked with pains and a sensation of weight upon each shoulder. These symptoms continued for some months, when a slight tumour showed itself on the right side of the sternum, near the second or third costal cartilage. I first saw him sixteen months after the commencement of his illness. A tumour, the size of an orange, existed over, and to the right of, the sternum, whilst around it there was extensive dullness on percussion. The swelling was elastic, and pulsated with enormous force; no bruit either with the sounds of the heart or over the tumour; first sound of heart deader than usual. The tumour gradually increased in size, until the costal cartilages became absorbed, when, not being confined anteriorly, it very rapidly enlarged; the veins over it were distended, and a week or two previous to his death the surface of the tumour became inflamed, and afterwards blackened to the extent of three inches in diameter. Towards the close of life, the respiration was exceedingly laborious, and on examination, a crepitation was heard in the lower and posterior part of the right lung. The power of vision was gradually lost, and he died in a state of coma.

Diagnosis.—Hypertrophy of the heart; aneurism of the aorta at its origin, and softening of the right lung, from compression by the tumour.

Autopsy.—The tumour was formed by an aneurism arising from the origin of the aorta, and projecting through an opening in the right side of the sternum. It was filled with fibrine, deposited in layers, and contained, also, a large quantity of coagulated blood. The left ventricle was thickened; no valvular disease. Both lungs greatly engorged and softened, more especially the right, which was compressed by the aneurism.

Remarks.—When a thoracic aneurism appears externally, its heaving impulse is sufficient to explain its nature; where, however, as in this case, much coagulum exists, a bruit is usually absent. It is well worthy of remark, that the first, and, for some time, the only symptoms complained of, were pains about the shoulders. Sympathetic pains are frequently too lightly treated, and I have seen very serious mistakes in diagnosis arise from so doing. I have known the pains of the leg produced by a popliteal aneurism treated for many months as rheumatism, until the size of the tumour in the ham accidentally attracted attention. The character of such pains is, however, totally different from rheumatism, being usually remitting and very violent during the time they are present. Some years ago a patient came under my notice, who complained solely of violent shooting pains in the shoulders and neck. They had resisted all the treatment employed for his relief. On examination, a small tumour was found at the right sterno-clavicular articulation, which proved to be an aneurism. From these and similar cases which could be brought forward, we may lay it down as a practical rule, that wherever violent lancinating or shooting pains exist about the shoulders, the condition of the heart and great bloodvessels should be carefully examined.

ANEURISM OF THE ABDOMINAL AORTA, SIMULATING CALCULUS IN THE BLADDER.

CASE 6.—A person, aged thirty-two, was admitted into the Newcastle-upon-Tyne Infirmary, in September, 1838, under the care of Mr. Greenhow. He complained of violent pain at the glans penis and pubic region during and after micturition, also of pain in the region of the kidneys, and at the scrobiculus cordis. Urine red, depositing a thick sediment; tongue white, and appetite bad. His illness had been of two years' duration, and was attributed to distress of mind. The symptoms appearing to indicate the presence of a stone in the bladder, a sound was introduced, but no calculus could be detected. Five days after his admission, he was seized with sudden faintness, the countenance became anxious, the voice whispering, the pulse exceedingly feeble, and the stomach rejected all food. On attempting to rise from his bed, three days afterwards, he was again attacked with sudden fainting, from which he never rallied, but died in a few hours.

Autopsy, thirty-six hours after death.—The abdomen was found filled with blood, which had proceeded from the bursting of an aneurism of the aorta. The tumour was the size of a large orange, and had produced caries of the bodies of the vertebrae, on which it rested, and to which it firmly adhered. The heart was enlarged; the left ventricle hypertrophied, and the tricuspid valve thickened. No calculus in the bladder, and no appearance of disease in any of the urinary organs.

Remarks.—1st. This case presents an instance of a fact frequently observed in the practice of medicine, that an irritation applied to a nerve is often only indicated by pain in a distant part. Here the pressure upon the aortic plexus produced the usual symptoms of calculus in the bladder, by means, we may suppose, of the communications of the aortic with the hypogastric plexus of nerves. 2ndly. It would appear, from the sudden depression observed five days after his admission, that the aneurism had burst at that time, but that the hæmorrhage had been arrested by natural means until three days afterwards, when the fatal rupture took place.

ABDOMINAL ANEURISM.

CASE 7.—A keelman, aged forty-two, of sanguino-nervous temperament, was admitted into the Newcastle-upon-Tyne Infirmary, under the care of Dr. Bates. He complained of violent pain, occurring usually in the morning, and extending from the left loin to the groin and thigh. The pain caused him to bend forwards on the thigh, and was not increased by pressure on the loin; retraction of the left testicle during the continuance of the attack; pain on passing urine, which contained no albumen, and was otherwise healthy. The symptoms gradually increased in violence, the pain extending

down to the left leg, and the paroxysms taking place three or four times a day, and relieved only by opiates. One morning, when suffering from his usual attack, he was observed by the other patients in the ward to be fainting, and expired a few minutes afterwards.

Autopsy, thirty hours after death.—On laying open the abdomen, an immense collection of blood was found behind the peritonæum, extending downwards into the pelvis. It had displaced the intestines, and pushed forward the left kidney. On removing the blood, an aneurism of the aorta was discovered about an inch below the cœliac axis. It had burst on the left side, at the back part, by a ragged hole. The sac, which was about six inches long by four broad, had, by its pressure, caused absorption of the greater part of the bodies of the two last dorsal and two first lumbar vertebrae, as well as the heads of the two last ribs. It appeared to be a true aneurism, and contained no coagula. The remains of the bones just mentioned formed a part of its posterior wall, and the blood contained in it must have been in contact with the two last dorsal and two first lumbar nerves of the left side. No calculus existed in the kidney nor ureters, and the viscera were generally healthy.

Remarks.—In this, as in the preceding case, pain was experienced in micturition, probably from the irritation of the sympathetic; but from the greater absorption of the bones, in the present instance, the spinal nerves had also been pressed upon, giving rise to violent pains in their extremities. The nerves, thus exposed, being those usually affected in calculus of the kidney, the symptoms were well calculated to give rise to the supposition of the existence of that disease. The absence of albumen in the urine being ascertained, the abdomen was examined, and it is difficult to explain how an aneurism of this size could escape detection. From the detail of the last three cases, we find that there are no general symptoms characteristic of aortic aneurism, but that, depending upon pressure on the neighbouring parts, they vary with the situation of the disease. As, however, there is no species of dangerous disease so frequently overlooked, we should lay it down as a practical rule, always to examine the aorta by the stethoscope, whenever the symptoms indicate an affection of the contiguous organs, the nature of which may happen to be obscure.

Dockinray-square, North Shields, November, 1845.

REPORT OF A CASE OF CHYLOUS URINE*

SUCCESSFULLY TREATED WITH THE BARK OF RHIZOPHORA RACEMOSA, OR MANGROVE, A TREE INDIGENOUS TO BRITISH GUIANA.

By GEORGE REGINALD BONYUN, M.D., M.R.C.S.L., Georgetown, British Guiana.

THE species of mangrove which I am desirous of bringing to the notice of European practitioners, grows commonly on the sea-coasts, the banks of the rivers as far as the tide extends, and the sides of the salt-water canals of this province. It attains the height of from twenty to thirty feet, with about six or eight inches diameter of trunk; the branches are rather diffuse with terminal tufts of pale-green, rather fleshy leaves, and axillary panicles of insignificant white flowers; the bark is smooth and reddish when fresh cut.

Several species of this genus—as the rhizophora mangel and rhizophora candel—are known to possess astringent properties, being used in some places for tanning. The bark of the rhizophora racemosa has been long known and appreciated by the negroes, in some parts of this province, as a sovereign remedy in inordinate discharges of urine, but has not, to my knowledge, been hitherto brought to the notice of the profession.

Before detailing the case of paruria incocta, I may remark, that the disease is by no means uncommon in the West Indies, is very frequently fatal, and as difficult of treatment as the diabetes mellitus, of which it is evidently a modification.

CASE.—H. K—, aged thirty-one, creole of Demerara, good constitution, bilious temperament, has enjoyed good health for several years; on the 8th of May observed that his urine was turbid, and of a brownish colour; this turbidity increased from day to day, until the urine acquired a milky appearance, and was slightly increased in quantity; he gradually lost his strength and appetite. Took tincture of iron drops three times a day.

June 8th.—Urine decreased in quantity, quite white, and coagulating immediately after being passed, so as to resemble blanchmange; dreadfully weak; little appetite; costiveness; dry skin; emaciation; low spirits; no perspiration at any time during the day. Took balsam of copaiba, liquor of potass, Scio turpentine, and other medicines, without any relief.

July.—Symptoms the same; much emaciated. Took indigo in ten-grain doses, and restricted himself to meat diet, with milk for drink. Temporary relief for a short time, when all symptoms returned. Took Dover's powders in ten-grain doses, and applied a blister to the spine.

August.—Kept reclining posture, persisted in meat diet, and took wine of iron. At this period felt great thirst.

5th month.—Took calomel and opium to salivation; then infusion of bark, with rhubarb and cinnamon, and then soda and ammoniacal gum, without experiencing the slightest benefit, the urine continuing to coagulate firmly, and a considerable quantity of mucus being likewise discharged from the urethra. About the end of the fifth month, took compound rhubarb pill and ipecacuanha, when an amelioration of all the symptoms took place; the urine became limpid and natural in quality; there was no thirst or inclination to drink, and a very trifling perspiration. In three days all the symptoms returned. He continued the rhubarb and ipecacuanha, and took, at the same time, quinine and iron, but experienced no further relief.

In the sixth month, abandoned the meat diet, but ate very little, and took for his drink a very small quantity of milk-and-water. Took infusion of angostura, with carbonate of iron, and likewise citrate of iron and quinine. General health somewhat better, urine remaining the same.

The seventh month: very much emaciated; general health miserable; cramps during the night; not the slightest perspiration; a loathing of fluids. Tried infusion of bucha with soda, hydriodate of potass and various indigenous herbs, without relief.

At the end of the ninth month, took benzoic acid, increasing the dose from ten to twenty grains three times a day; general health rather better during a week, and then became as bad as ever. Also took Pareira brava with no benefit.

Tenth month.—Went into the country; no medicine nor particular diet, excepting an abstinence from strong drink. After being in the country three weeks, was in the following state: urine, three pints daily, passed at four or five times, mostly in the evening, white, firmly coagulating, and separating, after remaining some hours, into a substance resembling curds and whey; no odour nor saccharine taste; the mucous discharge, which was hitherto only produced by exertion during the day, now came on an hour after rising in the morning, with great prostration of strength; tongue furred and dry; eyes suffused; lips parched; excessive languor and debility; slight perspiration occasionally; more inclination to drink, and appetite rather better; violent cramps during the night; greatly emaciated, but still able to move about a little. Took decoction of cashew bark, (*anacardium occidentale*), and thought himself slightly relieved for a time, but the symptoms returned and continued with violence until the middle of March, the eleventh month, when, by the advice of an old negress, he took decoction of rhizophora bark, in ounce doses, four times a day. After two days, urine appeared, immediately after being passed, like ill-prepared camphor mixture, and coagulated imperfectly; general health rather better. In five days, (the same treatment being continued,) urine not coagulating, more limpid, with flowing particles of mucus; perspiration gradually increasing; appetite better and more natural; felt generally much improved. In seven days, felt so well that he discontinued medicine for two days, when symptoms began to return, urine to coagulate, &c. Medicine was resumed in increased quantity, and continued for several days, until all the symptoms entirely disappeared, and the patient was restored to perfect health. After remaining in good health for some time, Mr. K— was again attacked, and had again recourse to the mangrove bark, from which he experienced immediate relief, but being obliged to visit the town, and not having a sufficient supply, the disease increased upon him considerably, but was arrested as soon as he procured the medicine.

Within the last few months, this gentleman, in whom there appears to be a strong tendency to this peculiar disease, has had another attack in a modified form, the urine being similar to fresh milk in odour, taste, and appearance, and separating by application of wine into curds and whey. The use of the bark restored him immediately. It may be observed, that although he has had two slight returns of the disease, it has

* Paruria incocta of Mason Good—Study of Medicine, vol. vi, third edition, p. 512.

never been able to make head so as to affect his general health to any extent, or diminish his power of undergoing fatigue.

The very great benefit derived from the use of this bark induced me to try it in a case of increased flow of urine, occurring particularly during the night, with languor, indisposition to work, loss of appetite, &c., which I had under my care for some time, without being able to effect any amelioration. A wine-glassful four times a day for three days entirely checked the inordinate flow of urine, and restored the patient to health.

I have used this medicine with several other patients, and I have reason to think with benefit; but the cases have not come sufficiently under my notice to enable me to give a proper account of them. If the mangrove bark is proved to have a specific effect upon the assimilating functions, to a derangement of which I think it most probable these peculiar abnormal excretions owe their cause, it will prove to be a valuable medicine, and is therefore well worthy of being properly tested in the hospitals of Europe.

George Town, British Guiana, May, 1845.

A REPORT OF THREE CASES OF DIFFICULT LABOUR.

By JOHN H. HOUGHTON, Esq., M.R.C.S.E., Surgeon to the Dudley Dispensary.

On the 26th of May, 1843, I was desired by the relieving officer to visit Elizabeth L—, aged forty, seven months advanced in pregnancy. I found her a good deal exhausted from a profuse draining, which had existed seven or eight days, but without pain. The os uteri could just be reached; but the presentation could not be made out. I ordered her some acid with opium, and cold cloths to vagina—gave directions respecting diet, and perfect quiet of mind and body, and left her. On the following day, the bleeding had agood deal abated; there had been no pain, and the beating pain in the head, with intolerance of light and sound, from which she suffered a good deal yesterday, was much relieved, and she seemed much better.

On the 28th, I found that she had lost a large quantity of blood in the night. She was much more exhausted, and the head symptoms had returned. She had a rapid feeble pulse, and pallid countenance, but no pain. On examination, I found the os uteri as large as a crown-piece, and flaccid; the placenta completely over it, and the head of the child was felt through it. I gave her some brandy, gradually introduced my hand, ruptured the membranes, dilated the os uteri, turned the child, and brought it away. The operation took some time, and some difficulty was experienced in extracting the head. After it, she was much exhausted. Breathing, sighing; pulse faltering, and at times imperceptible; the placenta came off without difficulty; the uterus contracted firmly, and the hemorrhage entirely ceased.

In the course of an hour and a-half the pulse had become equal and regular, and permanently so. She was much revived; she spoke with more power, and the countenance was much improved. The breathing, however, at times, was rather sighing. She had taken a good deal of brandy. I directed her to be kept quite quiet; not to be allowed to move or speak, or to see any person except the woman I left with her, and whom I directed to give her milk-gruel as often as she would take it, and a little brandy-and-water frequently. She went on favourably for an hour or more, when her husband would go up to see her. She raised herself up a little, made two attempts to speak, became restless and excited, and died in five minutes.

On the 1st of March, 1845, I was requested to see Mrs. S—, in the absence of a medical friend, under whose care she had placed herself. She had been flooding for a fortnight, for which she had been confined to her bed, and taken medicines. I had previously seen her, with Mr. Wright, (whose patient she was,) on account of the hemorrhage; but at that time the presentation could not be made out. I now found the os uteri low down, and somewhat dilated; the placenta over the os, and the hemorrhage going on. The bleeding had not produced any serious effect on the constitution. I immediately ruptured the membranes, and turned and brought away the child, without much difficulty. The child was dead. She took a little spirit during the operation. No serious symptoms followed. She herself attributes her quick recovery to the large quantity of milk-gruel she took after her delivery. She has had three children previously; never flooded before; but after the first child she had adhesion of placenta.

On the 16th of December, 1845, I visited Mrs. D—, aged twenty-seven. She is a fine-grown, stout, healthy woman, with a florid complexion—her fifth pregnancy. Her previous labours have been natural. She thinks that she is at her "full time," but does not know, as she has not menstruated since her last confinement. She was quite well till the 14th at noon, when, without much pain, the membranes ruptured; and this was followed by a very profuse gush of "water;" after which, slight and irregular pains came on at long intervals. On the 15th, at night, flooding commenced, and has continued till now without much pain.

Dec. 16th.—Eight P.M.: She has lost a good deal of blood, but the loss has not produced any serious symptoms; countenance not very pale; pulse 100, regular, soft, without much power; pain in the head, better when she sits up, worse when she lies down; os uteri as large as a shilling, soft and thick, and reached with great difficulty; head felt through parietes of uterus; some discharge and some clots; pains slight and unfrequent. Tight bandage to abdomen. Ordered, ergot of rye, a drachm; boiling water, a pint; infuse, and administer half an ounce every half hour.—Ten P.M.: Draining and clots continue; pains came on half an hour after first dose, and continue regularly, but not strong; head a little lower; os uteri as before. Cold to vagina.

17th.—Two A.M.: Head and os lower down; placenta felt at edge of os in front; less bleeding; pulse 112, regular.—Eight A.M.: No bleeding of importance since two o'clock; it has now quite ceased; pulse 100, regular, with more power; she has had some sleep; pains less strong; medicine has not been given regularly; she has felt the child within the last hour.—Eleven o'clock: At nine she had a rigor, with return of pain and flooding, which has continued till the last three pains; pulse 104, feeble, regular. At half-past eleven she was suddenly seized with pallor, faintness, and vomiting, and restlessness. On examination, the placenta fills the os, and the head has receded; good deal of flooding; pains less severe; os as large as half-a-crown, firm but dilatable. I immediately commenced dilating the os, and in half an hour brought down the feet, and delivered; considerable difficulty was experienced as the uterus grasped the child by a kind of band, (hour-glass contraction!) As the bleeding continued and urgent symptoms threatened, I detached the placenta as I passed my hand up, after which the bleeding quite ceased, and did not return. Some spirit was given freely during the operation. From the appearance of the child she was seven months advanced. In a quarter of an hour the colour returned to the face and lips, which are now not very pale; voice moderately strong; pulse 100, feeble, but regular; good deal of thirst; no bleeding. Whilst I write, sudden pallor and faintness seized her, followed by vomiting and great restlessness; arms tossed about, "wind-mill fashion;" respiration, sighing—and for half an hour I thought she would die. Spirit and strong milk-gruel were given freely, after which she rallied. For three hours I sat on her bed, and fed her copiously with milk-gruel, which she took freely. At three P.M. considerable reaction had taken place; pulse 100, regular but very feeble. I left her in charge of a good nurse, who kept constantly feeding her with gruel; the room was darkened, and no one was allowed to see her. The head was laid as low as possible, and the legs and thighs well raised and supported on pillows; this latter was done when the sinking commenced.—Nine P.M.: She has gradually improved; countenance and lips less pale; skin warm; pulse 120, feeble; tongue dry, good deal of thirst; urine not passed; great intolerance of light and sound, with beating pain in the head; strong after-pains. Ordered, opium pill, one grain, to be taken immediately, and repeated in four hours. Continue the gruel.

18th.—Very good night, slept soundly at times; countenance cheerful, not very pale; pulse 37, regular, feeble; urine passed; tongue moist, less thirst, she has taken plenty of gruel; very little discharge; severe beating pain in the head, with intolerance of noise and light; soft murmur with first sound of heart, which is feeble; voice firm. To be carefully moved. Ordered, sesquicarbonate of ammonia, ten grains; tincture of opium, ten minims; camphor mixture, an ounce. Mix for a draught, to be taken every four hours.

19th.—Though carefully moved by four assistants, she fainted, but soon rallied; countenance cheerful, but pale; pulse 37, feeble; tongue moist; appetite good; bowels not opened; head symptoms better; slight whitish discharge. An aperient, and continue. From this time her recovery was continuous to the present day, (Dec. 29th,) when she is going on favourably, in all respects.

Remarks.—Little need be said of the three cases above cited. The first two are cases of common placental presentations, in

which the ordinary treatment was adopted—in the second, with complete success, in the first, with a fatal result. I think there cannot be a doubt that the immediate cause of death was the excitement and exertion caused by her husband's imprudence in going to see her; added to this, she had, for some time past, suffered considerable deprivations. It is probable that a more favourable result might have obtained, but for these two circumstances; for during the whole of the time the symptoms were not so urgent as in the third case.

In case three, the placenta was not over the os, but close to its edge. As the hæmorrhage continued after the discharge of the "waters," and as the os was so high up as only just to be reached, the ergot seemed indicated, and it produced a favourable progress till eleven A.M., on the 17th, up to which time I trusted she would be delivered by the natural process, as the head descended slowly, and the hæmorrhage gradually ceased. At this time symptoms recorded induced me to repeat my examination, when I found the placenta almost plugging up the os. This, and the other symptoms, proved that there could now be no doubt that immediate delivery was imperatively called for; but the firm (hour-glass ?) contraction of the uterus on the child, offered a serious obstacle to an easy and speedy delivery; and as the hæmorrhage still continued, I determined to detach the placenta as I proceeded. With the detachment of the placenta, the hæmorrhage immediately and entirely ceased, and did not recur. Might delivery have been left to nature, after the detachment of the placenta? From subsequent reflection, I think that very probably it might; for the bleeding never recurred, and I conceive that delivery by the natural process would not have made a more serious demand upon her strength than the painful and tedious operation of turning. At the time, however, and under the urgent circumstances, I feared to leave the woman undelivered longer than I could help; as, at the time, the loss of a very small quantity of blood might have turned the scale against her.

I consider the detachment of the placenta to have been a most important step in this case, as it put a complete stop to the hæmorrhage by which life began to be threatened; and I am disposed to think that had delivery been effected in the ordinary way, and had the hæmorrhage continued, as it most probably would have done, during the operation, that death might have resulted. I, for one, feel thankful to Drs. Redford and Simpson for having called our attention to the propriety of detaching the placenta; and I believe that in placental presentations, where turning would be found impracticable, or very difficult, or in which the balance is so nearly drawn as to render immediate arrest of hæmorrhage important, the detachment of the placenta will be found to be of great service.

Dudley, December, 1845.

THE TREATMENT OF UTERINE HÆMORRHAGE.

By JOHN CRAIG, Esq., M.D., Paisley.

IN THE LANCET for Nov. 22, 1845, p. 558, two cases of supposed pregnancy at the third month, accompanied with hæmorrhage, are reported as having been attended by Dr. Hall Davis. I have little to say regarding the mode of treatment pursued by Dr. Davis, in the management of these two cases; indeed, in the first of them there was some reason to be alarmed respecting the safety of the patient, and in my opinion the treatment was prompt and judicious as far as the mother's safety was concerned. It gives me much pleasure to observe that so experienced and active a physician as Dr. Davis should, along with Professor Murphy, take the lead, in the metropolis, of administering opium in uterine hæmorrhage—a medicine of the greatest utility in such cases. The successful issue of those cases that are treated by the employment of suitable doses of opium, compared with others in which it is not used, will, I entertain no doubt, compel those practitioners whose minds are still prejudiced against the employment of this salutary drug in uterine hæmorrhage, to administer it in order to preserve their own reputation.

From the efficient manner in which Dr. Davis advises the application of the plug in hæmorrhage, accompanied with symptoms of abortion, there can be little doubt of its efficacy; but so far as my experience extends, it is never necessary in the early stages of pregnancy; and from the Doctor's own statements, it must be injurious in some cases, for he maintains that its operation not only arrests the discharge, but excites the action of the uterus to throw off its contents. In Dr. Davis's two reported cases of supposed pregnancy, threatening miscarriage, he informs us that he plugged the vagina, and gave ergot of rye, with the view of bringing off the contents of the uterus. In the early part of my experience in the

management of such cases, when considerable discharge had taken place previously to my being called to the patient, and especially when the discharge was accompanied with considerable pain of back and lower portion of belly, abortion, in almost every instance, was the result.

Latterly, however, several cases of a similar description have come under my care, and two of them very lately. The first of the two latter cases had flooded partially for several days before I was called to see the woman, but the day on which I made my first visit the hæmorrhage was alarmingly profuse, accompanied by severe pain at the lower part of the abdomen; the pulse could scarcely be felt; the skin was cold, and the countenance shrunk. The woman was in the fifth month of her pregnancy, and the motions of the child were distinctly felt. On examination, the os uteri was not at all dilated; but the uterus, above the pubis, felt like a round very hard ball. I enjoined that the patient should be kept perfectly quiet in the recumbent position, that free ventilation be allowed in her room, and that her drinks should be cold and acidulated with diluted sulphuric acid, and that cold wet cloths should be applied to the lower part of bowels, and over the genitals. At the same time, sixty drops of a solution of the muriate of morphia were given to the patient, and the same quantity was ordered to be repeated if required. By this mode of proceeding, the pains and hæmorrhage ceased, the patient became easy, and the natural heat returned to the skin. From this time, the patient had not a bad symptom. This woman continued in a tolerably good state of health until about the eighth, or a little after the eighth month of utero-gestation, when she was safely delivered of a fine healthy boy. Now, had plugging in this case, and ergot of rye been used, abortion, in all likelihood, would have been the result.

The second case was somewhat similar to the above; but the patient was more robust, and had not lost quite so much blood, yet the pain and discharge had continued about twenty-four hours before I was called to the patient. As the pulse was still pretty full and strong, twelve ounces of blood were taken from the arm, and, in every other respect, she was treated as the former case. She likewise went to her full time, and bore a healthy child.

This is a simple and safe mode of procedure in such cases, and is certainly fraught with great advantages over the method by which floodings are generally managed. To arrest the expulsion of the child at a time when it is not viable, and to protract the delivery to near the full period of utero-gestation, so that a living and healthy child is born, often creates a consummation of great interest to those more immediately concerned.

IN THE LANCET for December 13th, 1845, p. 644, a case is reported, headed "On the Treatment of Placenta Prævia. By John L. Pon, M.R.C.S.E., Lambeth."

In this case, uterine hæmorrhage came on about the sixth month of pregnancy, and seems to have been arrested for a month, when it again recurred to a considerable extent; yet the os uteri had dilated only so far as to barely admit the introduction of the index finger of the right hand. The os uteri was rigid and unyielding, and there did not appear the least disposition to dilatation. In such circumstances the plug was used; still no expulsive efforts of the uterus occurred for five hours afterwards. About this period the pains were considerable, but on removing the plug they were again suspended, and did not return until two doses of ergot of rye were exhibited, showing, to some extent at least, that the presence of the plug was the cause of the pains previous to those which succeeded to the use of the ergot, by which the expulsive efforts were produced. After the removal of the plug there was no return of the hæmorrhage, until expulsive pains came on after the ergot had been administered. The seventh month of gestation had been completed; the child was considered to have been dead three or four hours previous to its birth. Mr. Pon states, in the first column, "The preservation of the life of the fœtus does not appear to me a question for consideration; for as very few females arrive at the full period of utero-gestation in these cases, (premature labour being almost an invariable consequence,) in the majority the life of the fœtus is almost certain to be forfeited." This statement regarding such cases is quite at variance with my experience; for in almost every case of this description which I have seen, the patient, before it was considered necessary to deliver, had advanced to the eighth, or near the eighth month of gestation—a period at which, in such cases, the half of the children have been born that I have attended, not only alive, but were reared, at least as long as they remained within the range of my knowledge. My experience, then, enables me to state my opinion pretty confidently, that if women under such circum-

stances be confined to the recumbent posture, kept quiet, supported by mild nourishment, have cold acidulated drinks, cold applications to the lower part of the abdomen, and over the genital organs, with repeated full doses of laudanum, as necessity may require, so as to subdue pain or uneasiness, and arrest the discharge, the recurrence of each attack of hæmorrhage may be so completely checked as to enable the woman to go to about the eighth month of utero-gestation, when, generally, both she and her child may, by artificial delivery, be preserved alive. I have had only one case of the death of the mother in labours of this description, when there was anything like a fair prospect of saving both the mother and the child. This woman's mind was fixedly prepossessed with the belief, that if she were delivered artificially she would assuredly die in consequence of it; and, previously to delivery, she took leave of her husband under this impression. Whether such an appalling state of mind could have any effect in producing the mournful result, is not for me to decide. She was not by any means too much exhausted by previous loss of blood, and delivery was effected with great facility. The child, also, was strong and active at birth, yet the mother seemed quite indifferent at the result. The after-birth lay loose in the vagina, and only required removal.

The patient now seemed so well that the medical friend who kindly assisted me left the house, and a short time afterwards, I left the room for a few minutes, when, on my return she was sunk and ghastly. The discharge, to a considerable extent, had suddenly come on, and though it was at once subdued, it seemed, from all the previous circumstances, to be more than she could bear, and she died about two hours afterwards.

It will now be very obvious, that if the mode of treatment pursued by me be necessary to the completion of utero-gestation, so far at least as to give a fair chance to the safe delivery of the mother of a viable child, the method adopted by Mr. P^{on} precludes the probability of effecting this very desirable result; for he clearly, as it were, compels the uterus to expel its contents at an early period of pregnancy, and under the impression, "that the preservation of the life of the fœtus does not appear to him a question for consideration."

On the subject which has lately excited so much controversy,—namely, the delivery of the placenta before that of the child,—I am not prepared to give any decided opinion, never having seen a case when the placenta was expelled before the expulsion of the child. I may here remark, that in such presentations no particular difficulty ever occurred to me in turning and delivering the child, for if the attacks of floodings be properly managed until the period at which the woman must be delivered, the os uteri, from the relaxed state of the parts, will be pretty easily and safely dilated by cautious perseverance in the introduction of the hand.

I do think, however, that Dr. Simpson is at least entitled to the grateful acknowledgments of the profession, for calling their attention so ably and truthfully to the subject. He only advocates the occasional employment of the plan he espouses, and from the various facts advanced, it does appear that it may be sometimes useful. At all events, in urgent cases of difficulty and danger, it is of the utmost importance that we should be acquainted with every suitable kind of information; and any idea that adds to our stock of useful knowledge should be received, not with frivolous objections, but with a candour becoming a sound philosophic mind.

Paisley, December, 1846.

A REPORT OF A CASE OF OVARIAN DROPSY SUCCESSFULLY TREATED ON MR. BROWN'S PLAN OF CURE, UNDER UNFAVOURABLE CIRCUMSTANCES.

By THOMAS HUNT, Esq., Surgeon, Herne Bay.

Mrs. F—, aged thirty, the wife of a bricklayer in this place, was delivered of her fourth child in the month of January, 1841. She was then residing at Ingatestone, and Mr. Cornelius Butler, who attended her on that occasion, afterwards gave her the following memorandum in writing—viz.,

"In Mrs. F—'s last confinement, the progress of the head of the child was much impeded by a tumour in the recto-vaginal septum. After some difficulty I delivered her with the forceps. I merely write this to sanction the puncture of the tumour, if it be necessary, at any future time, as it has increased considerably, by the testimony of the gentleman who attended her previously, and with whom I am acquainted.

"Ingatestone, Jan. 1st, 1841."

"C. H. BUTLER.

The patient subsequently observed an enlargement on the left side of the abdomen. In the autumn of 1843 proving again pregnant, she consulted Dr. Blundell, who is said to have advised her then medical attendant to have recourse to

premature delivery. This was accomplished in the sixth month of gestation. From this time the abdominal tumour increased more rapidly.

In the autumn of 1845 she placed herself under my care.

October 15, 1845.—The abdomen measures thirty-four inches, parietes very thin, umbilicus prominent, fluctuation very distinct. The health is moderately good, and the menstruation regular. The os uteri is slightly tumid, and has rather more sensibility than usual, but presents no indication of disease. She has the appearance of a woman in the seventh month of pregnancy.

Having read the cases detailed in *THE LANCET*, by Mr. Brown, of Paddington, in which he succeeded in curing encysted dropsy, by pressure, mercurial treatment and diuretics, and the age of the patient and other circumstances appearing to justify the experiment, I requested my patient to wait upon Mr. Brown, who reported that he considered his mode of treatment to be highly appropriate in the case, and requested me to commence the treatment without delay.

22nd.—The abdomen was tightly bound with a flannel bandage, which was renewed night and morning. Onedrachm of the strong mercurial ointment was directed to be rubbed into the abdomen every night, a diuretic mixture ordered to be taken twice a day, and three grains of blue pill night and morning.

24th.—The diuretic having produced vomiting, the medicine was administered in the effervescing form. She has great uneasiness in the chest, from the tightness of the bandage.

28th.—She complains of vomiting and pain in the jaws. The gums and throat are very sore, and a copious salivation has set in. The quantity of urine passed for the last three days exceeds that of the fluid swallowed. The abdomen is decreased in size about two inches. Discontinue the mercury.

30th.—The mouth continues excessively sore; the soft palate is extensively, but superficially, ulcerated; the tongue can scarcely be protruded; and the salivation is unabated. Flow of urine still copious. The stomach rejects all medicine, except an occasional dose of aperient pills. The menses have appeared at the end of a fortnight from the last period. The abdomen measures less by three inches than at the beginning of the treatment. Milk diet ordered.

November 4th.—The soreness of the mouth is beginning to amend slowly. Urine smaller in quantity since the diuretics have been rejected, which has happened in every form of their administration.

11th.—Improving in health; is able to take more nourishment. Secretion of the kidneys diminished; bowels costive. The abdomen, having previously measured less by three inches and a half, is now somewhat increased in size. The bandage has been constantly applied, but cannot be borne very tight. Ordered a dose of aperient pills.

12th.—The cyst was tapped by Mr. Brown in my presence, and nearly nine pints of fluid were drawn off. It was almost as clear as water, and as colourless. When treated with nitric acid at a high temperature, it exhibited a slight albuminous cloud, scarcely visible at the time, but distinctly precipitated on the following morning. She bore the operation without fainting, and was put to bed, tightly bound with a flannel bandage, a book, enveloped in napkins, being applied to the umbilical and pubic regions, as a compress.

13th.—She has had a tolerable night, but complains of headach. She has passed five pints and four ounces of urine since the cyst was tapped, and has taken only a pint and a half of fluid. The bowels being costive, a dose of aperient pills was ordered, and some gin-and-water.

14th.—The pills excited vomiting, but have acted on the bowels. Complaints of the corners of the book hurting the ribs and hips. A large toilet pin-cushion was substituted, and the bandage re-applied. She has nearly lost her appetite, feels weak, and is distressed with flatulency. Ordered a glass or two of wine.

15th, 16th, and 17th.—Has been constantly harassed with flatus. When the bandage is withdrawn, she eructates an immense quantity of gas. Urine about equal to the fluids taken.

18th.—Appetite entirely gone. She has slept but little, is much depressed in spirits. Pulse 120; skin hot; abdomen somewhat tender; urine scanty; bowels costive. A cathartic pill was ordered, and an effervescing draught every fourth hour.

19th.—Better to-day. Skin cool; pulse weak, and slower. Complaints of noises in the head; has drank about a quart of fluid, and passed less than that quantity of urine. The bowels have been freely relieved. An attempt was now made to resume the mercurials and diuretics, but it was found impossible to persevere. The stomach became excessively irritable.

24th.—It is proper to mention that, about three weeks ago, one of her children returned from a visit to town with slight

fever (synocha); since that time, a second and a third child have drooped with a similar febrile affection, and during the last week, the mother has evidently been suffering from this cause. She has had a hot skin, rapid pulse, pain in the head at first, then noises and deafness. She has also been perpetually retching. An aperient pill was prescribed, (the bowels being constipated,) and effervescing medicines at short intervals.

25th.—She has been delirious in the night, sitting up and singing. She is vomiting green bile. Pulse 125, weak; eyes glassy; manner excited. Blister to the back of the neck. Opium and calomel, a grain of each, relieved the vomiting, and she was better in the evening.

26th.—She has had a restless night, but no delirium. The vomiting continues. She is much dejected; says she has been doing nothing but vomit for a fortnight, and cannot bear it much longer. She complains of distressing thirst, and thumping noises in the head, but no pain. Pulse 120, weak; features sunken; skin moist, but hot. The vomiting was by degrees controlled by repeated doses of creasote.

27th.—Somewhat better. Complains much of the heat of the flannel bandage. A linen towel tightly pinned round the pelvis was substituted. A cold lotion was applied to the head, and the hair taken off.

December 1st.—There has been some improvement for a day or two, but she is worse to-day. Has slept much, and is now (eleven A.M.) in a copious perspiration, but is again vomiting a dark-green fluid. The creasote to be repeated every fourth hour.—Evening: No vomiting, but nausea and eructations. Pulse 120, very feeble; countenance hippocratic. The morning perspiration having been excessively copious for about two hours, was succeeded by general coldness. She is now hot and dry. The tongue has presented an appearance throughout remarkably normal. The creasote to be continued, and a little brandy-and-water occasionally.

2nd.—She has slept a little; has had no return of the vomiting or nausea, but feels "dying weak." The creasote to be continued.—Evening: She has again perspired most profusely; feels somewhat better; pulse fluttering; speech affected; great exhaustion; no nausea or eructations. Take of sesquicarbonate of ammonia, one scruple; aromatic confection, half a drachm; camphor mixture, six ounces. A fourth part every five hours. She longs for some home-brewed ale. Let her have it.

3rd.—Decidedly better. Has slept well. A fortnight has now elapsed since the first accession of fever, and it seems to have arrived at a crisis.

9th.—She has continued fluctuating, but gaining ground. The perspirations have frequently returned, and likewise the eructations and vomiting, which nothing would permanently relieve but the removal of the bandage. It has accordingly been abandoned, and her stomach has become very comfortable. She takes nourishment in small quantities. Pulse 90; urine scanty; skin soft, but no disposition to profuse perspiration. There is no perceptible tumour in the abdomen, the muscles of which are so relaxed and attenuated that the presence of a tumour, if it existed, could scarcely escape observation.

January 7th, 1846.—She has now a good appetite, and is gradually regaining her strength, but still totters as she walks, and complains of confused noises in her head. The secretion of urine is normal, and there is a slight oedema of the feet towards evening, but not more than frequently occurs upon first sitting up after a long illness. She has recovered her hearing, and is in good spirits. The abdomen is flat, and no vestiges of any tumour are discoverable.

Remarks.—Although I am not unduly prepossessed in favour of this method of treatment, it is but justice to remark that, in this case, so many impediments to the prosecution of the plan presented themselves, if it had not succeeded (as to all appearance it has) the plan, as a whole, could not in all fairness have been charged with failure. The severity of the salivation in the first instance, and the subsequent accession of fever, prevented so protracted an exhibition of mercury as was previously decided upon; and the other prominent expedients—compression and diuretics—were, to a great extent, rendered unavailable, inasmuch as they were contra-indicated by the alarming irritability of the stomach. That the treatment has succeeded, and that the cure will prove permanent, in spite of these disadvantages, I am inclined to hope, for the following, among other reasons:—The copious secretion of the kidneys immediately following the operation, and the excessive perspirations supervening on their diminished action, appear to indicate that the tendency to increased exhalation has found, in the natural outlets of the system, a healthy substitute for the previous morbid accumulation in an internal cyst.

If a disease of this kind not only gets well, but retires before a vigorous manifestation of healthy action in the system, and this action is excited by medical treatment, it is surely fair to pronounce it cured.

Herne Bay, Kent, January, 1846.

ABSCESS OF THE TIBIA.

A LECTURE on abscess of the tibia by Sir Benjamin Brodie is to be found in a late number of the *Medical Gazette*. The lecturer commences with the following observations:—

"I need not tell you that bones are organized like soft parts, that they have the same apparatus of arteries, veins, nerves, and cellular tissue, and that they have superadded to these the unorganized phosphate of lime. Having the same tissues as the soft parts, they are liable to very much the same diseases; but then the characters of these diseases, their symptoms, progress, and treatment, are much modified by the presence of the unyielding earthy material which I have mentioned. Inflammation may take place in bones, as it does elsewhere; it may go on to suppuration, and abscess may form in their interior, as it does in the interior of other organs. But there are these points of difference: an abscess formed in a bone cannot very readily come to the surface, so that it may remain pent up for an indefinite period:—the soft parts will stretch, bones will not, and the consequence is, that an abscess situated in the latter is attended with much greater pain than that which occurs in the former. The patient's sufferings are consequently more severe, and they are protracted for a very much longer period."

He then proceeds to narrate the histories of several cases, and proceeds, having done so, to say—

"Now what are the circumstances that would lead you to suspect the existence of abscess in the tibia? and supposing it to be probable that such an abscess exists, how are you to proceed to relieve it?"

"When the tibia is enlarged from a deposit of bone externally—when there is excessive pain, such as may be supposed to depend on extreme tension, the pain being aggravated at intervals, and these symptoms continue and become aggravated, not yielding to medicines or other treatment that may be had recourse to—then you may reasonably suspect the existence of abscess in the centre of the bone. You are not to suppose that there is no abscess because the pain is not constant; on the contrary, it very often comes on only at intervals, and in one of the cases which I have related there was, as I then mentioned, an actual intermission of seven or eight months. After the disease has existed a certain number of years, indeed, the pain never entirely subsides, but still it varies, and there are periods of abatement and of exacerbation. The combination of circumstances which I have described will fully justify you in making an opening into the bone with a trephine. But how will it be if you are mistaken? This will not often occur, but if it should, really the taking out a circle of bone can be of no consequence—no injury follows the operation—it is unattended with danger. The operation is a very simple one. You expose the surface of the bone, and make a circular opening with a trephine at that part where there seem to be some tenderness and some pain on pressure. One principal thing to be attended to is, that you have a proper trephine. You do not want so large an one as for the cranium, and it must be somewhat differently constructed. Those which lie on the table are made for the purpose. One is of very small diameter, but generally it is quite sufficient. The common trephines are made with a rim or shoulder, and if there be much enlargement of the bone, they will not penetrate deep enough to reach the abscess. It is true that you may break away the bone afterwards, by means of a chisel, but the operation may be more easily performed with a trephine having no shoulder, which will at once penetrate to the abscess, however deep it may be, and render the chisel unnecessary. The after-treatment is as simple as possible. There may be some pain for a day or two, and especially, as in the case I last mentioned, if the patient be an hysterical female, there may be hysterical pain afterwards; but all that is required is to maintain the general health, and lay on some simple dressing; the bone soon granulates, the space is filled up by a sort of fibrous substance, and the wound cicatrizes.

"But what would happen if you were not to perform the operation? The patient may continue in torture, as I have already told you, for eighteen years, losing all the best part of his life; or a worse event than that may take place—viz., destruction of the joint."

Having narrated the principal facts of some other cases, Sir Benjamin goes on to remark:—

"The three last cases show that it is not safe to leave an abscess in the lower end of the extremity of the tibia beyond a certain time; that the joint is always in danger, and that the perforation of the bone is the only remedy. Even if you were mistaken in your diagnosis, no harm can arise from the operation. Nay, it is a question whether good may not arise, under certain circumstances, from taking away a piece of bone, where there is chronic inflammation in it, even though there be no abscess. The following very remarkable case will illustrate this last observation. A young gentleman, who lived at Brixton, was brought to me by Mr. Crowdy, a practitioner of that place, with violent pain in the middle of one arm, the bone itself being enlarged in that part to which the pain was referred. Some remedies were tried, which I need not enumerate, without any benefit. The pain continued, and I began to suspect that there might be an abscess in the centre of the bone. Under this impression, I proposed cutting down upon it, and making an opening with the trephine, so that I might remove the matter, if there were any there. The operation was performed; the trephine penetrated to the centre of the bone, but no matter escaped. I persevered, but still there was no matter; and at last the instrument penetrated completely from one side of the bone to the other. The bone was very hard and compact, and it was as much as the trephine would do to run it through. I thought that I had made a blunder, and that, there being no abscess, the operation would not be attended with any benefit. The next morning the patient had an attack of pain almost as severe as before the operation, but it did not last long, and he never had any pain afterwards. The wound healed, the relief was complete, and I heard of the patient not long ago as having continued quite well. I presume that this was a case of chronic inflammation of the humerus, and that taking out the piece of bone from the centre, probably partly by relieving the tension, and partly, by a discharge of matter from the bone, unloading the vessels, accounted for the relief which the patient obtained from the operation."

ON THE ORIGIN OF FIRM BODIES FOUND IN THE CAVITIES OF SYNOVIAL MEMBRANES.

"DR. BIDDER offers a new theory in regard to the origin of the firm bodies which are occasionally met with in the cavities of synovial membranes. He was led to form this opinion from an examination which he made of a substance evacuated from the knee-joint of a patient, who had for a considerable time been suffering from a swelling of the joint, and symptoms indicating the presence of a foreign body therein; a natural opening formed itself, through which a granular substance evacuated; the individual granules of which this substance was composed were uniform in size and general characters; they were flattened and oval, about a line and a half in length, three-fourths of a line in breadth, and half a line in thickness; they were of a yellowish-white colour, presented no trace of a pedicle, and were held together in heaps of various sizes by a very small quantity of a greasy transparent fluid. They were highly elastic, and when cut into, presented, both to the naked eye and beneath the microscope, a perfectly uniform surface, there being no appearance of laminae, of a nucleus, of a surrounding capsule, or of any fibro-cellular tissue: they presented none of the characters of epithelial cells, or of oval fat-cells. Neither ether nor acetic acid detected in them any trace of fat; they were unaffected by water, but by the action of alcohol were shrivelled up. From these facts it appeared to Bidder that the explanation offered by Meckel and Hyrtl respecting the formation of these bodies could not be regarded as the only one: these anatomists attributed their formation to pieces of fat, which are deposited on the outer surface of the synovial membrane, through which they make their way and pass into the cavity of the joint, where they lie free, and the synovial fluid of which they take up and convert into fat; but it seemed to Bidder very probable, that the epithelial cells were in his case, and so might be in others, the cause immediately concerned in the formation of these bodies; that the cells, under the influence of increased vascularity of the synovial membrane, are abundantly thrown off and accumulate in the cavity of the joint, where, by a process of endosmosis, or in virtue of their own peculiar vitality, they increase in size by abstracting nutritive material from the synovial fluid in which they are immersed: this view would seem to be especially favoured by the large quantity of albumen which the little bodies contained, and by the uniform size which they all presented.—*Northern Journal, from Oester. Medicin. Wochenschrift.*

REVIEWS.

Mesmerism. A Mystery. By HORACE SMITH, Esq. London: Colburn.

THE literary dabblers in quackery form quite a distinct genus, and deserve some rough handling from the profession. Medical free-thinking is almost a necessary qualification for the popular romance writer and poet of the present day. Like other unbelievers, they return to the true faith when dangerously ill, and seldom does a poor author die, but we hear of the assiduous and benevolent attendance of Dr. So and So. The medical profession has always been at the service of the writing race, but in our day the grateful return is little seen. We may justly consider authors and authoresses as our worst enemies, constantly engaged as they are in debauching and depraving the public mind with respect to the medical art. In the present tale Mr. Smith describes a young lady suffering from hysteria and heart-disease, sent from the lakes to consult Dr. Peterson. (Elliotson?) Dr. Peterson, who talks about everything in a style which may be termed the ultra-intense, mesmerises the patient once, and when first we read Mr. Smith's description of the process, we certainly thought he was writing a satire upon the subject; we soon found, however, that he has but a small sense of the ridiculous which his work contains in such abundance. After the Doctor has mesmerised and ranted in a style which makes Mrs. Johnson, a very matter-of-fact lady, exclaim, "Well, I declare, Dr. Peterson, you are quite an enthusiast—quite romantic!" he pronounces the victim of the hysteric passion "the very type of piety and reverence."

"So saying, he laid the finger of one hand upon the organ of veneration, while, with the other, he directed passes towards his patient, himself watching the result with the deep but calm interest of a philosopher; while Mrs. Johnson gazed at the proceedings with fixed eyes, half-opened mouth, quickened respiration, and a look of wonderment not unminged with fear, as if she were about to witness some scene of enchantment, of which she could not anticipate the consequences. And, sooth to say, the effects speedily produced might almost have been deemed supernatural. For a few minutes, the sleeper remained undisturbed, but presently, although the eyes continued closed, she appeared partially to awake; a beatific smile lighted up her countenance, like a ray of sunshine, and her face, which, as we have stated, was not naturally handsome, became suffused and irradiated with an almost superhuman beauty, until she seemed to have undergone a complete transfiguration. As the stupor of her trance passed away, she slowly raised herself from the sofa until she stood upright; then, with a gradual and exquisitely graceful motion, she lifted both arms to their fullest extent, at the same time stretching her whole figure upwards until she stood on tiptoe, as if she were striving to reach the sky. At this moment her eyes opened, and turned towards heaven with an expression of the most intense devotional ecstasy, the whole attitude and aspect giving her the appearance of a seraph in the act of rapturous adoration. That she had soared far above all sublunary thoughts and feelings was manifest at a glance; she appeared no longer a creature of flesh and blood, but a spirit; or if still mortal, her mind had undergone a temporary apotheosis.

"The effect of such a spectacle was not merely solemn and awful—it was sublime. Even the practised operator, who had thrown her into this state of enchantment, gazed with a thrill of reverence upon the vision he had conjured up; while Mrs. Johnson, silent and agast, and actually imagining that she saw a divine halo around the head of the entranced girl, looked inquiring at the ceiling, as if expecting it to open, that the angelic figure before her might ascend to its proper sphere."

If this be not "plain flat blasphemy" we do not know what is.

After this time Miss Harvey returned to the country, but now she was able to mesmerise herself by merely thinking about her "beatific vision" with Dr. Peterson. The doctor, too, after a while, sends her a pair of mesmeric gloves, which were quite as potent as the real manual passes. She now, on various occasions, saw a blank luminous disc before her eyes, in which appeared a figure in black, whom, after some mes-

meric flirtation, she discovered to be Death, or "The Universal Friend." Still more extraordinary things happen to her: as she is about to tumble down, an arm, of blood and muscle too, is stretched out to tug at her skirts, and this she knows to belong to a dead sister, for she recognises a ring on the finger which had been buried with her. The mesmeric prophetic foretells the illness and death of her father and sisters one after the other, and then her own, by the assistance of the "luminous disc" and "the universal friend," and Mr. Smith believes the whole, and wishes his lady-readers to believe it also. Mesmerists themselves have written no inconsiderable amount of nonsense, but none of them have ever reached the pitch of utter absurdity, impiety, and extravagance of the present work.

Miss Martineau, too, has been breaking a side lance lately with the doctors, and to her we have a word to say. In her "Game-Law Tales" she very ingeniously introduces the reception of the circulation of the blood by the contemporaries of Harvey, to show of how little value is medical incredulity. It is in the form of a dialogue between Lords Holland, Seymour, and Southampton.

"One object of Old Parr's going up to court is, that Harvey may study the case, and see if he can gain hints from it for lengthening our lives."

"But surely," said the clergyman, "it can matter but little what Dr. Harvey concludes and gives out about the case of this old parishioner of mine, or any other case. No one can have any respect for his judgment in the face of the wild doctrine he gives out about the blood."

"Does he adhere to that?" asked Lord Southampton.

"Yes," replied Lord Holland. "He will, ere long, publish another tract upon it. It is astounding to see a man, who seems otherwise rational and sensible, lose himself on this one point. There is no making any impression upon him; he persists as quietly as if all the wise people in the world agreed with him."

"Quietly," said Lord Seymour; "I thought he was a passionate, turbulent fellow, who thought all the world a fool but himself."

"Whatever he may think," replied Lord Holland, "he says nothing to give one such an idea: on the contrary, the most amusing, and yet melancholy, part of the business is, his entire complacency. He is so self-satisfied that nothing can move him."

"Dr. Oldham," said Southampton to the family physician, who sat smiling while this description of Harvey was given, "you have looked into this business,—this pretended discovery. What have you to say to it?"

"But little, my lord; it is not worth so many words as have just been spent upon it. There is not a physician in Europe who believes in this pretended discovery."

"After examination?"

"Surely, my lord. Any announcement of a discovery made by the physician whose merits have raised him to Dr. Harvey's post cannot but meet with attention from a profession whose business it is to investigate the facts of the human frame and constitution."

"Then known facts are against him?"

"Entirely. No point, for instance, is better understood, than that the arteries are occupied by the vital spirits, which are concocted in the left side of the heart, from the air and blood in the lungs."

"And what says Harvey to this?"

"He controverts it, of course. Neither the opposition of all living physicians, nor even the silence of Galen on this notion of his, has the least effect upon him. It is sad and pernicious nonsense, and ruinous to a man who, but for this madness, might have been an honour to his profession. Of course his opinions on any subject are of no value now."

"In the profession, do you mean?—or out of it?"

"I believe there are a good many out of the profession, who listen to him, open-mouthed, as to every professor of new doctrines; but it is an affair in which no opinions but those of physicians can be of any consequence; and, as I said, not a physician in Europe believes Harvey's doctrine."

"It ought to be put down," said Lord Salisbury, to which the clergyman gave emphatic assent, observing, that in so important an affair as a great question about the human frame, false opinions must be most dangerous, and ought to be put down."

"And how is new knowledge to fare when it comes?" said Lord Southampton. "By my observation, Dr. Harvey's notion is so following the course that new knowledge is wont to

run, that I could myself almost suppose it to be true. It has been called nonsense; that is the first stage. Now, if it be called dangerous, that is the next. I shall amuse myself by watching for the third. When it is said there is nothing new in it, and that it was plain to all learned men before Harvey was born, I shall know how to apportion to Harvey his due honour."

"I thought, my lord, you had held my profession in respect," said the physician, with an uneasy smile.

"Am I not doing homage to a most eminent member of it?—perhaps the most eminent in the world," said Lord Southampton. "And it appears that I am rather before than behind others in doing so. There is no man, not even the greatest, who may not stand, hat in hand, before the wise physician, and I, for my humble part, would do even so."

Really this is too bad. No men or women can make themselves ridiculous, and get laughed at, but they gravely refer to the treatment received by Harvey, Jenner, and others, as quite applicable to their own case, and they really believe, with Miss Martineau, that a thing laughed at by the majority must needs be true. The supposed ill-treatment of Harvey is a splendid refuge for knavish and foolish people, or unsound and unproved theories. No stupid book can now be published without a prop of this kind, and it is the great support of mesmerism, hydropathy, homeopathy, and other doctrines of the same class. But the real truth is grossly exaggerated to suit these trumpery purposes. Harvey's century was not the nineteenth, and many foolish people opposed him. But, notwithstanding this, his career was one of great triumph. At the time of old Parr's death, his doctrines were generally received. Hume, as a smart saying, declared that no physician in Europe, at the age of forty when the discovery was made, ever believed it. This is evidently untrue, for Harvey did not publish his "Treatise on the Motion of the Heart and Blood" till he was fifty years old, and he lived himself to see his discovery received in every university in the world. Hobbes of Malmesbury, a better authority than Hume, says of him, that he was, perhaps, "the only man who ever lived to see his own doctrines completely established in his lifetime." We trust we shall hear less of the absurdity so much used by little people, that great men have necessarily to be at war with the whole human race. They have their opponents and jealousies to contend with, but there are always the fitting minds to receive and propagate the truth. Every thinking man must be sick of the paltry uses to which the names of great discoverers are so constantly prostituted by unprincipled quacks and their followers.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

JANUARY 13, 1846.—DR. CHAMBERS, PRESIDENT.

The president made some remarks on a change to be instituted in the mode of balloting for fellows.

ON DIARRHŒA IN CHILDREN, AND ITS CONNEXION WITH HYDRO-CEPHALUS. By J. S. ALLEN, Esq., St. Marylebone Infirmary.
(Communicated by Dr. CLENDINNING.)

The author commences by observing that diarrhœa is a frequent and troublesome affection in children, being sometimes idiopathic, but more frequently symptomatic of disease already existing in some important organ; it is to the latter that his remarks apply. During the period of dentition, children are especially subject to severe attacks of this disease, and the object of the paper is to show that the diarrhœa is generally a salutary effort of nature to relieve herself, and that great and fatal damage is frequently done by suddenly checking it. The case usually presents itself as follows:—The child is said to have had for a greater or longer period profuse discharge from the intestines, frequently accompanied by irritability of the stomach; the evacuations are thin and watery, and often of a greenish colour. Astringents have generally been given with partial success, but as soon as they were left off, the purging returned. On inquiry, it will be found that on the checking of the diarrhœa the child became restless and uneasy; the skin hot; and that it often started and screamed during sleep; but that all these symptoms usually subsided on the return of the diarrhœa. What is very observable, is, that although the incessant drain from

the intestines may have continued for many days or even weeks, the child is not at all emaciated, but is plump and lively; though it will usually be found that the head is hot, with increased action of the carotid and temporal arteries. If the diarrhoea is allowed to continue unchecked, a cure is occasionally effected without the aid of art; but more commonly convulsions supervene, and carry off the patient, or the disease terminates in chronic hydrocephalus.

The author states that during the last five years he has seen more than 500 cases of diarrhoea in children whose ages varied from three months to three years, and that the proportion of cases of symptomatic diarrhoea to that depending on organic disease has been about six to one. The mode of treatment he has found most successful in the early stage, has been the abstraction of the blood from the head, which in the majority of cases has alone served to stop the progress of the disease. If this is not sufficient, he gives small doses of mercury with chalk, and occasionally magnesia combined with an aromatic.

If the bowels have become costive from the administration of astringents, or other causes, he gives calomel and jalap to purge freely.

The author then details several cases in support of his assertion. In some of these, head symptoms with convulsions suddenly supervened on the suppression of the diarrhoea by opiates and absorbents, and death shortly followed. Post-mortem examination showed evident marks of inflammation of the brain, with effusion. In others, these symptoms were subdued by the treatment above alluded to, and the children eventually recovered.

In conclusion, the author observes that, in the fatal cases, the appearances after death will vary according to the duration of the disease. If the child dies suddenly, great congestion of the vessels (particularly of the veins and sinuses) will be the most remarkable appearance; but if the disease has been of long duration, fluid will be found effused on the surface of the brain and in the ventricles, the intestines being generally found healthy.

Dr. J. WEBSTER agreed with the author that diarrhoea acted in many cases as a salutary effort of nature to relieve the system, and that great caution should be employed in suddenly arresting the complaint; but he dissented from the doctrine, that it was frequently produced by teething. No doubt, irritation of the gums and local complaints were often co-existent in children, but the former did not produce the latter affection, improper feeding being more generally the cause. Respecting the treatment, he (Dr. Webster) considered the exhibition of astringents and opiates to children so affected, as a dangerous practice; and however general the opinions of the author appeared on this point, the two cases read to the Society were instructive. In the first, catechu was employed, which arrested the diarrhoea, but the little patient died soon afterwards. In the second case, syrup of poppies stopped the purging, but the remedy was not repeated, as it seemed injurious, and the child eventually recovered. Having seen many examples of the disease under discussion when physician to an infirmary for sick children, he (Dr. Webster) could speak with some confidence respecting the remedies he had employed; the most useful were, mercury with chalk, rhubarb, and magnesia, especially when combined with minute doses of ipecacuanha and castor-oil, as also the strictest regimen. The author advocated strongly the utility of bloodletting, particularly by the repeated application of leeches; he (Dr. Webster) differed from him in opinion, and would only employ such active treatment, in recent cases, which exhibited decided symptoms of local congestion and inflammation.

Dr. COPLAND thought that the author was not correct in considering hydrocephalus as the result of the suppression of diarrhoea; he thought the cases described were simply those of congestion of the brain from the sudden arrest of the bowel complaint; and the effusion of serum which took place between the membranes was a mere accidental circumstance, and was small in quantity. This congestion occurred in the more acute cases, and unless subdued quickly, became fatal. When the diarrhoea was of long continuance, the child became anæmic from being ill nourished. The effusion was then the result of the existing state of the brain, which was softened and anæmiated; the fluid effused merely supplied the place of the blood which was deficient. It was important that these cases should be distinguished, as they required different modes of treatment.

Mr. DAVIS (of Hampstead) directed attention to the injury inflicted on children by the overfeeding of their nurses. It was common for a child to have the milk from the breast of its mother, and a second nurse, the diet of whom, from

the quantities of porter and other deleterious substances she took, was often injurious to the infant, by the production of diarrhoea.

Dr. CURSHAM thought Mr. Allen had confounded the hydrocephaloid disease described by Dr. M. Hall, with hydrocephalus; these diseases, though resembling each other in many respects, were widely different, as the former resulted from exhaustion, and required the administration of stimulants.

Dr. GOLDING BIRD had listened to the paper with much attention, and whilst, in common with every practitioner, he fully corroborated the accuracy and importance of the statements of the author of the paper, regarding the great impropriety of suddenly checking a diarrhoea, occurring more especially in early childhood, he yet felt inclined to differ in the line of treatment indicated. He expressed his decided opinion, from large experience, that in the vast majority of cases, infantile diarrhoea was a mere effect and result of some cause active in the system. Excluding unhealthy ingesta, he regarded the functions of the liver and skin as most frequently in fault. The depurating duties of the former organ, which in infancy are hardly second in importance to those of the lungs, are often imperfectly performed, and a vitiated, unhealthy secretion is poured out, which, acting as an irritant, becomes an active cause of a wasting diarrhoea. In such cases, a few grains of mercury and chalk, by goading the liver to an effective performance of its duties, often better relieve the patient than a shopful of astringents. The green or chopped spinach motions, so common in the more severe and obstinate cases of bowel-irritation, too frequently regarded as made up of bile only, had, as he (Dr. Bird) believed he had elsewhere proved, been shown to be chiefly composed of modified blood; all, in his opinion, that was required to produce these green stools was a congested condition of the portal system, producing a slow and scanty exudation of blood from the intestines, which being acted upon by acid secretions, becomes altered in colour and general character. Green stools were, in fact, to be regarded as mild melæna. In these cases, a direct appeal to the function of the skin, by determining blood to the peripheral capillaries, and relieving those of more central organs, constitutes the only real effective treatment. Here the warm bath and ipecacuanha were invaluable, and often were competent to avert the serious and much-dreaded sequelæ of infantile diarrhoea.

Mr. MACILWAIN corroborated, from experience, the remarks of the last speaker. He alluded to the connexion between diarrhoea and skin diseases, as evidenced by the alternation of one with the other. The importance of the functions of the skin and liver in diarrhoea were great; he believed the bowels merely acted as compensating organs.

Dr. THEOPHILUS THOMPSON alluded to a class of cases not mentioned in the paper, but which were important. They were cases of diarrhoea, accompanied by hydrocephalus, but in which neither disease had any connexion with the other. The seat of effusion was different from that commonly observed. A child was brought to us with symptoms of meningitis, accompanied by diarrhoea, which, though not averted by remedies, was not sufficient to produce head symptoms. This state was followed by occasional screaming fits and excessive sensitiveness of the surface; the pupils in the early stage of the disease were contracted, but became afterwards dilated. The patient became lethargic, and death ensued. The serum, after death, was not found in the ventricles, but under the arachnoid. The course of this disease differed in many points from hydrocephalus; there was not constipation, but diarrhoea, and there were alternations of lethargy and excitement. He thought both the diarrhoea and head affection were independent of each other, and had their origin in some peculiarity of the system. Was it not probable that this state of system might be dependent on a granular condition of the kidney?

Mr. W. O'CONNOR said, that in the very practical remarks delivered to the Society by Dr. Golding Bird, he did not once allude to dentition as a cause of diarrhoea in children, and he (Mr. O'Connor) was astonished that no allusion had been made to so important a cause by Dr. Copland and other gentlemen who had spoken; neither had the author of the paper called attention to dentition as a cause, nor in any way noticed the symptoms resembling hydrocephalus often accompanying dentition, which might be mistaken for that affection. It was well known to all who have paid attention to diseases of children, that dentition was a frequent cause of diarrhoea, which was relieved by freely lancing the gums, and sometimes requiring the use of a little mercury and chalk and castor-oil. In children, during the period of dentition, there were fre-

quently present symptoms like to those of hydrocephalus, and when those symptoms—which were only symptomatic of dental irritation—were treated as of cerebral origin, a state of prostration supervened, under which the hydrocephaloid disease noticed by Dr. Marshall Hall was induced. The author of the paper made some allusion to the views of Dr. Hall, but it was evident he misunderstood or knew nothing of them. Dentition, and the general irritation accompanying dentition, including intestinal irritation, had been noticed, if he (Mr. O'Connor) did not mistake, by Dr. Marshall Hall, as illustrative of his theory of the reflex function.

Dr. COPLAND said the discussion was not on the forms and treatment of diarrhoea, but the connexion of this disease with hydrocephalus. He had seen cases similar to those mentioned by Dr. T. Thompson; they occurred generally in scrofulous children, and were accompanied by softening of the brain.

Dr. CHAMBERS remarked, that one point of practical importance had not been alluded to in the discussion; he meant, the condition of blood which resulted from the absorption of foul secretions which were the cause of diarrhoea. This showed the necessity of clearing away all foul secretions, for if allowed to remain, they were often the cause of secondary head affections.

(To be continued.)

UNIVERSITY COLLEGE MEDICAL SOCIETY.

FRIDAY, JANUARY 16.—MR. HILLMAN, PRESIDENT.

A paper was read by Dr. HENRY on the "Pathology of Inflammation."

After a few prefatory remarks, the author of the paper stated his object to be, the institution of a comparison, as near as he could draw one, between the healthy process of nutrition of the animal tissues and the process of inflammation. Many pathologists of the present day consider the latter as a modification of the former; and this view appears well grounded.

The subject of nutrition was first treated of under three heads:—

I. The nature of the plastic material, from which the tissues are formed, with the nature of the process by which the material itself is produced.

II. The means by which it escapes from the capillary vessels.

III. The nature of the force which assimilates the exuded plasma into the form of certain tissues—i. e., the "metabolic force" of Schwann.

I. The fibrin of the blood is said to be the material of nutrition. It exists in the chyle, but not in a plastic form, "being deficient in consistence, sometimes merely gelatinous."—(Simon.) Hence it must undergo further changes, or more must be formed, in the blood. Mr. Wharton Jones supposes it formed by the red corpuscles, as secreting cells. Dr. Simon thought it formed from the nuclei of the red particles. There seem to be several objections to both these views, of which the principal one is this. They assert, in proof of their views, that in disease the number of red corpuscles is in an inverse ratio to the amount of fibrin; but do not account for the fact that in some diseases both are diminished. Dr. Carpenter thinks that fibrin is elaborated by the pale corpuscles. But this theory is probably untenable, as will be afterwards shown. The researches of Mulder on the oxides of protein were then alluded to. The free access of atmospheric oxygen is necessary. Tritoxide of protein exists in several situations, as in the buffy coat, in false membranes, in vitelline substance, &c. The products of oxidation of protein occur constantly in the blood. Mulder states them to be formed in the lungs from fibrin, which is the principal, if not the only, carrier of the oxygen of the air. Hence it is probable—

1. That more than one substance has been confounded under the name of fibrin.

2. The substance, commonly known as fibrin, requires to be converted into tritoxide of protein, before being employed in nutrition.

The question whether all the fibrin is originally formed in the chyle, or not, is here left undetermined. The plastic material, being probably tritoxide of protein, has an inherent vital property of plasticity, the tendency of which is to form cells; and the formation of the pale corpuscles may be explained in this way. Mr. Addison supposes them identical with epithelium cells, exudation corpuscles, and pus globules; and supposes them to elaborate fibrin, and the secretions within the vessels; this, however, is improbable.

II. The plastic material passes through the coats of the vessels in an amorphous form. The pale corpuscles are supposed by Mr. Addison to pass through by some means; this is by no means proved, and it does not agree with what we see

in the web of a frog's foot. The heart, vessels, and blood, are probably mutually concerned in supplying the plasma.

III. We have here to observe—

1. The primitive tendency of the inherent plastic force of the fibrin. This has been already noticed as the cause of the formation of the pale corpuscles; and in the exuded plasma we see it forming cells, and in inflammation, exudation cells and pus globules. The embryo is at first formed from cells, before any trace of other tissues can be discovered.

2. The surrounding tissues, however, act on the plasma by their metabolic force, causing it to assume their particular forms. Whether cells are first formed, or not, is not very important here. This force appears to be truly vital, and seems to bear a certain ratio to the supply of plasma. In hypertrophy, we may suppose it increased. The durability of the metabolic force seems in an inverse ratio to the activity of the functions of the animal; as is seen by comparing mammalia with batrachia, it being of higher "tension" in the former, but of greater permanency in the latter.

The subject of inflammation was next considered.

I. The amount of fibrine in the blood is increased, in some cases, to ten or twelve parts in 1000. (Andral and Gavarret.) This is shown by the buffy coat. But the buffy coat is present in several states when inflammation is not present; hence it is not a criterion. It would be desirable to make careful chemical and microscopic examinations of the buffy coat in all cases in which it appears. Mulder says that it contains tritoxide of protein. Does this exist in the buffy coat of phthisis? The condition for the formation of additional tritoxide of protein in inflammation—a free supply of oxygen—is effected by the increased circulation and respiration. The additional formation is probably general. In the buffy coat, and in the stimulated web of a frog's foot, we see an increased number of colourless corpuscles. These are probably formed in the mass of the blood, by an exaggeration of the vital plasticity. Are these formed in tuberculous disease?

II. The increased exudation of fibrin in an inflamed part is from the relaxation of the vessels, and cessation of the circulation.

III. The metabolic force of the tissues is impaired or destroyed; probably from the intensity of the inflammation. The effused plasma tends to form cells; at first, exudation corpuscles, being probably the result of an increase of the vital plasticity of the fibrin, the metabolic force being still impaired. We see here a distinction between inflammation and hypertrophy. In the former, the plastic material is increased, and its inherent plasticity is exaggerated, while the metabolic force is diminished. In hypertrophy, the metabolic force is increased, as well as the supply of plasma. It is in the early stages of inflammation that we find exudation corpuscles, probably before the balance between the assimilating power of the tissues and the formation of the tritoxide of protein has been entirely destroyed; and in this stage, by restoring the equilibrium, "resolution" can be effected. Pus appears probably to result from a degree of exhaustion of the inherent vital plasticity of the fibrin, the metabolic force not being restored. How is it that it is formed when the symptoms of active inflammation are diminished? Perhaps for this reason, that the more simple a tissue is, the more likely is it to be permanent; hence cells are more permanent than muscles or nerve. Also, the pus probably exerts a metabolic force of its own; and we see an instance of a less highly organized tissue tending to assimilate plastic material to itself, in the case of malignant tumours. We may, perhaps, explain the difficulty which is asserted to exist, in producing suppuration in cold-blooded animals, by supposing the balance between the metabolic force of the tissues and the plastic force of the fibrin to be less easily destroyed in these cases.

A discussion followed, in which Messrs. Cousins, Ransom, and Marshall, and Dr. Henry, took part. The meeting then adjourned.

BRITISH MEDICAL ASSOCIATION,

EXETER HALL.

JANUARY 13, 1846.—DR. WEBSTER IN THE CHAIR.

In consequence of the temporary lull in medical affairs, the regular meetings of this Association have not been held for some time past. The present was a special general meeting of the members, convened for the purpose of reviewing the late parliamentary proceedings connected with medical politics, and for taking into consideration the present state of the Association.

After an animated and interesting discussion on medical affairs, the following resolution was unanimously adopted:—

"That the present Government Medical Bill falls very far short of what is desirable and necessary for public and professional interests; has a direct tendency to lower the status of general practitioners by constituting them an *inferior* class; and therefore in its present form it ought to be met by the most strenuous opposition of all the general practitioners in the kingdom."

It was not considered necessary to pass any other resolution respecting MEDICAL REFORM during the present uncertainty as to the future proceedings of the Government on this important question, but much doubt was expressed whether Sir JAMES GRAHAM would again introduce his contemplated measure into Parliament.

It was evident, during the discussion, that the members strongly adhered to their first recognised principles of reform—viz., the attainment of a FACULTY OF MEDICINE, which, without interfering with those divisions rendered necessary for the convenience of the public, should embrace the *whole profession as one body*. It was stated that in advocating the separate incorporation of the general practitioners, they had done so with a view eventually to such an institution, and it was considered by some of the speakers that the Government plan of examining all members of this class first by their own body and then by a joint board of physicians and surgeons, would lead to such a result. If the title of Surgeon were to be conferred in consequence of this joint-examination, why should not the title of Bachelor or Doctor of Medicine be also demanded, if the College of Physicians are to interfere with a branch of the profession over which, hitherto, they have had no control. A feeling was expressed by some that the Council and Fellows of the College of Surgeons would never be brought cordially to recognise the present practitioners as their equals in the management of the college, so that it might be fairly and fully considered as their head and home. Others entertained directly opposite hopes and opinions.

The state of the finances of the Association was then amply discussed, when it was resolved unanimously,—

1st. That this meeting considers, that at the present crisis of medical affairs it is highly important that the British Medical Association (the oldest reform association now in existence) should continue its exertions with increased energy and vigour, and watch over all parliamentary and other proceedings connected with Medical Reform.

2nd. That in order to carry the objects of the Association into effect, it is desirable that those members who from various circumstances have not for some time been called upon for their annual subscription, should be applied to without delay, and that the Secretary write to every such gentleman, with a copy of the above resolution.

4th. That this meeting adopts and confirms the acts of the Council and its officers since the last general election.

5th. That the best thanks of the meeting be given to the council and officers, and that they be requested to continue their services and exertions in the cause of medical reform; and proceed at their next meeting to consider whether a revision of the laws and regulations of the Association be necessary.

The proceedings of the meeting terminated at a late hour.

BRITISH AND AMERICAN MEDICAL JOURNALS.

We have received a file of the *Port Philip Gazette*, and our attention has been requested to a series of essays "by a Resident Physician," entitled, "ROUGH SKETCHES, EMBRACING THE NATURE AND TREATMENT OF THE PREVAILING DISEASES OF PORT PHILIP."

The essays are on the following subjects—Dysentery, Fever, Purulent Ophthalmia, Porrigio, Rheumatism, Delirium Tremens, Infantile Remittent Fever, and Inflammation of the Liver. Were these essays to be appreciated by their length, their value would be considerable. We have taken the trouble to peruse them, and having done so, must express some opinion of their merits. The writer is evidently a man who has studied disease in practice, but still more in theory. His ideas are not novel; if there is an exception to this, the novelty is no speculation. He is of the Mackintosh school, and "bleeds for bleeding sake." Bleeding he practises in the treatment of dysentery; and bleeding is necessary, he believes, at the commencement of fever. Stimulants are too much made use of in disease, as well as in health; and he finds just fault with what must certainly be considered an Australian practice.

"I would conclude by making one or two remarks on a custom too generally sanctioned, and which appears to be replete with dangerous consequences. I allude to the practice of administering opium and wine to children. These agents are used, and abused, in a variety of ways, by parents, who fancy that to ease pain, or recruit the strength of their offspring, one or other of the above should be had recourse to. It is really deplorable to find these guardians of youth sacrificing the health and future happiness of children by adopting practices of such delusive tendency. In relation to the prevalent custom of giving wine, in health as well as disease, it is customary to urge the expediency of the measure on other grounds also—viz., peculiarities of climate in different regions of the globe; hence many proselytes have been procured, who have readily embraced a doctrine which, from its speciousness and simplicity, has deceived many. It is to be remembered, however, that the vigour of childhood can be maintained by the smallest possible stimulus; and however much the truth of this assertion may be attempted to be distorted, the real point to be determined is, 'whether wine (by many falsely termed a tonic remedy) is calculated to preserve, or derange, the natural functions at this period of life.' Let the children of the peasantry of any province, of whom it is to be credited few know the taste of alcohol in any form, bear testimony to the falsity of the supposition involved. Whatever notions our friends in India may have imbibed on this subject, most assuredly the great salubrity of this climate, the pureness, elasticity, and dryness of the atmosphere, are circumstances which favour the presumption that the juvenile portion of our population demands no such artificial mode as that which has been alluded to, in order to support their stamina. I fear, however, it will be a fruitless task to persuade even our own colonists of the truth of this latter statement. Few parents hesitate to give wine to a child should it evince a disinclination to take its usual meals, thinking thereby to provoke an appetite."

The diseases described by the writer do not present any striking peculiarities, and the views which he was desirous of inculcating might have been brought into a much more limited space.

PERITONITIS AFTER CONTUSIONS OF THE ABDOMEN.

"Mr. H. JACKSON read a short paper to the Sheffield Medical Society on the frequent recurrence of peritonitis after contusions of the abdomen. He detailed the particulars of one case which presented a type of a number he had had to treat: it was the case of a boy, who, in running along the street rapidly with a wheelbarrow, had been struck in the abdomen by one of the stilts, the wheel having been suddenly stopped by some impediment. He was in a complete state of collapse, and there was reason to believe that rupture of some of the viscera had taken place. He rallied, and peritonitis set in; this yielded to treatment, and when apparently convalescent, he was, without known cause, attacked with peritoneal inflammation again. This recurred a third time, but eventually he was discharged, well. He had noticed this from other causes—from the passing of a cart-wheel over the abdomen, (an analogous case to which was reported by Mr. Bennett, of Hailsham, in *THE LANCET* of March 22, 1845,) from blows from the handle of a windlass, &c. The reader had found it to recur most frequently under the age of puberty than beyond."

"Considerable discussion ensued as to the treatment of cases of injury done to the abdomen, as to whether opium alone was not better than calomel when combined with it."—*Provincial Journal*.

PERIODICAL HEMORRHAGE FROM THE BOWELS.

Mr. HARRISON narrated the case of a man aged forty-seven, who, six or seven years ago, was affected with pain in the head and vertigo, which was relieved by an involuntary purging. He had not noticed the stools, although this occurred at periodical intervals, until his attention was called to them by a fellow-workman. He then found that he had parted with a quantity of blood. This discharge came on monthly, and was always preceded by head-symptoms, which disappeared after the discharge, and which amounted to from eight to sixteen ounces. Rather more than a year ago he had no discharge of blood for three months, and until it re-appeared he was very ill. His health is generally very good when the discharge is regular in its return.

"A sister was similarly affected after the cessation of menstruation, up to the time of her death, which occurred at fifty years of age."—*Idem*.

THE LANCET.

LONDON: SATURDAY, JANUARY 24, 1846.

CONSIDERING all that has transpired, the circulation of a begging letter by the LAWLESS COMMITTEE of Regent Street and Blackfriars, was a curious fact; but more curious still, should it prove to be true, is the fact, that before that letter was issued, the Committee had been informed by Sir JAMES GRAHAM, that it was *not his intention to introduce another Medical Bill into the House of Commons*. By next week we shall be enabled to address the profession with accuracy on this singular subject.

THE appearance of the LONDON MEDICAL DIRECTORY for 1846 enables us to take a glance at the state of the profession in the metropolis, and to the eye that looks at all beneath the surface, the medical faculty betrays a very heterogeneous and unsatisfactory condition.

Last year the qualified and unqualified practitioners were mixed together, but in the present volume a black list has been prepared, where the unqualified and those whose names cannot be identified in the various college lists, are placed by themselves. This list contains the names of one hundred and forty individuals, none of whom, if this authority be correct, can have a shadow of right to be engaged in the practice of medicine or surgery. It is of course more difficult to obtain the names of surreptitious than of legitimate practitioners, and there are, without doubt, many others not included in this list, who are preying dishonestly on the profession,—men without education, ability, or conscience, who are dishonestly standing in the place of those who have toiled for years to enter the profession by the proper gates—dogs, who are eating the children's bread.

But taking the number at one hundred and forty, and estimating the illegal income of each at 300*l.* per annum, a low figure when we consider that this variety of the quack is one of the most impudent and predacious of the whole herd, we have the sum of 42,000*l.* stolen from the profession in one year in London alone!

Here we are tempted to a digression. It is to the Society of Apothecaries in particular, that the profession has a right to look for the prevention or suppression of such a state of things: and inasmuch as this annual robbery takes place without their interfering to prevent it, this Society must be held as conniving at the theft. Yet it is the leading members of the Society of Apothecaries who have degraded, but never adequately defended, the profession; who, on the first note of medical reform being sounded, fled from their posts, declaring that their scanty prosecutions were at an end, thus destroying of themselves the penal clause in the Apothecaries' Act, before it was legally dead; who for years past and for years to come, if the power should remain with them, have suffered, and will suffer, any number of imposters to spring up around their own licentiates without scarce lifting a finger to protect them; it is these men who clamour for a new college and for a perpetuation of the powers to endamage the profession, for it must be remembered, that in the new Bill they merely propose to have the present penal enactments against irregular practitioners continued as before.

One might have expected, that during the last two or three years of medical agitation they would have been busily engaged in prosecuting unqualified intruders. Such would have been a more fitting and effectual mode of recommending themselves to the general practitioners of this country than meeting in irresponsible conclave at Hanover-square or Regent-street. These would have been "Transactions" that might have recommended them for renewed confidence and power. When a new stewardship is applied for, old accounts are generally referred to. Does the late conduct of these men, as a "Society," warrant their being trusted in time to come under the guise of a "College?" Will the old penal enactments against unqualified persons, carried into effect by the same paralytic hands, satisfy the general practitioners of this country? We trow not; for we may safely ask, where is the individual, in general practice, who has not suffered pecuniary injury and professional scandal from unqualified practitioners in his own neighbourhood, whom the Society of Apothecaries were bound in honour, and empowered by law, to remove?

The loss of the chief part of this 42,000*l.* per annum clearly lies at the door of Apothecaries' Hall; but there are other modes in which the profession loses a large income in a manner at present not cognizable by law. There are, in London, upwards of two hundred and twenty persons practising as surgeon-dentists, and, from the Directory, we see that not more than the odd twenty are members of the College of Surgeons. Now, we hold that all ought to be qualified persons, and to those who say that the practice of dentistry would bring discredit on the faculty, we would point to BELL and NASMYTH as furnishing the sufficient answer. If we take the incomes of these two hundred unprofessional dentists as averaging, also, 300*l.* per annum, we have the sum of 60,000*l.* Such, we are persuaded, is too low a sum, as the receipts of many dentists in good practice range from 1,000*l.* to 5,000*l.* a year. This amount is the property of the profession, though neglect has suffered it to pass into other and more active hands, and its resumption is a matter which should steadily be kept in view. Thus, then, we have, at the lowest estimate, upwards of 100,000*l.* annually of legitimate professional income distributed extra-professionally, in London alone—a sum nearly equal to 50*l.* per year for the purse of every qualified man at present in the metropolis, and this exclusively of the sum taken by unqualified oculists, aurists, cuppers, chiropodists, hydropaths, mesmerists, *et hoc genus omne*.

The style and title by which different men designate themselves is worthy of remark. Physician, surgeon, and general practitioner, are the three great divisions; but some men in general practice call themselves surgeons; others, general practitioners in medicine and surgery; general practitioners in medicine, surgery, and midwifery; surgeon-accoucheurs; apothecaries; medical-surgeons; &c. Uniformity of name where the mode of practice is uniform, would be most desirable. We see no reason why the general practitioner should not take the name of "surgeon." This title implies general rather than operative practice in the eye of the public, and the word is never used on the doors or cards of those who are actually the pure surgeons. The number and variety of the medical degrees which are confessed to in this work are astounding. Besides the English, Irish, and Scotch diplomas,

we have represented in London, the universities or colleges of Paris, Berlin, Vienna, Madrid, Giessen, Fribourg, Erlangen, Pavia, Pisa, Erfurt, Catania, Rome, Bologna, Geneva, Leipzig, Cologne, Tubingen, &c., and some even from the new hemisphere. Now, though of old, degrees in learning, like the order of knighthood, passed current everywhere, *ubique gentium*, it is too much that in the present day any value whatever should be attached to degrees attainable without study or preparation of any kind save as to the mode of paying for the parchment. Out of the long list, Paris and Berlin are the only names that ought to be received on equal terms by graduates in this country. They may, some of them, be very well as honorary appendages, but as titles to practise they are worse than nothing.

We are told that during the present year many gentlemen have occupied themselves in obtaining a better title than they could show last year. One curious instance of this we have noted. In 1845, Dr. CURIE, the homeopathist, was entered as "M.D. Paris, 1823." This year there is the addition of "M.D. Aberdeen, 1845," obviously with a view of entering the College of Physicians as a British graduate under the New Bill, should it pass into law. Some singular queries present themselves on these points. The universities of Scotland have of late years boasted much of the trustworthiness of their examinations. How then did Dr. CURIE obtain the degree of Doctor of Medicine? Did the examiners allow him to flout legitimate medicine by telling them that what they taught in their class-rooms was an old woman's tale, and that infinitesimal globules are the true foundation of therapeutics, and the itch-theory of HAHNEMANN the only philosophic pathology. Was this done boldly and honestly, and suffered to pass, or is it possible that Dr. CURIE did for the nonce put on the allopathic doctrines, and pass by stealth to the doctorate? A true history of this degree would form a very curious chapter in medical quackery. Another point is this: If a bill similar in this respect to the one proposed last Session should pass, will the College of Physicians admit Dr. CURIE, or any other of the homeopathic M.D.s, within its walls? Will they accord the highest medical title in England to those whom, though patronized by peers, they have solemnly decreed to be incompetent to attend paupers? It looks oddly enough to see homeopathic and allopathic physicians practising together at Stafford House, under the patronage of her grace of Sutherland. It looks still more strange to see that Dr. QUIN has been appointed "Physician in Ordinary to his Majesty LEOPOLD the First, King of the Belgians." We certainly have not heard that Dr. CARSWELL has resigned his post? Perhaps his Majesty takes pills at Brussels, and globules at St. James's! CARSWELL and QUIN must surely be anti-pathic to each other, and one must eventually go to the wall. Some of the great houses in this country have, we observe, their separate homeopathic and allopathic attendants. Thus the Duchess of CAMBRIDGE has her pulse felt one way, and the Duke the other, by Dr. QUIN and Dr. BARTLETT. Surely an end must come to this sufferance, and open, inveterate warfare be declared.

In the majority of cases in the metropolis, those who have done most to advance professional knowledge are prominent in practice; but we regret that many men, of no desert whatever, are acquiring wealth; and still more than this do we regret, that there are some who have toiled hard through the best years of their lives, without meeting their due honour or

reward. Of these, two most painful instances present themselves to our mind, and it would be false delicacy not to name them. We mean Dr. ROBERT GRANT and Mr. LANGSTAFF. The shame belongs all to the profession and to the public, not to them.

Dr. GRANT has laboured faithfully for more than a quarter of a century in Comparative Anatomy, a branch of knowledge, the successful cultivation of which has given a great impetus to general and medical science. But, unfortunately, its benefits are diffused among men in general, they bring little profit to the individual, and it is, therefore, these unselfish departments of science which are most deserving of public reward. In great bitterness of spirit Dr. GRANT must have written, that "in 1844, the seventeenth of his professorship, the twentieth of his lectureship, and the thirtieth of his authorship in Comparative Anatomy, out of his income, amounting *in all* to 120*l.* 6*s.* 6*d.*! the sum of 110*l.* 10*s.*! was earned *exclusively* by oral lectures on the favourite study of his past life!" O Science! how mean are thy rewards, when a profession, a people, a government, can suffer this to be! Such a man should have been pensioned long ago by the state.

Mr. LANGSTAFF's case is equally lamentable. He also has laboured unceasingly for thirty years. His ambition was to have formed an universal museum of pathological anatomy. Those who have ever in their lives put up half a dozen morbid preparations, and have felt the trouble such proceedings entail, may form some idea of Mr. LANGSTAFF's prodigious labour, in preparing, with his own hands, 2380 specimens, and many of these, during the long period which passed in forming the collection, requiring to be prepared the second time. He worked on, animated by the idea that his labours would be thought worthy of perpetuation. We have heard an eminent physician declare, that if at the time of placing each preparation in spirit he had published a simple description of it, he would have anticipated all the modern pathology of the French school. In the preface to the work entitled "THE PATHOLOGICAL MUSEUM," he writes thus—"Of all the preparations I have preserved a careful description, which extends to the history of the case, the medical treatment, with its results, collateral circumstances of importance, and to the pathological appearances observed on the post-mortem examinations. This history occupies ten thick folio volumes." What must have been his melancholy feelings when, disappointed of the hope, which he had long entertained, "that his collection might be preserved entire, through the liberality of some of the many important medical institutions of this enlightened country," he was obliged first "to part with certain portions," and then to disperse, "by public auction, the remainder." This man, like Dr. GRANT, well deserves a public pension. Future generations will look back with regret to these the dark ages of medicine, when the highest and most extensively beneficial forms of scientific labour scarcely obtained common food and raiment for their cultivators. We saw it hinted the other day, that Mr. NEWPORT was a proper object for a pension, but any young man able to labour on, should blush to have a pension thought of for himself, while such veterans as GRANT and LANGSTAFF pass unrewarded.

Such are a few of the points suggested by looking over the "London Medical Directory for 1846;" we shall be glad if 1847 may supply our readers with more grateful topics for meditation.

In reply to a vast number of correspondents who have addressed questions to us relative to the approaching ballot for THE MILITIA, we may state that there is nothing in the Act of Parliament which exempts medical practitioners or medical students from being chosen to serve.

HOSPITAL REPORTS.

LONDON HOSPITAL.

HYDROCELE.—DIFFICULT DIAGNOSIS.

HENRY S—, a tall man, aged forty-three, applied at the hospital in August, on account of a large swelling of the scrotum on the right side. The swelling was of a pyriform shape, and fluctuated, but by no means distinctly. It extended as high up as the inguinal canal, which was full and dilated. The testicle could not be felt, but at the back of the tumour there was an induration which indicated its site, the usual pain being experienced on pressure there. The tumour received an impulse on coughing—an impulse as distinct as is usually felt in scrotal hernia. On examining the tumour in the ordinary way, no transparency could be detected; but on placing the patient in a room from which daylight was carefully excluded, and examining the swelling through a tube, formed with a roll of writing-paper, a lighted candle being placed at the opposite side, transparency could be clearly recognised. The patient stated that he had been subject to a swelling of the scrotum as long as he could remember. Mr. Curling gave his opinion that this was a case of hydrocele, the fluid being contained in a thickened sac, and an impulse on coughing being communicated to the swelling, in consequence of the sac extending as high up as the internal abdominal ring. He stated that the sac was of uneven thickness, and that, at its lowest part, there was a kind of pouch, the sac being thinner at this part, and the transparency, consequently, more evident. As a matter of precaution, he carefully cut down to the sac at this part with a scalpel, and made a small opening in it. About twenty-seven ounces of fluid, of a darker colour than usual, and thickly loaded with cholesterine, escaped. The testis was found rather large, and the epididymis and vas deferens a good deal thickened. Inflammation of the tunica vaginalis followed the operation, and at one time there was a prospect of the hydrocele being cured by it. But after some weeks, the fluid appeared to be returning, and the patient has since discontinued to attend.

ENCYSTED HYDROCELE OF THE EPIDIDYMIS, COMBINED WITH VARI- COELE, CONSEQUENT ON AN INJURY.—DIFFICULT DIAGNOSIS.—RELIEVED BY PUNCTURE AND THE LEVER TRUSS.

Morris L—, aged forty-two, a stout German Jew, came under the care of Mr. Curling, as an out-patient, in consequence of a swelling of the left testis. He attributed the origin of his complaint to a blow received six months previously. It caused considerable pain and swelling at the time, and he was admitted into the hospital, where he remained several weeks, and was then discharged. There was a soft doughy swelling at the upper and back part of the testis, and connected with it, and extending upwards to the inguinal canal, a large number of varicose veins; but the swelling was obviously something more than a tumour occasioned by dilatation of the spermatic veins. It felt irregular, and communicated to the fingers an indistinct sense of fluctuation; but on careful and repeated examination in a darkened room, not the slightest transparency could be detected. The part felt heavy and uncomfortable, and, at times, quite painful, so that the patient could not continue his usual occupation. Various external applications were used, such as mercurial and iodine ointments, and iodine paint, but without relieving the pain, or causing any reduction of the swelling, which remained for some weeks in a stationary condition. Suspecting that the swelling might partly consist of an encysted hydrocele of the epididymis, the transparency of which was completely obscured by the varicose veins distributed around the tumour, Mr. Curling introduced a grooved needle into the upper part, when the escape of a few drops of a clear pellucid fluid revealed the true nature of the case. An adjoining but separate and smaller cyst was afterward punctured in a similar manner. In a few days afterwards, the swelling had subsided a good deal, and the part was freer from pain, but it still felt heavy and uneasy at times. In about three weeks the swelling had increased to its former size, and it was again relieved in the same manner as before. Pressure at the external

abdominal ring was found to relieve the sense of weight, and the uneasiness in the testis. The moc-main lever truss was consequently applied, and the patient derived so much benefit from wearing it, that he shortly afterwards desired to be discharged.

MR. BROWN'S CASE OF OVARIAN DROPSY.

To the Editor of THE LANCET.

SIR,—Allow me a few lines in reply to the letter of Mr. Hicks in your last number, wherein he animadverted upon my case of ovarian dropsy, which you recorded in the LANCET of January 10th. At the same time, permit me to say, it is not my intention to enter into a correspondence on this subject; as many cases will shortly be placed before the profession, which will remove from the minds of Mr. Hicks and others any doubts as to the truth of my previous statements regarding the treatment of this disease. I am happy to say, that many men of science and liberal feeling in the profession have given the plan a fair trial, and the results have confirmed them in its favour; and probably, if you have space in your next number, Mr. Hicks will be able to read a case, not recorded by me, free from any objections that can be urged against the case of Miss F. B. I am fully aware that the efficient curative agent in that case was suppurative inflammation of the cyst, and that it followed the means used. I am also equally aware that the patient recovered under the plan of treatment followed; although it is a fact, (which Mr. Hicks seems aware of,) that few patients recover under such circumstances—viz., the formation of ten pints of pus. I repeat, pus, although Mr. Hicks imagines it was serum mixed with pus. I assure that gentleman I am fully sensible of the importance of adhering strictly to truth in recording any cases in medicine, and more especially cases treated by what has hitherto been considered doubtful practice. If, however, Mr. Hicks doubt my capability of judging on the truth of my statement, I can refer him to Mr. Lane and the other gentlemen present; and Mr. Hicks from having been House Surgeon of St. George's Hospital, must know that Mr. Lane, at all events, is capable of judging between pus and serum mixed with pus.

I cannot believe that any gentlemen who have read my previous papers in the LANCET can require me to answer the following questions:—Does Mr. Brown imagine that these remedies (pressure, mercurials, and diuretics) are capable of curing ovarian dropsy without the operation of tapping? or does he make use of them for the purpose of producing suppurative inflammation in the cyst after the operation? To avoid, however, the chance of misunderstanding the nature of the treatment recommended, I will merely reply, I never imagined, and never said anything of the kind—on the contrary, as all my cases will prove; nor did I ever say, imagine, or recommend, that they be used to produce suppurative inflammation; on the contrary, my object has always been to produce adhesive inflammation; and this case was intended to show that if, in an unhealthy subject, the adhesive inflammation should become suppurative, even then a steady perseverance may be successful, and consequently no effort should be left untried. As Mr. Hicks has done me the honour to read and criticise this case, I hope he will now favour me by reading all my past papers, and having read them, to try, fairly and fully, the plan of treatment, and I doubt not I shall have the pleasure of numbering him amongst the supporters of the treatment.

I am, Sir, your obedient servant,

I. B. BROWN.

Oxford Square, Hyde Park, January 17th, 1846.

PLACENTA PRÆVIA.

To the Editor of THE LANCET.

SIR,—If the following remarks are considered suitable, perhaps you could find them a corner in THE LANCET, and oblige
Dublin, Nov. 4, 1845.

AN IRISH SUBSCRIBER.

Irishman considers that the reasons which Dr. Simpson assigns for the hæmorrhage ceasing when the placenta is extracted are not satisfactory. He would therefore suggest the subsequent remarks, as explanatory of his ideas on the subject, supposing that they will account for the quantity of hæmorrhage being greater where the placenta is more extensively attached, and less in proportion as we approach nearer and nearer to a total separation. He agrees with Dr. Simpson that each new detachment gives rise to renewed hæmorrhage, but differs with him in supposing that its cessation depends upon the obliteration of the vascular cells in the placenta. Irishman likewise differs with Dr. S. as regards

the source of the flooding, supposing that it comes from the uterine orifices.

In a case where the placenta is attached to the os uteri, labour has begun, and hæmorrhage sets in before the os has begun perceptibly to dilate; this commencement of labour is the action of the longitudinal fibres, by whose contraction the os uteri is dilated and the tissue around is thickened; as labour progresses, renewed hæmorrhage takes place from the detachment of fresh portions of placenta, which exposes from time to time new uterine orifices, from which the flooding proceeds. As the os uteri continues to dilate by the contraction of the longitudinal fibres, the uterine orifices that were situated immediately round the os become closed and cease to bleed. Yet we find that the hæmorrhage still continues, nevertheless it becomes diminished in quantity from the detachments that now take place being near the circumference of the placenta, where the orifices are not so large. Thus by the continued dilatation of the os uteri, which is in reality a contraction, the exposure of new and consequent closure of old orifices goes on, until one organ is separated from the other. It is in this way we find that Nature overcomes the difficulties connected with these very dangerous cases. And if we are not too wise we may copy a little from the book which she now and then opens for our improvement.

Note.—How would Dr. Simpson, according to his theory of unavoidable hæmorrhage, account for the flooding that takes place on the separation of the placenta in natural cases, or after the placenta is detached, as in cases of relaxation, if venous hæmorrhage by retrogression is prevented? If such hæmorrhage is prevented when the placenta is attached to the os uteri, why not if the connexion is at any other part?

NEWS OF THE WEEK.

Mr. L. D. MORGAN, the Secretary of the Middlesex Hospital, has written to us to say that the lecturers at the school of that Hospital would be obliged by our insertion of the following notice:—"In consequence of certain transactions with reference to the entrance of pupils by Mr. Tuson, it has been resolved by the lecturers of the Middlesex Hospital School, that no pupil of Mr. Tuson will in future be admitted to the School."

VOLTAIC ELECTRICITY IN TETANUS.—*To the Editor.*—SIR: Many years ago, I applied voltaic electricity in a case of tetanus, (*trismus opisthotonos*), at the request of a medical friend. The issue was successful. More recently, tetanus has been subdued in America by the application of the same means. In a recent occurrence of lock-jaw, in Hull, I offered my gratuitous aid to Dr. S—, as I do not practise in any way as a medical man, nor meddle with therapeutics. My reception was far otherwise than courteous; but I had no right to complain of this hauteur, seeing that it *might* have proceeded from some mental idiosyncrasy, while I must nevertheless assume, that my recognised scientific character might have reasonably anticipated a very different reception. The efficiency of this powerful auxiliary might have been tested in a few minutes, but would not have interfered, in any way, with other remedial measures. I have heard that Dr. S. observed to some one afterwards, that the patient could not withstand the shock! Now, sir, you know there is nothing of the kind, and that voltaic electricity might be safely applied to a baby. Dr. S. says that he did without it. But the question is, might he not have done better with it than by the sanguinary system of Sangrado. Lock-jaw, although formidable, has been conquered by very different treatment. It is the last time I shall condescend to submit to such an undeserved repulse for an act of pure benevolence. I am glad to see that medical galvanism is rapidly extending; and I cannot but think it was the duty of Dr. S. to have accepted the proffered aid, and allowed the simple and safe experiment to have been made.—I have the honour to be, Sir, your obedient, humble servant,

Hull, Nov. 7th, 1843.

J. MURRAY, Ph. D.

EXTRACTION OF NEEDLES FROM THE FLESH.—The following statement is taken from the *Sheffield Mercury*, and certainly, from what appears in the imperfect state of the report, presents some curious circumstances for consideration. The degree of credit to be attached to it we leave to our readers, premising only that one very remarkable circumstance, and seeming to indicate a more recent introduction of the needles than the correspondent of the paper seems to imply, is, that their polish was not at all affected. It most generally happens in such cases that the needles are corroded

to a greater or lesser extent:—"A striking illustration of one of this class of cases has occurred in Sheffield in the course of this week. The subject in this instance is a servant in the family of Mrs. Heppenstall, of Uppertorpe, and about 21 or 22 years of age. It seems the young woman was recently under the care of a medical man whose treatment produced salivation, subsequently to which she fancied that needles were slowly progressing from her left shoulder to the arm at some depth in the muscular substance. On Monday the pain became excruciating, and presently one, and soon afterwards three small needles were extracted from the fleshy part of the arm; and on the following morning two more, with part of a third! They made their appearance partly above and partly below the elbow, and seem perfectly bright and uncorroded. Mr. John Heppenstall, who himself drew out the latter portion of the needles, says that they did not by any means easily come away; and that no blood followed from the puncture. Next in interest to the curious fact of the undoubted extraction of so many needles under the circumstances, is the question as to how they got in the young woman's flesh? Of this she can give no account, having no recollection of having either swallowed them or received them into her body from any external accident; but she says that sometimes she has felt the pricking of needles in her chest, while their progress down her arm was quite perceptible. She states also, that seven years since she recollects not fewer than fifty similar needles and pieces of needles came from one of her fingers in the course of a fortnight."

APOTHECARIES' HALL, LONDON.

Names of gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, 15th January, 1846:—William Skafie Gibson, Dublin; Frederick Augustus Crisp, Orford, Suffolk; John Cowburn.

CORRESPONDENTS.

Oxonienis.—If a medical man, we recommend the necessary study; if a patient, he should apply to his medical attendant.

B.—Williams on Diseases of the Chest, and Walshe on Physical Diagnosis.

A Country Bookseller.—We never prescribe in the pages of THE LANCET.

We have to offer a thousand apologies to our respected correspondent, Mr. Crisp. His long lost paper has been discovered.

We should like to receive a copy of one of the bills reported to have been distributed to the congregation at the Catholic church, Portland Town, on Sunday last.

A Governor of the Salisbury Infirmary.—We are not at this moment acquainted with a similar case, but, as the advocate for one faculty of medicine, we can see no objection to such an arrangement.

We shall publish the communication of Mr. John Calvert, (of Witherne,) but we must first address him privately on the subject.

F. P. C. is informed that the cases would be inserted in the pages of THE LANCET.

Another able report from the pen of Dr. Taylor will appear in the next LANCET.

A most diligent search shall be made for the communication of Mr. J. W. Bellamy.

Magister.—No apprenticeship is required by any of the colleges.

We advise *A Medical Student* to write to the Hall, as we believe that he would receive a satisfactory reply to his application.

Dr. Turnbull (of Liverpool) shall receive a private note.

Chiron (Westminster) wants to know "what will be the next move of the voracious BENJAMIN, at the CABAL-HOSPITAL, near the Abbey." *Chiron* thinks that "the late lamentable failure is likely to make the plotter more than usually cautious." He also wants to know "why it is that BENJAMIN now enacts the toady to a weak old gentleman whom he has often virulently abused. Mr. GUTHRIE," he adds, "evidently treats his former tool with disdain." BENJAMIN appears to us to be a very busy, meddling, inflated person, whom a single touch of THE LANCET would reduce to a permanent state of collapse. Hitherto we have treated his unprovoked hostility with contempt.

Mr. Robinson's communication has been received, and shall be published in an early number.

We will make an inquiry for Dr. Hinxman. We believe a very good one has been lately published.

For what purpose was the *Liverpool Standard* of Jan. 20th sent?

Communications have been received from a Gownsmen of King's College, Mr. Hampson, Mr. J. G. Shelburne, Mr. Blacklock, S. P. B., Mr. W. Royle, Medicus, Mr. W. M. Colchester, (Old-street-road,) A Country Surgeon, Dr. Tod, Mr. T. W. Paterson, (Ibstock,) Mr. W. Anderson, Mr. J. Eustace, A Liverpool Student, H. S. B., Mr. C. R. Elliot, Mr. Barker, Censor, Amor veritatis, A Country Practitioner, M.D., (Cambridge,) A Subscriber, Mr. Alfred Bower, Mr. Carson, and Mr. Hunt, (Herne Bay.)

A COURSE OF FIVE LECTURES ON FRACTURES AND DISLOCATIONS:

EXPLAINING

NEW MODES OF TREATMENT, FOUNDED ON ANATOMY
AND PHYSIOLOGY, AND THE LAWS
OF MECHANICS.

By GEORGE O. JARVIS, M.D.

SURGEON TO THE FREE-STONE QUARRY, PORTLAND, CONNECTICUT,
ETC. ETC.

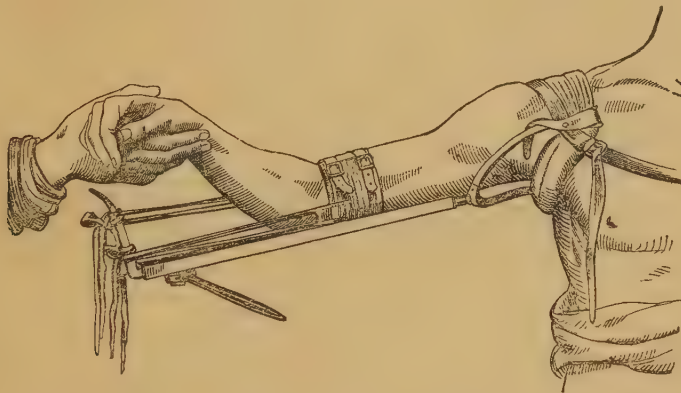
UNITED STATES,

Delivered at the Royal Westminster Ophthalmic Hospital, Charing Cross,
London, November, 1845, and sent to THE LANCET by the Lecturer.

Illustrated by Engravings.

Division of the muscles of the thigh into classes—Mechanical actions of those muscles in fractures of the bone—Usual violation of the laws of mechanics in the treatment of such fractures—Necessary attention to fixed points in applying force to reduce luxations.

We will this evening call your attention to dislocations of the superior extremities. We will begin with those of the shoulder, and from the manner in which this instrument operates, you will at once perceive that it is not necessary that it should have but one mode of application for luxations of this joint, the line of extension being entirely under the control of the surgeon, to vary it at his will; whether the head of the bone is under the tendon of the triceps, in the axilla, or under the pectoralis muscles, it is equally subject to his direction, and therefore is its one mode of application quite sufficient for every variety. We will now apply the instrument, and describe that mode.



buckled. Thus, as you see, the instrument is now on the patient, and ready for the operation; and by the lever you hold great power in your hand, more than a prudent man would ever think to use on the shoulder. You will, however, soon get so accustomed to its use, that you will know very nearly the amount which you at any time use; indeed, by this instrument, with very little trouble, you may tell to an ounce the amount of power which you have applied. I will not detain you longer with this luxation, but will call your attention to one of the elbow. We will suppose the case, where the coronoid process of the ulna is lodged in the posterior fossæ of the humerus, and an important point in this dislocation, when it presents difficulties, is to be able to flex the arm while extension and counter-extension are operating on the limb, without any abatement of force. There are two ways of applying the force of this instrument in this luxation. Some surgeons have preferred the one, and some the other method. As for myself, I think them both important, according to the case to be treated; and if I had an exceedingly bad case, and one which required my best efforts to reduce, I should apply both modes at the same time, and which may be done very readily. I will show and describe them both; the first one described, however, is the one which I use.

Buckle the belt having a close or leathern loop on it around
No. 1170.

Buckle a belt round the arm, immediately above the elbow, with one loop lying on the upper, and another on the under side of the arm. Through these loops pass strong tapes or cords; and I think it well also, in grave luxation, to cover the whole hand and arm, below the belt, with a common roller, to prevent, in some measure, the congested state of the capillary vessels, which is always certain to attend the application of force, in whatever way applied from this point, and is frequently the cause of the greatest pain to the patient which they have to endure during reduction, especially where the operation must be long continued. Prepare the instrument, by buttoning tensely across the top of the shoulder fork (fig. 5) the roll H. Apply the fork to the counter-extending bar D; apply the roll in the axilla, and tie the tapes closely round the foot of the rack. I would here recommend, in difficult cases, to lay in the axilla, between the roll and the skin, folds of cloth sufficiently thick to prevent the roll from pressing strongly on the tendons of the latissimus dorsi and pectoralis major muscles, the folded cloth being placed between those tendons. By doing this, the surgeon can, if he chooses, make the instrument operate precisely like the heel in the axilla, but much more steadily, and with much greater force than he can ordinarily command, and, moreover, the whole operation is immediately under his control. The instrument being thus applied, buckle the strap across the shoulder; or, which I prefer, pass the strap (which is used on the dorsum of the ilium in fractures at the neck of the thigh-bone) around the roll on each side of the shoulder, crossing the top of the scapula, drawing the strap sufficiently tight to press the roll firmly against the under side of the shoulder, so that the line of extension shall be from the centre of the elbow to near the centre of the glenoid cavity. This being arranged, apply the hollow part of the strap (which accompanies each box of the instrument for that purpose) to the point of the acromion process, and carry the ends on each side, between the fork and the roll, and around the body; let it be drawn tight and

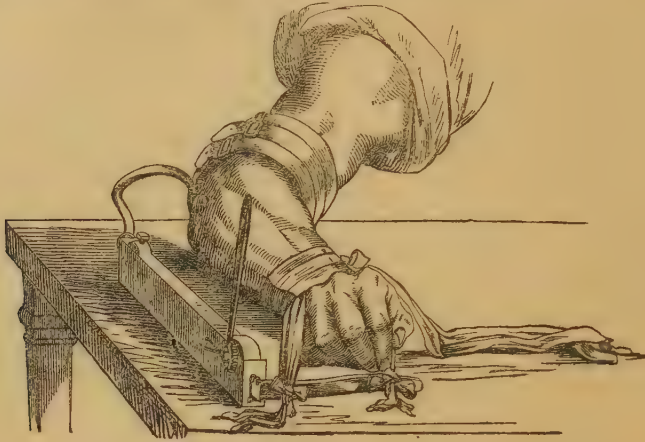
the arm, with the leathern loop low over the olecranon process, and the belt above it; buckle the second belt around the wrist, with a loop on each side of the hand, armed with strong tapes; insert the elbow-fork (fig. 7) into the close or leathern loop, and the counter-extending bar, D, into the socket, K; tie the tapes in the belt around the wrist to the foot of the rack, minding to draw them closely round the foot of the instrument; with the lever make extension, &c. [See the engraving on the next page.]

Second mode.—Buckle a belt round the arm, below the shoulder, with a loop on the back, and another on the front part of the arm, the loops looking towards the elbow; pass the two arms of the jointed fork through the two loops, the joint being on the under side of the arm: on the fore-arm, and close to the elbow, apply a silk handkerchief, in form of a roll, by a dove-hitch, the knot resting on the ulna, immediately below the olecranon process; insert the end of the counter-extending bar into the socket of the fork and tie the handkerchief closely round the foot of the rack; to securely fix the instrument to the limb, let another handkerchief be passed closely round both, near the top of the instrument, and tied; with the lever make extension, &c. Thus you have the two methods explained, and you will readily see that they are both easy of application, and, at the same time, by employing two instru-

ments. The last mode would bring the radius and ulna down, while the arm is in a flex position, thus drawing the coronoid process out from the fossa; the first would press the humerus backward, while the forearm was being flexed on the arm, thus bringing the coronoid process forward of the trochleated surface of the humerus.

We have but one more luxation to which we would call your

attention, trusting that, if you understand those already shown, you will be able to apply this instrument in every case which you may be called upon to reduce; that one is of the thumb; and although this is but a small member, it often makes a grave case for the surgeon, yet with this instrument I am quite sure you need never be defeated; and it is the same too with all the phalanges.



In showing the application of the instrument to reduce this luxation, it is not so easily exemplified as in the other cases in which you have seen it applied, mainly for the want of that peculiar prominence which the luxated bone presents, projecting over the side of the distal extremity of the bone from which it was dislocated, since it is around this prominence of the luxated bone that the force is to be applied. The thumb may be dislocated either backwards or forwards, and whichever way the bone is displaced, the force should be applied against the upper extremity of the distal bone. Suppose the thumb is displaced backwards—apply a broad tape, smoothly doubled, lengthwise, after having been met by a dove-hitch over the projected shoulder on the back of the thumb, letting the knot rest on the inside; apply the jointed fork to the instrument, and by the strap used to cross the dorsum of the ilium, apply it in form of a loop, hanging loosely down between the arms of the fork, being suspended from them; let the hand, between the thumb and index-finger, be made to rest against this strap, the back of the hand resting on this brass case; then tie the tape which is attached to the luxation to the foot of the rack, pass a handkerchief round the wrist and instrument, and tie it so as to confine them together; with

the lever make extension, and as that is being made with one hand, with the other cast the luxated bone directly backwards towards the wrist; when the extremity of the bone to which the tape is applied has reached the edge of the articulating surface from which it was displaced, bring the luxated bone forward again, when the two articulating surfaces will readily be restored to their normal position. When the thumb is luxated inward, apply the tape to the prominent end on the inside—as it was before applied to that on the back of the thumb—and let the thumb be also cast inward, as it was before backward; in all other respects the two operations are alike.

Thus we have now closed our remarks on luxations, and it only remains for me to return you my sincere thanks for the attention I have received while I have been attempting to contribute a small amount to the general stock of surgical knowledge. I can only say that my desire has been to do good, by endeavouring to improve the practice of that profession in which there should be felt one common interest; and in conclusion, I have only to ask for what I have said, that it be judged by the standard of truth.

CLINICAL LECTURES

ON THE

PRINCIPAL FORMS OF INSANITY,

DELIVERED IN THE MIDDLESEX LUNATIC-ASYLUM
AT HANWELL.

BY JOHN CONOLLY, M.D.,

PHYSICIAN TO THE ASYLUM.

LECTURE IX.

Melancholia.—The Treatment concluded.

I wish to pass a few more cases of melancholia in review before you, arranged according to their causes, to illustrate the degree of advantage derived from a knowledge of their probable origin, as respects their treatment.

Instances have been pointed out, in preceding visits, of melancholia in middle-aged women, apparently dependent on the changes taking place in the constitution at their time of life. These cases are of frequent occurrence, and generally characterized by restlessness, anxiety, and a fretfulness long inexplicable by their relatives; a short attack of maniacal excitement then supervenes; delusions arise, and the faculties seem afterward to be oppressed or enfeebled; the patients are sunk in perpetual gloom, and seldom speak; and this state lasts many months, or a year, or two years. A dread of poverty, and much consequent ingenuity in avoiding expense,

together with a needless anxiety concerning the health, or sanity, or personal safety of their children, are not uncommon symptoms in these patients; they imagine that their children are in prison, or are unable to take care of themselves, or are dead. This form of malady, when apparently dependent on the condition of the uterine functions, ensues most frequently, I think, on the abrupt cessation of the catamenia, and less often where the period of cessation is attended with menorrhagia; and some relief may be obtained by the application of leeches to the pubes, by the warm-bath or hip-bath, and by gentle aperients taken daily, as the seidlitz powders, or two drachms of the sulphate of magnesia, or a scruple of the compound powder of jalap; five grains of the extract of henbane, with a few grains of camphor, taken at bed-time, are also useful. Regular exercise, change of scene, the use of the tepid shower-bath, and kind and tranquil management, are important auxiliaries. Whatever treatment is adopted, the depression seldom wears off soon; but if harshness, or reproaches, or violence of any kind are employed, much excitement follows, and the suicidal disposition, which is so incidental to this form of malady, is pretty sure to be developed. It is not an easy task for those about the patient to bear with undeviating good humour what appears to be sullenness, or obstinacy, or ingratitude for all they do; but any resentment is misplaced, unjust, and productive of bad effects. For this, among other reasons, the condition and the prospects of such patients are often better in an asylum than anywhere else. The feelings of the officers and attendants are not wounded by manifestations incompatible with the comfort of the family

of the patient; and if both the officers and attendants are humane and judicious, all vexatious influences are kept aloof, and time and care may restore the patient to cheerfulness and usefulness.

When attacks of this kind have been recovered from, the disorder may be renewed in subsequent years by any causes of mental agitation. M. W.—, in the female infirmary, is an example of this; she is fifty-seven years of age, and unmarried. Ten years ago, at the “change of life,” she became desponding, and at the same time the bowels became habitually constive. She then became pretty well again; but having entered into business as a milliner, and lost all that she had saved when in service as a lady’s-maid, she became low-spirited during the last year: she says, the blood went suddenly to her head and took away her memory, eleven months ago; and that a few weeks before admission she felt herself becoming insane, and spoke to a friend about it. When admitted here she often spoke rationally, but was much oppressed, and disposed to destroy herself. She described her restless condition by saying that she often felt a desire to scold; and as if she could neither sit, stand, nor lie down, and as if she was bewitched. You have seen that she is thin, and of a sorrowful aspect, having a narrow forehead, and a well-developed upper head, dark hair, growing grey, and dark eyes. She used frequently to have pain of the occiput or of the middle of the forehead, alternating with a feeling as of being torn to pieces, referred to the stomach. After being five months with us, she is now convalescent, having been chiefly relieved by leeches applied to the head; the extract of colocynth with a little of the mercurial pill, warm-bathing, a belladonna plaster to the epigastrium, a blister behind the neck; and by being much comforted and encouraged, and induced to employ herself.

After much observation of certain cases of religious melancholia in younger women, I am disposed to associate the idea of their malady with that of uterine disturbance. They accuse themselves of improprieties of which they were never guilty; construe natural feelings into sinful propensities; think themselves degraded and lost to hope; and imagine that all whom they meet in society, or in the street, are conscious of their supposed immoral state. Their peculiar delusions are often connected with many sensations referred to the uterine region; with an irregular or painful performance of the uterine functions; and sometimes with what appear to be neuralgic attacks in the uterus, and excessive tenderness and sensibility of all the parts in the neighbourhood of that organ. The mental symptoms are mitigated, in general, by means calculated to remove this bodily disorder, as by leeches applied to the sacrum or pubes, the warm hip-bath, sedatives, and the careful use of mineral tonics. There are no cases in which a tendency to suicide is more constantly observed; if not repeatedly attempted, it seems to be at all times meditated. Little or no advantage is ever gained from combating their religious delusions, on which they are themselves much disposed to dwell. I believe it is better never to allude to them; or if they must be spoken of, simply to point out their utter fallacy, and to change the subject, or in some way divert the thoughts of the patient to something else. This form of disorder is doubtless most common in persons whose feelings are developed by education and the habits of refined life; and in whom religious excitement is too often a mere substitute for other excitements to which the world is less indulgent. It is also not unfrequent in the middle classes of society; but among pauper-lunatics it is less often met with; and the same observation may be made as respects all sexual irregularities; so that every circumstance appears to connect the melancholia in such instances with the physical cause to which I have alluded.

Intemperance is occasionally reported to us as having been the cause of melancholia, although its most ordinary mental consequence is maniacal excitement. There are four male patients in our wards at this time, all considerably depressed in mind, and in whom the malady is ascribed to excess in drinking, and all of these are under forty years of age. T. M.—, a very tall young man, in ward No. 11, is only twenty-eight. He is an Irishman, of the Roman-catholic religion, and single; and when he was admitted, a few months ago, he had been five months insane; his trade was that of a shoemaker, but he was in the police force. His malady has been marked by great depression, but by very little irrationality. He told us that he had drunk hard, and became insane in consequence. His tongue was white and very tremulous; his pulse languid and feeble; his voice so low as to be heard with difficulty, and his replies were slowly made. He is very inactive and apathetic, often stands like a statue for a long time together, and is always gentle, inoffensive, and obedient. It is to be feared that de-

mentia and paralysis are coming upon him; but he has sometimes become a little more animated, after the application of leeches to his head, where he usually complains of pain; a blister behind the neck has occasionally also seemed to be serviceable to him, and his head has been relieved by taking aperient medicine. The shower-bath, and small doses of calomel long continued, have seemed to be of no service. His strength has improved when taking porter, (stout,) an effect so frequently and sometimes so marvellously produced among our poor feeble patients, as always to furnish me with an excuse for not signing the extravagant declarations of the well-meaning committees of what are called medical temperance societies, to the effect that barley, porridge, or gruel, are more nutritious. Many of our patients are long kept alive by porter whom barley-water, or gruel, or porridge, would soon carry to the grave. This kind of apathy is so great in several melancholic patients, that they seem as if they would remain inactive, silent, and without food, until they died. The power of moving, speaking, and taking food, survives in them, but volition seems to be extinguished, and although the mental faculties do not appear to be confused in them, all instinctive love of mental exertion is lost.

If, as seems most probable, the brain has, in these cases, undergone a change, in consequence of intemperance in drinking, part of that change may be presumed to be an increase of firmness in its substance, and of thickness in the membranes, accompanied by sub-arachnoid effusion; and this condition closely resembles what is found in an incurable form of paralysis, already alluded to as associated with insanity, and hereafter to be described; and it may be observed, that the symptoms of that peculiar form of paralysis very much resemble those of intoxication: the voice is hesitating and tremulous, the action of all the voluntary muscles is impaired, the gait is unsteady, and the mind is excited.

It is this tendency to effusion of serum within the cranium, and to an altered consistence of the brain, but more frequently of its investing membranes, which makes so many cases of mental malady incurable. I believe such a state of brain exists in at least 800 out of our 985 patients. I exclude the epileptic, in whom the morbid appearances are usually different. No art can reach, or medicine remove, these morbid products, or undo what has been done. But these changes may exist in various degrees, and be combined with various degrees of remaining sensibility and cerebral power, and life may continue long, its whole character depending on the general management of the patient, whom the practitioner has to conduct comfortably through all the inevitable troubles of a chronic and incurable disorder, affecting not the body only, but the propensities, the affections, and the intellect. This it is which causes the range of the practitioner’s attention to extend to whatever can favourably or unfavourably affect the mind as well as the body, and from hence are deduced the true principles of the treatment of mental disorders. It would be far more satisfactory, no doubt, to be able to tell you that a great proportion, or even a majority, of cases of insanity were curable: but my duty is to tell you what I believe to be the truth; and I am far from believing that a majority of the cases, from whatever cause arising, are permanently curable; and I am incredulous as to the statements to the contrary, wherever made, not doubting the good faith of the reporters, but distrusting their evidence of the facts.

I believe that the proportion of cures in melancholia is not less than in mania, although I think a contrary opinion prevails. In six years, the number of maniacal patients admitted at Hanwell, excluding the cases complicated with paralysis or with epilepsy, which are acknowledged to be incurable forms of malady, has been as follows:—

Males	199
Females	214
	— Total 413

The recoveries during the same period have been—

Males	103
Females	78
	— Total 181

The number of cases of melancholia admitted in the same period, with the same exclusion of paralytic and epileptic combinations, has been—

Males	60
Females	93
	— Total 153

And the recoveries—

Males	24
Females	46
	— Total 70

By which it would at first sight appear that melancholia is even more curable than mania. It would also seem that more men recover from mania, and more women from melancholia.

T. B—, in the male infirmary, is reported to have become insane from intemperance; but in this case, and others of a like kind, poverty and difficulties have usually been acting on the patient, sometimes the result of intemperate habits, but sometimes leading to them. Both the father and mother of this patient are said to have been hard drinkers. He was admitted three months since, (1841,) is thirty-eight years of age, and his occupation is that of a coachman. If any of you return home occasionally at late hours in London, you can scarcely fail to see whole streets filled with carriages, and the coachmen and footmen waiting for hours in the night and early morning air for their masters and mistresses. Their severest duties being consequently to be performed in the hours usually devoted to sleep by other persons, weary with waiting in the cold, without refreshments of any kind, except what the dram-shop offers to them, you will not wonder that many become habitual drunkards. The temperance societies cannot counteract these evils, unless they can enlarge the idea of temperance, extend it to fashionable amusements, and influence the higher classes as well as the lower. The patient of whom I am now speaking probably inherited a very excitable brain, for this is his second attack; he has been tormented with various apprehensions, imagined people came to his house to rob him, thought a razor was purposely left for him to cut his throat with, and attempted to do so. When first admitted, he used to run about the ward, fancying people were calling him, and he was greatly depressed. The bodily functions were very little disturbed; his tongue was coated; he had occasional giddiness; but his appetite was good, and the pulse natural. Occasionally, there was much heat of the forehead, with corrugation of the skin, and the feet were cold. Leeches were applied, with relief, and he had warm and shower baths, and took some aperient medicines. In a short time he became a helper in the ward, and he is now well. The regular habits of patients in an asylum, and the absence of all intoxicating fluids, constitute important parts of the treatment in all cases originating in intemperance. Regular hours, good food, exercise, employment, conduce to the cure of all such cases in all ranks of society.

I mentioned in a former lecture that we sometimes met with cases of mania, which had supervened on a fit of hard drinking prolonged for a few days. J. B—, in ward No. 11, presents an example of melancholy, originating in the same way. He was admitted three months since, and had then been five months insane, having had no previous attack. He is a cooper, thirty-four years of age, and of the Methodist persuasion, and has an aunt who is insane. In the hottest season of the year he was induced to drink hard for a few days, to which he was not accustomed. On his return home after this outbreak, he found fault with his wife, and threw the furniture about; but the next morning he went to his work as a cooper again. He returned in the evening in very low spirits, and tried to cut his throat with a knife. On the day following, fever came on; he was bled at home with temporary relief, then became for a short time maniacal, and then deeply melancholy, refusing food, and requiring its introduction by means of the stomach-pump. When admitted, he was very dull and depressed, would seldom reply when spoken to, and when he did, spoke in so low a voice as to be scarcely audible. He fancied he was to be hanged or transported, he did not know for what offence. His head was hot, and his tongue white; he walked slowly, and as if feebly, and his expression was downcast; but his complexion was ruddy, and there was scarcely any manifest disturbance of his bodily health. When a patient is received in whom these fears of punishment for some unknown offence prevail, the state of the mind may be relieved or further exasperated by the character of an asylum; they always mistake it for a prison; and if any harshness is employed, and particularly if fetters or a strait-waistcoat are put on, their melancholy delusions are confirmed. M. W—, a patient in the same ward, and, like the last-mentioned patient, now convalescent, imagined, when admitted five months ago, that he was brought here to be put to death. He is thirty-four years of age, a shoemaker, and his religion is that of a Wesleyan. When admitted, he had been insane two weeks, and was oppressed with the severest melancholy; was suicidal; fancied he had done some irreparable injury to his brother; and declared that he had one night seen two or three moons, and had been unable ever to rest since. His malady arose from intemperance, acting on an hereditary disposition to insanity. He appeared to be feeble; his pulse was 120, and

very weak; his voice was tremulous; he had scarcely any desire for food. Pain was often complained of, referred to the region of the sigmoid flexure of the colon, and the bowels were costive. A mixture of the sulphate of magnesia and magnesia in peppermint-water gave complete relief to the latter symptoms; and he also took the infusion of cascarrilla, with the addition of a little aromatic spirit of ammonia; and his strength was further kept up by strong beef-tea. Although most of the symptoms were often disposed to return, he became capable of employment in the garden in about a month, and he has from that time been gradually recovering. But I was principally led to mention his case, from a recollection, that for many days after admission, in the midst of his crying fits, this poor man used often to stop, look at us with a kind of surprise, and exclaim, "How kind you all are!" and then cover his face again, and cry bitterly. If the suicidal propensity existing in this case had been met by restraint instead of kindness, I believe he would not have recovered.

When melancholy has been directly occasioned by mental anxiety, the utmost attention to the state of the mind, and a careful avoidance of all that can occasion uneasiness, is more obviously indicated. In a brain hereditarily predisposed to disturbance, the depressing effect of fear and anxiety is with difficulty resisted, and has a tendency to become permanent, or to be violently renewed from time to time, and only allayed by a kindness, or, I might say, by a tenderness of conduct in those who have the charge of the patient. I might relate touching cases of this, occurring in private practice, but my present object is to teach by the examples before us, and the principles thus inculcated are not likely to be forgotten when you have to direct the treatment of patients of higher cultivation, more refinement, and, perhaps, of more acute sensibility. C. C—, in ward No. 9, is thirty-one years of age: he came to us two years ago, and was then reported insane more than two years, the character of his malady having been throughout that of melancholy. He is, however, recovering, and will, in all probability, soon leave us, (1843.) His history illustrates several points worthy of your attention. He had an uncle and a cousin who died insane; and another cousin has been insane, but recovered. The patient himself held a responsible appointment, and he was one day informed that he was accused of misconduct. Being a man of good character, this information greatly affected him, and his mind was filled with the apprehension that his wife and children would be unjustly reduced to beggary. It proved that the information given to him was quite the reverse of the fact, and had only been communicated in jest, to heighten his surprise and pleasure on being informed by his employers, that, in consequence of their high approval of his conduct, he was promoted, with an increase of salary. When this was told to him he seemed to receive no pleasure from it, was silent, and apparently unconscious of what was said. He then became fretful and uneasy, and attempted suicide in various ways. He was sent to a public asylum, remained there three years, and was then discharged as incurable; thus illustrating the fallacy of attempts to separate incurable from curable patients. Ideas of unfitness for his employment, and of ruin and disgrace falling upon him, haunted his mind long after his admission; and a more distressing sight could scarcely be imagined than that of this intelligent and manly person in his paroxysms of grief. His was one of the cases in which these paroxysms were accompanied by vehement action of the heart, and in which relief was given by the application of leeches to the precordial region, and by sedatives; the action of the heart was at all times too strong, and there was evident hypertrophy of its walls. Constant attention was required to restore this patient's confidence in himself, and although, when the paroxysms were present, he seemed incapable of receiving consolation, he was evidently sensible of the sympathy shown to him.

In the history of most of the cases in which melancholy has ensued on mental causes, it is found that some of the relatives have been insane. The brain is predisposed to be disordered by strong impressions. There is a very quiet, respectable-looking man in ward No. 3, W. M—, to whom I spoke this morning; he was sitting by the window with his arms folded. He has been with us nearly a year. When admitted he was forty-eight years of age. The father of this patient has always been accounted a weak-minded man, and one of his brothers became insane for a time, after an attack of fever. The patient himself was subject, at all times, to headach and giddiness, but went on well in his business as a salesman, at last, however, becoming a bankrupt, six years since, after being in respectable circumstances. Then his mind began to suffer, his memory to fail, and he was observed sometimes to talk in-

coherently. On one occasion he went into the country, did not return until two days after he was expected, and could not tell where he had been. These were the first symptoms; despondency supervened; he fancied that he saw an angel, who directed him to murder his wife, and thought that he had seen a golden man who was the Saviour. He begged his wife not to leave him, for that he should destroy himself. In this state he was admitted. The general care taken of him has prevented any accident, and the general influence of the asylum has produced a state of such habitual tranquillity and content as to remove any particular apprehension about him; but his mind does not recover its power; he becomes indolent, listless, indifferent to things which once interested him, and the prospect is very unfavourable.

Although I have mentioned cases of recovery in older patients than the one last mentioned, the chance of recovery generally diminishes with age. A first or second attack, occurring between forty and sixty years of age, may be recovered from, and the malady recur later, and be fatal. In the worst cases of this kind, fits of great excitement occur, which tend to exhaust the patient. A male patient was admitted to the asylum, in 1841, affected with general paralysis and mania, and died not very long after admission. His wife, sixty years of age, became melancholy after his death, and after being a year in a private licensed house, came to the asylum as a patient. At first, excepting great depression, there was very little disturbance of her intellect, and there were scarcely any symptoms of bodily disturbance, excepting a pulse of 120. Two months after admission, she became suddenly and violently maniacal; she threw herself about, attempted to bite everything within her reach, and tried to beat her head against the furniture and walls; she was pale and thin, but incessantly in motion, and constantly noisy; her head was very hot, and her face flushed, and the tongue was dry and red. She was removed to a padded room; sedative and aperient medicine was given, and she had a warm bath, but she continued to be much excited, and talked or moaned incessantly; the pulse was 144, and she scarcely slept. Soon after this she appeared to be sinking, and wine was given to her; but although she lived some months longer, she never perfectly rallied.

There is a case apparently pursuing the same course at this time in the asylum—that of M. G.—, in female ward No. 10. She is fifty-four years of age, (1844,) a married woman, of the sect called Independents, and when admitted, a year ago, had been in a low state about six weeks, in consequence of grief, it was said, acting on hereditary disposition. She was then tranquil; but her mind was so enfeebled that she could not give a clear account of herself; she complained of pain of the head; her tongue was rather white; the bowels costive; the urine scanty; the pulse about 100; the sleep disturbed. She is now generally in a violent state. No medicine has given her any relief; she has become emaciated, and her case will probably end fatally.

J. B.—, in male ward No. 11, presents an encouraging example of recovery after an attack of melancholia induced by mental causes, in a person hereditarily disposed to insanity. His age is forty eight; he is a married man: three months before admission he lost one of his children, and became low-spirited and scarcely able to work. He talked of drowning himself; and had a dread of being sent to prison. One of his sisters had been insane many years. He came to us in a very restless state, emaciated, sallow, very feeble, generally moaning, and complaining of a "sinking" in the left side of his chest when he gave way to his feelings. The bowels were costive; the pulse was 120; his voice was low; he slept ill; but there was not much bodily disorder. In this state he continued for about two months, but without any alternations of violence, and then he began to gain strength both of body and mind, and I look upon his recovery as tolerably certain. [He was discharged, well, a month later.]

The treatment, which was evidently serviceable to this patient, consisted of the application of leeches to the head; mercurial alteratives; warm baths; the infusion of calumba with the liquor of potass; porter; sedatives at night when most restless; sometimes two drachms of the tincture of hyoscyamus, and sometimes half a grain or a grain of the muriate of morphia. Now that he is better, he is employed in the painter's shop.

You may remember my mentioning to you that the father of M. H.—, a young woman now affected with alternate mania and depression, had once been a patient here, affected with melancholia. This was three years ago; and he was then forty-one years of age. He had been four months ill when

admitted; twelve years before he had been in the same state, but his immediate attack was brought on by grief on account of the first appearance of insanity in his daughter, who is also now suffering from a second attack. She was then but fifteen years of age, became insane and violent, and was sent to the workhouse, which caused her father to grieve excessively, and his melancholy state returned. He was very feeble and oppressed, but spoke rationally, and it was nine months before he was well enough to leave the asylum. Leeches were occasionally applied to his head, but generally he required wine and careful nourishment. He has occasionally been to the asylum to see his poor child in her present attack, and although his agitation has sometimes been great, I believe he has been prevented from becoming melancholy by his personal knowledge of the kindness shown to the patients at Hanwell.

I might cite several cases of melancholia, in young men and young women, arising from mental causes, and yet ending favourably, in some of which there was an unvaried depression, and in others occasional mania; but those already mentioned are sufficient for the purpose of illustrating various circumstances in the ordinary history, treatment, and progress of cases of melancholia in general. From the observations I have made when alluding to them, you will have gathered that the mere medical treatment of this form of insanity is not very complicated. To relieve the head of pain and a sense of fulness by leeches and blisters; to restore the proper functions of the digestive organs by alteratives, aperients, and tonic medicines; to tranquillize the nervous system by sedatives and warm bathing; and to procure regular rest by these means and by regular exercise, are objects to be kept in view in almost every case of melancholia. The practitioner naturally feels anxious to produce some more direct and palpable effects, but the laws of disease are not to be abrogated by his ambition, and any attempt to excite the patient by stimulants is usually unfavourable, producing maniacal excitement, and sometimes fever and death. I have failed in attempting to rouse even the old and feeble in this manner, and have found that the skin became hot, the tongue dry, and the whole condition of the patient changed for the worse. Dr. Hitch, physician to the Gloucester Asylum, who has great experience in the treatment of insanity, and whose evidence may be relied upon, speaks very highly of the hydriodate of potash in doses of five or eight grains. He found that in one case a patient had become maniacal when taking it, and he employed it afterward in cases of depression, in order to stimulate, and with good effect. I have met with cases of maniacal symptoms ascribed to the use of large doses of steel, and am perhaps too cautious in my employment of means likely to produce such effects. Even in small doses I have often found the sesquichloride tincture of iron produce such increased excitement as to make me desist from its use in cases of melancholia, although it is a medicine which appears to be so plainly indicated that I am continually making new trials with it. It seems to be best tolerated when the patient takes a tepid or even a cold shower bath every morning, or every other morning.

Some allusion was made in a former lecture to a case of melancholia in a young married woman who was in the asylum, and who was accustomed to stand in one place all the day, and never to speak. She attributed her entire recovery to the shower-bath, and acknowledged that it roused her the more because she did not like it. After the first shower-bath she took food willingly, having previously refused it. This patient was only twenty-four years of age; she had been two months in a melancholy state before admission, and this state had come on after an attack of measles. She had become very thin and feeble, and was a miserable example of what seemed to be hopeless dejection. She was admitted in May, 1839, and discharged in September, 1840, her recovery proceeding slowly; but she had become so improved in appearance, that no one who had only seen her in her melancholy attack could possibly have recognised her. Her pale, pinched, depressed countenance had become lively and handsome; her dull and spiritless eyes had become bright; and her silence and inactivity had given place to very active habits, and a disposition to talk rather more than other persons. This patient's case made a great impression upon us, as she had at one time every appearance of sinking into dementia; and we know that her recovery has been permanent.

Warm bathing is a soothing and useful application to the melancholy. The bath is best taken just before going to bed, and the patient should remain in it from half an hour to an hour. Warm clothing is also generally essential to these

patients, and friction of the skin. As I have not praised the application of the *douche* in acute mania, you will not expect that I should recommend it in cases of melancholy, or that I should approve of the attempts which have been made to remove delusions by its continued or repeated administration. I can conceive delusions being disavowed under such treatment, but not removed. Fear will effect disavowal, but will scarcely improve the mind. Such a practice is too severe, and too much like a punishment. But, indeed, for any curative purpose, the *douche* seems to me to be in no degree more serviceable than the shower-bath, and it is certainly more distressing to the patient. It is one of the remedies which medical men are not much disposed to make trial of in their own persons; but M. Esquirol did so, and he described the sensation as that of a column of ice descending upon the head. I also entertain the strongest aversion to the affusion of cold water, as what is called, by a great abuse of language, a moral means of overcoming obstinacy, and can see no advantage gained by inducing a poor melancholy man to promise to work that he may escape being half drowned. There is nothing against which the officers of asylums ought to be more on their guard than this self-complacent profession of overcoming the impulses of insanity by pains and penalties; it is a mere excuse for impatience, and sometimes for cruelty and pride, and not only fails in its effect on the immediate object of the infliction, but creates a general dissatisfaction in the other patients, offends their sense of justice, which is seldom extinct, and is in its whole spirit opposed to a humane system of treatment and to non-restraint. It is always necessary to remember that the patients are insane, and that what would in others be ill behaviour, or ingratitude, or obstinacy, are but symptoms of their malady, for which they are not to be punished, but from which they ought to be relieved by every salutary influence that can be brought to bear upon the remaining feelings and the remaining understanding. I formerly mentioned to you that it was not uncommon to find all the natural feelings perverted, even in a short fit of maniacal excitement, so that the same patient would manifest friendly feelings when well, and the most hostile feelings whenever the excitement returned. We can seldom, therefore, form a just opinion of the real character of an insane person; and it is as irrational to be angry because they are tiresome, and selfish, and self-willed, as it would be to be angry with a patient for having the rheumatism. In public asylums, the patients may be protected from the imperious character of any one officer by the humanity of the rest; but in private asylums, where this check is wanting, it is especially important never to forget that the waywardness, the violence, and all the foibles of the patients, are the results of disordered mind, and do not justify coldness or resentment, and far less excuse any kind of revenge in the shape of punishment, with whatever moral and self-complacent motives professed and practised.

Seclusion, you will readily conclude, is not in frequent use in melancholia, being neither necessary nor desirable. Melancholic patients, however, frequently request to be indulged by being in their rooms alone; an indulgence not always to be withheld, but to be permitted with some caution. M. Esquirol considers seclusion really useful to them: "the moral forces," he says, "previously lost in the violence of the passions, are recovered in seclusion." The disposition to hide themselves, and to commit suicide, must, however, be kept in mind. If seclusion is necessary, the patient should be frequently looked at through the inspection plate in the door, and frequently visited in the night; the expectation of such visits, or the consciousness of such frequent inspection, acting as a preventive of suicidal attempts; and all such attempts should be rendered additionally difficult by the removal of all easy means of carrying the intention into effect.

Exercise in the open air, an almost universal remedy in functional ailments, and almost universally neglected,—by some from mere indolence, by many from the imaginary advantages of ever-during application to the means of gain and advancement,—is most essential for the expulsion of melancholy, and, perhaps, more successful in expelling it, when not inveterate, than all the articles of the *materia medica* put together. Aperients, sudorifics, narcotics, are mere substitutes for that voluntary exertion of the muscles in locomotion which appears to be a means no less of improving the circulation of the blood than of recreating the nervous system, and promoting every secretion by which life is sustained. In cases of melancholia it must be recommended according to the patient's station in life. The rich will object to it, except as an amusement, and patients of the poorer classes are averse to it, except in the customary form of labour. The poorer class of women cannot

be persuaded to walk, if they have nothing to do, and richer women can scarcely be induced to breathe the morning air, or to walk or ride before those hours of the day are come when its freshness is gone, and exercise is taken more for fashion's sake than for health's sake. Trained to these habits from girlhood, they become the victims of many sufferings, which more sensible habits would have preserved them from, and seek from drugs the remedy which the Creator of the world has provided for them in every breath of the air around them, and in the use of their own muscles. Few facts are more generally admitted, than that many bodily and mental disorders, dyspepsia and gout, hypochondriasis and melancholia, are rendered more frequent by sedentary habits in some classes, and by habitual positions observed in consequence of peculiar employments in others, producing pressure or compression of the epigastrium or abdominal viscera. Yet one of the dearest privileges of wealth seems to be considered that of refusing to stir out after dinner; and among artisans and workpeople, that free exercise out of doors which would be highly salutary, appears to be as repugnant to their feelings as the most disagreeable medicines. When our workshops at Hanwell were removed from the interior of the main building to their present situation, it was at first difficult to persuade the patients, especially the tailors, to walk to the new rooms, a distance of about one hundred yards, and they are generally found to be quite indifferent to taking exercise in the large field in front of the asylum.

Riding on horseback, hunting, driving, and also fishing, farm and garden work, and all pursuits which involve the necessity of walking, are useful in different cases. The various kinds of exercise which may be taken within doors are serviceable also, as billiards, ball-playing, battledore, and dancing in the evenings when the season is unfavourable to an evening walk. I mention the latter with most gratifying recollections of the exhilarating effect of the dancing evenings at Hanwell on some of the most habitually desponding of the patients whose cases have been mentioned to you.

Travelling, as it comprehends all kinds of exercise, and continually varied stimuli to the senses and mind, with change of air, diet, society, and language, one would think likely to be useful in almost every case of melancholia capable of improvement. But some discrimination is required in the application of this important general agent, as the weak and irritable mind of a melancholic patient is sometimes extremely excited by all these changes, and a state of mania may be produced. The cases which have arisen from a moral shock probably depend on a temporary debility or paralysis of some part of the brain, in which diet and regimen are more important means of recovery than any medicine. Change of place, although unwillingly agreed to by the invalid, is generally useful. It does that in a short time for which time is generally required. But in these cases, frequent changes of place, long and hurrying journeys, and numerous and violent impressions, irritate and fatigue the patient, who can bear no violent impressions of any kind. And I must again remind you, that in many cases of melancholia life is held on a most precarious tenure. A languid circulation, a feeble digestion, a soft and flaccid skin, a deficient vigour of every function, are often present; the patients require good food, porter, ale, wine, sometimes brandy, or cordial and tonic medicines. Cold extremities, bowels totally inactive, the appetite quite lost, may be the precursors of rapid sinking, or of the occurrence of gangrene of the extremities, followed by death.

Great anxiety is inseparable from the cure of many of the cases of melancholia, in consequence of a tendency to suicide. Although in most of the cases this tendency is only occasional and paroxysmal, lasting a few days or weeks at a time, and then for some time disappearing, there are patients, chiefly those affected with vague religious fears, in whom the tendency is continual, and who can never be trusted alone or out of sight. About twenty out of eighty melancholic patients now in the asylum are known to be suicidally disposed; and I ascribe our freedom from the dreadful occurrences that might be expected, chiefly to the general comfort enjoyed by these patients, to their being occupied, or interested in the crowd by which they are always surrounded. Every object suggestive of suicide is carefully removed from them; they usually sleep in dormitories, near patients rational enough to give an alarm; and, above all, they are carefully watched, kindly treated, and encouraged to activity and cheerfulness. All such patients are easily alarmed and depressed; they imagine themselves in disgrace, or slighted, and are prone to think that some punishment they have long dreaded is only deferred; or, if parents, they think that their children are shut up in the house, they

say they hear their voices through the ventilators, and they believe that they are about to be put to death. We think it our duty to do something for the relief even of these causeless anxieties. In No. 6, female ward, there is an epileptic patient, M. B—, in whom the suicidal tendency was quite removed by allowing her to see her children. She had attempted to cut her throat and to strangle herself; and she sat in a corner of one of the padded rooms, in a strong ticking dress, her hair hanging over her shoulders, wild in aspect, and apparently quite irrational; but in the midst of this distraction she told the nurses that she should be happy, and give them no trouble, if she could see her children, who were somewhere in London. An attendant was soon despatched to town, who, with some trouble, found one of her poor children, a little girl, and brought her to the asylum, to her anxious mad mother. The presence of the child did "good, like a medicine," and the next day, I found the poor woman walking in the gallery with her daughter, smiling and tranquil, and thankful for the poor child being allowed to pass a day or two with her. In the evening of the day afterward, the mother and child were at chapel together, at the evening prayers.

Another serious trouble connected with cases of melancholia is the refusal of food, on which I have already made several observations, which it is unnecessary to repeat. In this house at present, with nearly a thousand patients, we have not one who refuses food, except occasionally, perhaps for a day or two; and the stomach-pump has not been once required in any such case during the last three years.

One would scarcely think it necessary to say, that in all cases of melancholia, but especially in cases of religious melancholy, the general demeanour and conversation of the officers and attendants should be consolatory at least, if not cheerful. I am sorry to say that I often find this form of derangement to have arisen from hearing the fanatical discourses of gloomy and ignorant preachers, and from reading worthless books of pious pretensions, to the exclusion of all works of sound religious or general instruction, and all elegant literature. The minds of the patients, debarred from all reasonable relaxation, have often been kept in a continual state of excitement, or perhaps over-tasked in undertakings professedly charitable, but of doubtful value, and far beyond their powers. Even the religious despondency is occasionally treated as a natural and desirable symptom, and designated as a struggling of the spirit, and encouraged. The end of such fanaticism, which particularly infests our watering places, and other localities especially devoted to fashion, luxury, idleness, and selfishness, is either raving madness, or hopeless melancholy and suicide.

In the management of these cases, the chaplain becomes the auxiliary of the physician, and much depends upon his prudent and judicious care. The calm and paternal conversation of a devout and well-informed clergyman may do much to correct the wild conclusions and perverse misapplications of scripture which are so common in these cases. It requires a thorough knowledge of the human heart to distinguish the true from the false in the exaggerated self-condemnation of the desponding, and to abate, without extinguishing, the hopes of the excited and extravagant. It is very important that the physician should have such aid; for it is scarcely necessary to say, that a clergyman so qualified, and ever mindful of the boundless pity and goodness of the Creator, must have more influence with patients affected with religious insanity than any medical attendants can possibly exercise.

Some kind of mental employment is requisite for those melancholic patients whose minds have been cultivated, and any return to customary habits of reading, drawing, or application to music, or any kind of employment, is commonly a favourable symptom; for the greater number of the melancholic will do nothing. The malady is sometimes the apparent product of a cessation of ordinary mental avocations, in men leaving off business, or all at once retiring from active life. For those who have not been accustomed to find solace in intellectual pursuits, active amusements become necessary, or exercise out of doors. For more intellectual patients, some daily mental employment, of a nature to excite hope, or to gratify the love of acquirement, or to rouse curiosity, may prove remedial. The selection of books is of great consequence: those of a religious character, even the Bible itself, must sometimes be withheld, as every striking text sometimes becomes a source of morbid ideas. Yet in all asylums, among innumerable instances of the plan of the physician being countermined by conflicting authorities, you will find all kinds of injudicious works put into the hands of the patients. The rule

ought to be, that no book of any kind should be introduced into the wards without being first submitted to the physician.

I have met with cases of melancholia which appeared to have originated in the application of the mind to subjects for which it was unprepared, or unpossessed of sufficient natural capacity. The subjects of it have generally been young persons, and especially young women sprung from uneducated families, and painfully trained to act as governesses; but I have also met with it in young women of highly educated families, tempted by intellectual ambition to apply too devotedly to the study of difficult languages, or of mathematical studies, or led far astray from reason by that portion of German literature which is characterized by involving somewhat shallow thoughts in studiously unintelligible words and phrases.

The intelligent state of melancholic patients in general, their timidity, and their sensibility to all impressions, give particular importance to all branches of what is commonly denominated moral treatment. Many of them derive an evident satisfaction from being spoken to in comforting terms, and having their dismal views combated. The physician must, however, have patience to repeat his consolatory assurances day after day, and be contented to make a small apparent progress to permanent conviction. Some effect is certainly produced; and it may be progressive. I do not recommend too anxious attempts to excite the reasoning powers of these patients, by conversation or remonstrances. The patient will admit your reasoning, but retain his morbid impressions. He will tell you that he knows you are right; and add, that he wishes he could think so, or feel so. The disease consists in his being unable to think or feel so; in his being unable to reject opposite and incompatible notions. Until something which is wrong in the brain is set right, false impressions will triumph there over reasoning itself. A perusal of the most favourable balance sheet does not remove the belief of being ruined. A mother sees her child run over, and concludes that it is killed; the brain receives a shock which prostrates reason for a time; she cannot give up the idea that her child is dead, even when it is shown to her alive and unhurt.

But if direct reasoning has small effect, the importance, in a case of melancholia, of what may be termed indirect means of influencing the mind, and favouring its recovery, cannot be magnified. To soothe, to conciliate, to encourage, to occupy, to amuse,—never to deceive, never to be harsh or severe, never even to pass the patient without some kind recognition,—these are points, some of them separately trivial, but all of importance when united so as to constitute the habits of those about them, and the system under which they live.

To expect to cure the melancholy by mere medicines, neglecting all the circumstances which give a colour to their hourly life, is a vain expectation; and unless the patients have all these attentions constantly secured to them by the principles of the physician in chief, and the faithful exertions and co-operation of those under him, the patients cannot enjoy the advantages essential to their recovery.

I have said nothing of restraint or non-restraint. The question of its employment in the treatment of melancholia is one which I am sure you are now yourselves prepared to determine; nor would it be worth while to allude to it, were it not that it used to be, and still too often is, the sole resource adopted for the safe-keeping of these unhappy patients. You can go into few asylums without seeing some melancholy object walking apart from the other patients, eyeing you timidly, and bending under a weight of mental affliction, the very hands being refused the natural relief of being clasped in his despair, tied up in a close, hard, leathern muff; and his pensive steps embarrassed by leg-locks, never removed from his ankles except when he is fastened down in his bed, and exchanges the wretchedness of the day for the torture of the night. This is the rude means adopted to prevent the commission of suicide; means only adapted to make suicide desired.

You know that we cannot select our patients in this asylum. We take all that we have room for; the worst that can be sent to us from other asylums; the refuse of workhouses, and the despair of private treatment. When you see that we manage all these cases, including numerous instances in which suicide is meditated, without a chain or strap by day or night, you will not readily admit that any absolute necessity can exist elsewhere for mechanical means, which, whether applied to the melancholy or not, must present them with constant images of affliction.

Imagine the effect on a melancholy patient entering an asylum for the first time, alarmed, bewildered, conscious of his helplessness, when the first objects which he beholds are

violent maniacs running about in strait-waistcoats; others sullen, and bound hand and foot; others fastened in restraint-chairs, offensive to all who approach. He must soon witness the struggles with which a strait-waistcoat is put on when needed, and the arbitrary cruelty with which attendants, trained to such doings, put it on, without difficulty, in cases where it is not needed. The evening closes on the painful day, and then he sees mild and harmless patients locked and fastened to their bedsteads for the night, and in his own bedstead he finds all prepared for a similar infliction on himself, staples, short chains, and leg-locks dangling at the foot. One may describe these things; I describe them from notes written with the objects before my eyes, when all this apparatus was considered almost sacred; but I cannot describe the hourly slights and neglects of these poor patients, their mean diet, their abject dress, nor the unreported blows, nor all the habitual disregard of lunatics which restraints ever created, and ever will create, in the minds of those permitted to use them without limit or control. I repeat, then, that the question of the employment of restraints in cases of melancholia may be left to yourselves. I have no fear of your forgetting what you have seen in the wards at Hanwell, and resorting to restraints elsewhere.

FOREIGN DEPARTMENT.

M. RICORD ON THE SECONDARY AND TERTIARY FORMS OF SYPHILIS, AND THEIR TREATMENT.

(Continued from p. 65.)

THE TERTIARY FORMS OF SYPHILIS.

TERTIARY symptoms may be said to be essentially characterized by not being transmissible hereditarily. When syphilis has arrived at this stage, it seems to lose its specific character, and to constitute a cachexia, having a certain affinity to scrofula. I believe it, indeed, to be the most frequent cause of that malady. The constitution is deeply modified after passing through the different stages which intervene between the first manifestation of the primary sore and that of tertiary disease. The affiliation cannot always be traced, although, no doubt, it always exists. The secondary symptoms may not have been perceived, or may have been forgotten. Thus, when transmitted by heredity, secondary symptoms appear within five or six months of birth, and subsequently disappear, whether treated or not. They may not be recognised by the parents; and yet tertiary symptoms supervening, the latter may appear to occur primarily.

Mercury may prevent the manifestation of tertiary symptoms, or modify them when they have appeared; but because it does not always prevent their occurrence, we are not warranted in concluding that it causes them, or that they are the result of the combined influence of mercury and syphilis, as has been asserted by many pathologists. They have been repeatedly observed on persons who have never undergone mercurial treatment—a fact which decides the question.

It is generally believed that tertiary symptoms are more serious and more difficult to cure in patients who have taken mercury than in those who have not; and among the former, more difficult to overcome the greater the amount of mercury taken. The explanation of the fact may be easily given. The disease is most difficult to cure in such persons because they are precisely those on whose economy syphilis has the firmest hold, and who have been, consequently, all along, the most rebellious to the action of mercury.

Tertiary symptoms are more serious than secondary, for the older syphilis is, the more formidable it becomes, and the more firmly does it establish itself in the economy which it deteriorates. Mercury, when it is not the most precious and the most efficacious of medicine, is a dangerous remedy, often, indeed, a violent poison. When it does not cure, it does not remain innocuous; on the contrary, it injures and debilitates the constitution. Now syphilis is the more formidable, the weaker the constitution on which it acts. In this sense, the abuse of mercurial preparations may be followed by deplorable results, as it places the patient in the most favourable circumstances for the development of tertiary phenomena. But although, in diminishing the quantity of fibrine in the blood, which mercury does, you weaken the constitution, you cannot, by such means alone, produce tertiary symptoms, with their peculiar characteristics. The caries which may be occasioned by carrying mercurial stomatitis to its last limits cannot be confounded with the caries of tertiary syphilis. Between the one and the other, there is the greatest possible difference.

Tertiary syphilitical symptoms rarely manifest themselves within six months of the primary infection; this is the inferior limit. As to the superior one, the longest term after which they may appear it is impossible to fix. No tertiary symptoms have been known to occur, ten, fifteen, or twenty years after infection, or even after a still longer period. It rarely happens, however, when the interval is so lengthened, that the patient has not experienced some intermediate symptom. There has, nearly always, been a thorn somewhere, some local ailment, notwithstanding that the general health has been excellent. Suddenly, a tibia becomes painful, a testicle swells or melts, or an exostosis appears. A syphilitical exostosis has, however, never been known to develop itself eight, ten, or fifteen days after the manifestation of a chancre. In some rare cases, I have seen patients at the third, fourth, or fifth month, present phenomena which occupied a medium position between secondary and tertiary syphilis, and which, subsequently, became evidently tertiary; but they were exceptional cases. Tertiary accidents are principally situated in the sub-cutaneous or sub-mucous cellular tissue, in the fibrous, osseous, cartilaginous, muscular, or nervous tissues, and in organs in their locality. One of the principal characteristics of tertiary syphilis is its tendency to concentrate itself in the internal organs. One of the earliest diseases of this period is syphilitical sarcocele.

Syphilitical sarcocele has also been called syphilitical albuminitis, and justly so, as it is the white tissues that are first affected. Generally speaking, it only attacks one side, although it is not very rare to see it begin simultaneously or successively in both testicles. The attack is scarcely ever preceded by symptoms which indicate what is about to take place. When, however, this is the case, acute pains and a sensation of heaviness are experienced in the region of the loins; these pains are sometimes nocturnal. Most frequently the patient is not himself aware when the disease begins to appear, his attention being accidentally directed to its existence. The disease commences generally by the body of the testicle, on which may be felt several small indurated points, which gradually extend from one to the other, often forming, as it were, zones or circles of induration. The indurations thus continue to extend and to coalesce until the whole testicle has been invaded by the malady. The testicle has then lost its elasticity, has become coagulated and hardened. At the same time there are no symptoms indicating inflammation, and the epididymis remains soft and free. The hardened testicle may continue of normal size, or it may increase in volume, until it becomes two or three times as large as natural, or even larger. The syphilitical testicle is not lobulated, nor does it present mammillary eminences. Its surface may be uneven, but the unequal surface presents a certain regularity, and never rises into protuberances. When the testicle is very voluminous, the epididymis disappears, owing to its being spread out and flattened on the superior extremity of the enlarged organ. The spermatic cord also remains healthy and free from hardness. There is no pain in the testicle, nor in its vicinity, either when the testicle is left to itself, or when pressure is exercised upon it. The weight of the enlarged organ may, however, drag down the cord, and occasion pain.

The tumour is hard, solid, without elasticity, and offers to the finger on pressure the sensation that would be produced by fibrous or cartilaginous tissues. The skin undergoes no alteration, but remains moveable, and of the natural colour. There is no febrile or functional reaction. The spermatic secretion diminishing gradually, especially if both testicles are attacked at the same time, the power of erection diminishes, and at last disappears entirely. The progress of syphilitical sarcocele is slow, essentially indolent; it may last not only several months, but several years. The tumour never suppurates, and shows no tendency to suppuration, nor does it ever go beyond the size I have mentioned. Arrived at a certain stage of its development, resolution commences, and a process sets in, the very reverse of the one I have described, either under the influence of proper treatment, or spontaneously. The testicle gradually regains its normal size, and the patient is delighted; but he soon becomes alarmed to find the diminution in size persisting until the testicle melts and disappears. As the testicle diminishes and becomes atrophied, the entire economy is altered, and the voice changes its tone.

The disease does not, however, always follow this course. There are cases in which cartilaginous, fibrous, or even osseous degeneration follow the syphilitical hypertrophy of the testicle. All the above changes may also take place in a limited point of the organ. In some exceptionable cases I have

known syphilitical sarcocele to terminate by true resolution, the organ returning to its normal condition.

The disease, as I have stated, nearly always begins in the body of the testicle. I believe, however, that it may possibly commence in the epididymis in a manner analogous to that which I have described.

Can syphilitical sarcocele manifest itself in a person in whom the syphilitical diathesis has been transmitted by heredity? All that has been written on the subject of this disease has been drawn from the observation of adults who had been themselves infected, who had had chancre. It cannot, however, be denied, that syphilitical sarcocele, which is a late symptom—a tertiary one, may be the result of the hereditary transmission of syphilis, and yet only appear at the age of puberty, when the genital organs first begin to play a part in the economy. I believe, myself, that a host of testicular degenerations, which have hitherto remained unexplained, may be attributed to this disease, as, for instance, the atrophy of the testicle occurring in early life, and generally considered congenital, and many of the fibrous, cartilaginous, and osseous degenerations which we find described at every page of surgical works on the testes. All these, I firmly believe, are often only the results of syphilitical sarcocele transmitted by heredity. The same may be said of many cases of chronic orchitis, which, when not specifically treated, is often known to end in atrophy.

The causes which more immediately occasion the manifestation of syphilitical sarcocele are all those which, setting aside syphilis, are likely to irritate the testicle. The most frequent of these is blennorrhagia—a blow, a contusion, will act in the same way. The tubercular, cancerous, or scrofulous diathesis, may contribute to bring to light the syphilitical diathesis. These affections may also, as a matter of course, complicate the syphilitical disease.

Syphilitical sarcocele may be complicated by all the known diseases of the testicle and of the annexed organs, by all the forms of hernia, by varicocele, by hydrocele, by acute or chronic epididymitis, by simple orchitis, by kysts, or by the various degenerations. When, however, it exists alone, the symptoms which I have above enumerated will suffice to enable you to establish a diagnosis. If there is any doubt, a trial of the specific treatment will throw light on the question.

The prognosis will depend on the freedom from complication and on the duration of the disease. If it is uncomplicated, and of short duration, the specific treatment of tertiary symptoms may bring the testicle to a normal state, without leaving any trace of the disease. At a more advanced epoch, it is still possible to prevent degeneration, but atrophy will often follow, which is better than retaining a hypertrophied testicle. At a still more advanced period, when hypertrophy has set in, we must endeavour to prevent degeneration, which may be all we can accomplish.

Sometimes, in mixed cases, or cases in which the symptoms of cancerous or tuberculous degeneration complicate those of syphilis, so as to render it impossible to form a correct opinion of the share which each has in the disease, the specific treatment must be resorted to as a means of elucidating the question. Unless a testicle be unquestionably cancerous or tuberculous, it should never be attacked with the knife until mercury and the iodide of potassium have been tried.

(To be continued.)

CASE OF EPILEPSY FOLLOWING CONCUSSION OF THE BRAIN.

By WILLIAM ANDERSON, Esq., M.R.C.S.E. & L.S.A.,
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A. A.—, a little girl, eight years of age, on Saturday, July 9, 1842, tripped over a stone whilst running in play, and fell to the ground upon her nose. She was stunned by the blow, but recovered after about five or ten minutes, and was able to walk home; a distance of a mile. No disturbance of the health took place on either of the two following days, nor was any mark of violence perceptible, unless a very slight abrasion of the cuticle covering the right nasal bone. On the Tuesday following (the 12th), whilst talking to her mother in a standing position, she was taken suddenly speechless, motionless, and stood as rigid as a statue, apparently unconscious of all that was passing around her. This state continued less than a minute, and soon passed entirely off, terminating with a kind of hysterical laugh. On the following day a similar paroxysm took place, and was equally transient. Her right arm was

bent, and the fingers placed upon the throat, scratching it, as if uneasy there, but the act was evidently involuntary. These fits continued to increase in number and severity every day, and it is not improbable that at this period also she had returns at night, although we had no evidence of such occurrence. For some time they affected the face and upper parts of the body only, commencing with a rapid convulsive quivering of the orbicularis palpebrarum of the right eye, extending to the muscles of the globe, rolling the eye outwards and upwards—then to the muscles of the face, occasioning violent convulsive twitchings, and drawing the angle of the mouth backwards,—and to the neck, bending the head downwards and to one side. These paroxysms would continue for about a minute or two, and then pass off. They gradually extended after a time to the muscles of the trunk, and both upper and lower extremities. The flexors of the arms would be violently and rigidly contracted as well as those of the neck. As they increased in severity, sometimes the flexors would be rigid and contracted, bending the limbs into various forms; at other times the extensors violently stretching them; or the flexors of the upper and the extensors of the lower extremities would be simultaneously affected, and vice versa. Latterly these fits terminated with convulsive motions of the limbs, as of violent trembling, and at times the contractions of the muscles of the fore part of the trunk were perfectly emprosthotonic, (the abdomen tense and hard,) and raised her involuntarily from a lying position. As they became still more frequent and severe, they terminated with an involuntary evacuation of urine. She never referred to the head as the seat of pain or uneasiness, nor could the expression of any sensation of the kind ever be elicited from her; in the intervals her health was perfectly unaffected, and she never complained but of slight uneasiness behind the sternum whilst under the influence of mercury. From one or two daily, the number gradually increased to ten, fifteen, twenty-four, thirty, and thirty-six, in every twenty-four hours, up to the middle of September, in which time she could scarcely have had less than twelve hundred paroxysms. Sleep did not prevent, but seemed to aggravate them. The early attacks had more the character of tetanic rigidity, only the latter came on with this same rigidity, always attended with a moaning noise, (a rapid succession of short inspirations and lengthened expirations,) and terminated with epileptic convulsions. Whilst these paroxysms were limited to the face and neck, but little notice was taken of them, and a course of mild purgatives only was administered, but when they began to be severe, the fall was recollected, and more active treatment adopted. The head was kept shaven, cold constantly applied to it, (occasionally leeches and blisters;) purgatives administered; and quiet rest observed. Six ounces of blood, taken partly from the arm and jugular vein, alone made any impression, and that only to lengthen the interval a few hours that day. In spite of treatment, they continued to recur with greater severity and frequency. There existed throughout considerable torpor of the alimentary canal, which resisted the action of ordinary doses of medicine—full doses of drastic purgatives being required to procure action from the bowels, never observed on any previous occasion. Calomel was given in repeated doses until the breath became fetid, and was then withdrawn, from a fear of a sudden exhibition of its effects on the mouth, &c. No such effect, however, followed. On some occasions, she was considered worse after purging, but it was not much regarded, as she continued to get worse under any treatment. In the intervals, latterly, she became very weak, partly perhaps the effect of the disease; but mostly perhaps of the treatment; and being unwilling to reduce the vital powers too much, for many days little was done beyond attention to the bowels, rest and quiet, and a few doses of quinine.

On the 30th August, when they had assumed a frightful form, attended with a cadaverous aspect of the countenance, mercury was once more exhibited in doses of one grain and a half three times a day. During the week previous to this date, she said, once or twice, that she had a ringing in her ears; there was sometimes a little difficulty in deglutition, and a defect in the usual readiness of utterance.

Sept. 1st.—She was speechless; had vomiting sometimes.

5th.—Deafness supervened, with great prostration.

6th.—Decided erethismus, marked by utter prostration of strength; increased frequency of the pulse; occasional sighing, vomiting, and hiccup; coldness of the face and extremities; the fits (generally epileptic convulsions) continuing unabated, in this her then present condition, distressed (exhausted) her fearfully afterwards. From her inability to

swallow, medicines were discontinued; evacuations black; perfectly sensible, although unable to speak, hear, or move.

8th.—Hears well; speaks indistinctly, in low whispers; has involuntary sudden and quick motions of the arms, hands and legs, not unlike those of chorea; frequent falling forward also of the head; fits, three in four hours, limited to a rolling of the eyes; two affecting the neck and arms; respiration a little laboured; tongue white; lips blistered; no vomiting; motions more healthy; no involuntary evacuation of urine at the end of the fits. Calomel, one grain, resumed night and morning; sinapisms to the feet.

9th.—Had fifteen or sixteen in the night, very severe, slept well between them. Involuntary jerkings continue.

10th.—Much chorea. These fits from this time until the 18th of October gradually subsided in frequency and severity, and for many days previous to their total disappearance were limited to the countenance and the eyes. On one or two occasions, they increased in number and severity in the night-time, and were treated by shaving the head, blistering it; calomel was continued, and after their disappearance, quinine.

June 3rd.—In the course of the two or three weeks previous to this date, she again received, in the course of play, two rather hard knocks, one on the forehead, and one on the vertex. No disturbance of the health had been perceptible, unless a diminution of the appetite. On that day, (June 3rd,) the return of this disease was indicated by a sudden involuntary alteration of the expression of the countenance continuing for a minute or so, attended with a convulsive quivering of the right eyelid. These paroxysms returned daily for nearly a month, and then extended to contractions of the right arm, with hurried and noisy respiration. This condition had been treated by alterative mercurials, mild purgatives, and sulphate of zinc, which appeared to exercise control over the symptoms by prolonging the development of them.

July 14th.—Had four returns, rather severe, but limited to the right arm and face, (opening the mouth, and drawing back the right angle,) affecting also the respiration. Continuing alterative mercurials and aperients with sulphate of zinc, and extract of gentian, in pills, three times a day.

23rd.—This morning, about four o'clock, she had a very severe fit, which continued some five or six minutes; pupils dilated, foaming at the mouth, but *no convulsions*; it took place during sleep; she was, of course, not sensible to impressions from without, and when it went off, it left her still asleep. Two leeches were applied to the nostrils, which bled well; ordered calomel and colocynth in pills occasionally. Omit the sulphate of zinc.

26th.—Still has three or four slight ones by day, and also by night. Resumed sulphate of zinc.

August 7th.—No amendment. A warm bath at bed-time.

8th.—Paroxysms in the night much aggravated, assuming the form of decided general epilepsy. Zinc again discontinued. This morning she ejected from the stomach a quantity of bilious fluid; slight aphonia observed for some days.

10th.—Began to try the hydrocyanic acid in doses of one drop every four hours.

14th.—Acid gradually increased to doses of two drops and a half every four hours, and was then discontinued as the paroxysms increased in severity. Head shaven; cold constantly applied; mustard pediluvium at night; mercurial alteratives and aperients continued.

15th.—Five leeches behind the left ear bled well; cold to the head continued.

16th.—Paroxysms in the night much more severe, being epileptic convulsions. Ordered, calomel, a grain and a half; muriate of morphia, one-eighth of a grain: mix, and administer three times daily until pyralism is produced.

17th.—Paroxysms much the same in severity; has slept much, and complains now and then of a little pain in her head; gums red and swollen; breath offensive, but no decided mercurial fetor; frequent hiccough and vomiting; much languor; has taken no nourishment to-day; aphonia more marked. Discontinue the pills; let her have lemonade; and cold to the head.

18th.—Slept well; paroxysms the same; recur also during sleep; speechless in the morning; gums tender; mercurial fetor; no sickness; and less languor. Continue cold to the head; calomel and morphia at bedtime only.

19th.—Urine passes involuntarily during and after each paroxysm. Cantharides plaster on each side of the head; continue calomel without morphia.

22nd.—Hiccough sometimes; has been unable to speak since the 19th; free salivation, (dribbling;) paroxysms much

the same; increased in severity last night, which was believed to be the effect of the blisters; corneæ morbidly brilliant. Heal the blisters; sinapisms to the feet, and scrobiculus cordis at bedtime; spine rubbed with soap liniment and laudanum.

23rd.—Paroxysms fearfully increased in severity, recurring every half-hour; grinding of the teeth in the intervals; now and then sighing and yawning; two or three cervical glands enlarged; crying from pain in the left hypochondrium; the application of a hot flannel to relieve this pain brought on a fit, in which she screamed with fearful violence; sometimes she has a numbness in the right leg. Omit everything except the cold to the head.

25th.—Respiration for a day or two a little laboured; pulse usually 96 or 100, slightly intermittent; paroxysms as usual; speechless; frequent yawning; now and then vomiting; very languid all day. Omit everything except cold.

26th, P.M.—Pulse more frequent, small; respiration tranquil; frequent yawning; sometimes hiccough and sighing; has slept much and tranquilly; paroxysms since noon, at intervals of two hours, and do not draw back the angle of the mouth; gums are swollen; she is speechless; dribbling has ceased; gums are swollen; she is speechless; vomits sometimes; pain in right side required fomenting; she is very prostrate; tongue white; skin soft and smooth; fibre lax. Only lemonade.

27th.—Slept well this morning; paroxysms slighter, and return now at intervals of two hours; voice returning; is better. No medicines.

29th.—Paroxysms sometimes contract the arms, legs, and neck, and affect her with trembling and noisy moaning respiration, but are altogether slighter and less frequent. A calomel aperient only.

Sept. 1st.—Still improving; paroxysms half a dozen or so by day, very frequent by night, but always slight, limited to the face and neck, and only contractions with a little moaning.

10th.—From Sept. 1st only an occasional calomel aperient was given. Had no return last night, and only a few slight ones to-day.

21st.—None at night for several nights—number by day gradually reduced to six, five, four, and three. Voice good, but speech imperfect. Walks with the legs separated, and rather stooping.

29th.—Latterly two, then, for a few days only, one daily, affecting the left eye-lid for a minute or so with convulsive quivering. To-day (the 29th) for the first time, not one. She has continued free up to the present date, and is in every respect in good health.

Remarks.—This child, from birth till fourteen months of age, possessed an excellent constitution, and good health; and although a twin, could run well and unassisted before the completion of the eleventh month. She possessed also an irritability of temper, and the corneæ were remarkably bright and clear. At fourteen months of age, some error in diet brought on severe diarrhœa, which continued for several weeks, and induced not only a great degree of marasmus, but symptoms indicative of a congested condition of the brain. The cerebral symptoms were entirely removed by the application of a good sized leech, and cold; but her return to health, so as to admit of her walking, was very slowly progressive, and the tumefaction of the abdomen did not thoroughly disappear for nearly two years afterwards, in which time she had the measles and passed favourably through them. From that time to the occurrence of the fall, her health had been uninterruptedly good; retaining, however, her naturally bright condition of the corneæ, and irritability of temper, which latter had been somewhat subdued by discipline.

In the early period of the first attack, when no severity of symptoms was manifest, a mild plan of treatment only was adopted; but in contemplating the terrific muscular actions subsequently developed, it was found essential, for the beneficial direction of the treatment, to arrive at some definite knowledge of the cause and its location. Remembering the doctrines of physiology, which teach us that muscular irritability is a property inherent in the muscular structure, and manifested only by the application of an irritant, or the stimulus derived from the nervous centre, I was induced to consider (in connexion with the fall) that it depended upon an excess in the supply of nervous influence rather than upon any increase in the irritability of the muscular structure itself. Thus the cause was referred to some abnormal condition of the base of the brain, and it was difficult to explain how that could exist to the production of excessive involun-

tary muscular action, truly terrific, unattended by any other symptom. She never referred to the head as the seat even of uneasiness; there was no exaltation, no diminution of the functions of the nerves of special sense, no change in the function of the stomach, (unless that induced by medicine,) only an unusual torpor of the bowels; in the intervals she was as well as ever, and would have continued about had it been safe to permit her. That the brain and not the spinal marrow was the seat of this disease, (although the muscles mainly implicated are influenced by spinal nerves,) I think may be inferred from the nature of the accident—from the commencement of the disease being manifested in parts supplied by cerebral nerves—from the fact that the several paroxysms always began in those parts—and from their being the last from which it disappeared. They (the paroxysms) were also aggravated by the state of sleep.

The nature of this abnormal condition next became a question: it was referred to a state of simple irritation, occasioned by the shock passing through the base of the brain, and, probably, affecting principally the pons Varolii and medulla oblongata. The natural constitutional irritability in a state of health, resulting from the peculiar structure of that organ, would also favour this opinion. Had the inner table of the skull been splintered,—had any portion of the cerebral mass been dislocated or lacerated,—had effusion, however slight, taken place,—or had there been congestion, some permanent symptoms, no doubt, would have been presented,—or if either of the latter conditions had existed, it would scarcely have disappeared so suddenly under the mercurial erethism, after enduring so long a time. The opinion that it was a state of simple irritation seems also to be confirmed by the fact, that remedies having the effect of counter-irritants invariably aggravated the symptoms, as shown by the report, following the application of blisters, sinapisms, leeches, and even the exhibition of purgatives.

In the treatment, mercury was resorted to with much reluctance, from a fear of permanent ravages on the constitution, with little chance of its success. Such fear proved to be groundless, yet it arose on the second occasion, notwithstanding the successful operation of mercury in the first instance, and led to the exhibition of zinc. This mineral (zinc) certainly exercised much influence over the progress and development of the symptoms, but it was not equal to their removal; the hydrocyanic acid had no effect, and opiates or narcotics were deemed inadmissible, as the state of sleep favoured the return and violence of the paroxysms. On one occasion the cold douche was tried, but such dreadful paroxysms followed that I dared not to venture upon it a second time. This was in the first attack; in the second, the warm-bath had an equally pernicious influence. In the first attack, the mercury failed to manifest its influence on the gums and salivary glands—the state of erethism supervened without such symptoms; in the second attack, no benefit resulted from the salivation; the state of erethism wrought the change. Now erethism is a condition of the system induced by mercury operating upon it as a poison—the salutary operation of mercury is manifested on the gums, &c. We have in this case, then, the apparent paradox of a salutary influence produced by the poisonous operation of a powerful and valuable remedial agent. There are some other points of interest in this case. In the first attack the paroxysms assumed, successively and unequivocally, the appearance of tetanic rigidity, epileptic convulsions, and chorea, pointing to the fact that the same cause, the same morbid condition, in different degrees of intensity, will produce the morbid muscular actions known by these terms respectively, and that that cause may be located within the cranium. The moaning which attended each paroxysm was evidently indicative of distress, yet she felt no pain, no distress, only latterly she experienced a feeling of great exhaustion after the termination of a paroxysm. This seems to illustrate Dr. Laycock's principle that the external indications of emotions may be manifested unattended by a sensation or consciousness of emotion. In the last attack it was frequently observed that she was perfectly sensible during the fits, and could repeat after them any conversation which took place during them, by persons at the bed-side; it was also observed in the first attack, but not so frequently.

On some occasions the lower extremities from the pelvis were jerked with so much violence, that it seemed as though they would be separated from the trunk, and reminded one forcibly of a succession of electric shocks passing through the limbs, which would indicate the identity of the nervous and electric forces.

Oakham, Rutland, Dec. 1845.

CONTRIBUTIONS TO THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF VENEREAL DISEASES.

By W. ACTON, Esq., Surgeon to the Islington Dispensary, and formerly Externe to the Venereal Hospitals of Paris.

(Continued from p. 70.)

ON THE INDICATIONS FOR THE EMPLOYMENT OF IODINE AND MERCURY IN THE TREATMENT OF CONSTITUTIONAL SYPHILIS.

Uncertainty which reigns in the profession on the advantages of mercury and iodine; eclectic views of the author, that both remedies are valuable and efficacious in proportion as the indications for their employment are understood; cases from private practice to prove the following propositions:—I. Secondary symptoms occurring after a primary affection which has not been treated with mercury, are usually not in the least degree ameliorated by iodide of potash.—II. Secondary symptoms occurring after a primary affection which has not been treated with mercury, will as generally require for their cure the preparations of mercury given in appropriate doses.—III. Secondary symptoms following sores treated with mercury, frequently persist in spite of mercurial preparations, in some cases, become aggravated, or only yield to very large and dangerous doses of the mineral.—IV. These symptoms will very readily yield to iodide of potash when administered in proper doses.—Remarks on the essential differences of author's views and those of other surgeons; M. Ricord's, explained by difference of treatment in France and England, corroborating author's opinions; supported by Dr. Fergusson and Mr. Wild; Dr. Williams's views on the indications of iodine and mercury considered; Mr. Carmichael's opinions, with extracts from their works; cases in which iodine is to be given; mode of prescribing it; dose, how long to be continued; tests for, effects on, the disease; never produces atrophy of the testes or mammary gland; liability to relapse.

DURING the last three years I have remarked cases of secondary symptoms which have not been benefited by mercury—a remedy I at one time believed to be a specific in these forms of syphilis; and meeting with other instances which did not recover under the use of iodide of potash—a preparation much vaunted in their cure—I was induced to take notes of all such anomalies, in the hope that strict observation might enable me to unravel this apparent contradiction. On lately comparing these cases, I have arrived at conclusions which I believe of sufficient importance, in the treatment of secondary symptoms, to warrant me in bringing the subject before the profession, in the hope that the indications for the employment of mercury and iodide of potash may be found as simple and as generally acknowledged in secondary symptoms as these remedies now are in primary and tertiary affections. For the sake of making my conclusions more evident, I shall state them in the form of propositions, and then cite cases in corroboration, premising, however, that in doing so I have inverted the order in which I arrived at the conclusions:—

Proposition No. 1.—Secondary symptoms occurring after a primary affection, which have not been treated with mercury, are usually not in the least degree ameliorated by iodide of potash.

Proposition No. 2.—Secondary symptoms occurring after a primary affection, which have not been treated with mercury, will as generally require for their cure the preparations of mercury, given in appropriate doses.

Proposition No. 3.—Secondary symptoms, following sores treated with mercury, frequently persist, in spite of mercurial preparations, in some cases become aggravated, or only yield to very large and dangerous doses of the mineral.

Proposition No. 4.—These symptoms will very rapidly get well under iodide of potash, when administered in proper quantities.

Every surgeon's experience must furnish instances of the truth of the first and second proposition. Amongst many others that have fallen under my notice, I may cite the two following, as cases seen by other practitioners as well as myself:—

E. B.—contracted sores in 1841, and came under my care; simple treatment was employed, and the patient recovered, though leading a very irregular life, within three months. Secondary symptoms followed: a general practitioner was now consulted, who recommended iodide of potash. The disease steadily progressed, although the patient had taken twelve quart bottles of a mixture containing the salt. At this period I was again consulted; the mouth, tongue, and throat, were covered with condylomatous growths, as well as the scrotum, to an extent I have seldom witnessed in

private practice, attended with patches of lepra and psoriasis on several parts of the body. I recommended mercury, to which the patient objected; but getting no better, Sir B. Brodie was consulted, who concurred in recommending the free use of mercury; no sooner did this mineral exert its influence, than all the symptoms vanished, and this gentleman has enjoyed uninterrupted health since, is now married, and the father of two healthy children.

A second case, no less interesting, and proving the inefficacy of iodide of potash, is that of a gentleman, who in the summer of 1842 contracted what he supposed to be gonorrhœa. Soon after, a sore appeared on the frænum. This patient being at the time in Paris, was treated by M. Ricord by simple means. After a tour, he returned to England with a few well-marked spots of lepra and psoriasis on the face and body. I recommended mercury, and a few pills were taken. This patient was advised by his friends to consult an eminent army surgeon, who deprecates the use of mercury in syphilis. I did not myself again see the patient, but was told by a medical friend that this gentleman had taken iodide of potash for six weeks, and at that time remained spotted like a leopard.

These, and several other cases I could cite, prove how inefficient is iodide of potash, though employed for a length of time, and seem to bear out the assertion I made in my work on venereal diseases, that secondary symptoms require mercury for their cure. Such a rule I now find, however, to have certain exceptions, which I shall immediately show, not depending upon this or that variety of eruption, as some authors assert, but upon the treatment of the previous primary symptoms.

A gentleman, sent to me by Mr. L. Parker, of Birmingham, stated, that twelve months previously he had contracted syphilis. Mercury was used, but it appeared that the patient's occupations prevented him taking the necessary precautions; secondary symptoms recurred, and it was at this period he came under my care. Imbued with the notion that iodide of potash was not beneficial in the forms of lepra, impetigo, and psoriasis, under which this patient laboured, I employed mercury. He at first improved, then relapsed, admitting that he partook freely of wine. As a consequence, ulceration attacked the *alæ nasi*, and dreading the occurrence of tertiary symptoms, I immediately gave this gentleman iodide of potash. It acted like a charm, and he is now restored to perfect health, and travelling on the Continent.

Another case of this kind came under my care about a year ago. A foreign gentleman, obliged to quit Paris, was recommended to me by M. Ricord; he was labouring under secondary symptoms, consisting of impetigo of the head, a few spots of lepra on the body, and psoriasis palmaris, with a trifling affection of the throat: as my friend, M. Ricord, had ordered this patient iodide of mercury, I continued the treatment, and although the patient took every precaution, the spots disappeared only to reappear after slight exposure. Not finding my patient making the progress I desired, I was about to alter the treatment, when this gentleman disappeared for some weeks, and on his return told me he had consulted Mr. Key, who prescribed iodide of potash with marked benefit, for all the symptoms had disappeared save and except some slight stains on the hands. This patient had been treated with mercury in England previous to going on the Continent, on account of an indurated sore, under the direction of an eminent surgeon. I must detail one more case. A gentleman contracted syphilis during the last summer; the sore became indurated, mercury was used, and the chancre rapidly disappeared. I hoped secondary symptoms would not occur. Within four months of this contagion, a few spots of psoriasis appeared on the body and scrotum, accompanied with impetigo of the scalp, and the throat was seriously implicated by superficial ulceration. Mr. Lane and myself saw this gentleman, and we determined to give him iodide of potash; after a few doses all the symptoms disappeared, and he recovered, having taken only half an ounce of the salt.

Such cases as these prove most incontestably that secondary symptoms are not always benefited by mercury, as most authors believe, but require iodide of potash; and in collating my cases I find they arrange themselves under these two heads, proving that the surgeon must be particular in ascertaining the previous history of the patient, as furnishing him with the best indication for treatment.

I believe the propositions will be proved founded on facts, at least I may affirm that they are the consequence of cases which have fallen under my notice; and far from theory having led me to draw the conclusions, my pre-

vious observations induced me to believe that all secondary symptoms would be benefited by mercury, and it was only by repeated cases of failure I was compelled to admit that iodide of potash was far preferable to mercury when the latter had been used in primary symptoms. I indulge the hope that similar mistakes will no longer occur, and that surgeons will be as generally unanimous in this part of the treatment of venereal diseases, as they are that indurated primary sores require mercury, or that periostitis and nodes are immediately relieved by iodide of potash.

I need scarcely remark that the views here advanced are not generally entertained by surgeons who have written on the curative powers of iodide of potash; the literature of the subject is principally confined to the writings of M. Ricord, and the late and much lamented Dr. Williams,* of St. Thomas's Hospital—Mr. Carmichael, of Dublin,† has likewise recommended the iodide. My late master denies entirely the utility of hydriodate of potash.‡ The other gentlemen recommend it in some forms of the eruptions, and admit its inefficacy in others. In reference to the denial of the professor of the Hôpital du Midi, I may state, that when in France, the cases I observed in his hospital induced me to entertain similar opinions to his own, and in my treatise on venereal disease I recommend mercury, to the exclusion of the iodide, in all the early stages of constitutional syphilis.

Since commencing practice in London, I have seen reason to modify these opinions, as the cases above cited show, and the cause may be attributed, not merely to more extensive experience, but depends, I believe, upon the more general use of mercury employed in London than in Paris. In France, little, if any, mercury is given in primary symptoms, and when secondary symptoms follow such cases, by the rule I have attempted to lay down, the iodide would be of no service; hence the conclusion M. Ricord has arrived at. In London, on the contrary, mercury is largely given in the various forms of primary symptoms, and, by the same rule, we must expect to see secondary symptoms much benefited by the iodide. Another fact in explanation of the difference of opinion between M. Ricord and myself will be found in the

* Dr. Williams was a great advocate for iodide of potash, and he seems to have given it pretty indiscriminately in all cases, in preference to mercury, but on closely examining his cases, the reader will at once see that the late physician to St. Thomas's Hospital admits its inefficiency, although he does it with hesitation, and believed that it cured some varieties of eruptions in preference to others; he, however, does not appear to have been aware how much the previous employment of mercury influences the efficacy of the iodide.

† "The roseola syphilitica annularis usually rapidly declines when treated either by small doses of mercury or by iodide of potassium, but the latter medicine is, from its innocuous properties in all cases, as the effects are equal, to be preferred to the former. There are cases, however, which appear to yield only to the iodide of potassium."—*Williams's Elements of Medicine*, vol. ii., p. 156.

‡ "The purpura syphilitica sometimes yields to mercury or to the iodide of potassium. Occasionally these cases are most rebellious to every remedy, whether antiphlogistic or antisiphilitic." . . . "Of all the syphilitic papular eruptions of the skin, the lichen syphiliticus simplex is the most intractable by medicine. The iodide of potassium does not appear to influence this form of disease, and when treated by mercury or by sarsaparilla, separately or together, it often continues many months."—*Loc. cit.*, p. 155.

† Mr. Carmichael, of Dublin, speaks highly of iodide of potash during the first four or five weeks of the existence of the papular and pustular eruptions; also in the scaly tubercles following phagedæna; like Dr. Williams, he recommends it in certain forms of secondary symptoms, and employs mercury in others, but he does not give it or withhold it according as the patient has, or has not, previously taken mercury.

Carmichael's Clinical Lectures, p. 176.

Mr. Carmichael's treatment of secondary symptoms is summed up at page 115 of his Clinical Lectures. During the existence of fever, confinement to the house; the exhibition of antimonials, and such medicines as determine to the skin; abstinence from meat or wine; about the end of the second or third week, decoction of sarsaparilla, conjoined with small doses of tartarized antimony; and when fever has subsided, hydriodate of potash, in doses of five to eight or ten grains, three times a day. "When the spots have all desquamated, if they should continue to linger long, notwithstanding this treatment, you may give with advantage small doses of mercury in conjunction with sarsaparilla, in place of hydriodate of potash. The preparation or formula I usually prefer is that of Plummer's, or the compound calomel pill, of which four or five grains may be given twice or thrice a day. This course I pursue until the eruption has disappeared, the throat well, and the pains of the joints no longer felt, under confinement to the house in cold or wintry weather; but in summer, or in warm weather, I am not in the habit of exacting strict confinement during the desquamating stage: however, generally speaking, the less the patient exposes himself to our cold, variable climate, during the continuance of the eruption, the more certain will be his recovery; and by attending to this advice, as well as in avoiding the use of mercury until the eruption has desquamated, you take the best measures to secure your patient against iritis, a return of the eruption, or a relapse of the other secondary symptoms attending this form of disease."—*Loc. cit.*, pp. 115, 116.

‡ "I have demonstrated, in the most positive manner, that the iodide of potassium is a remedy which cannot at all be depended upon in the treatment of secondary symptoms; indeed, it seldom succeeds in dissipating them; it nearly always fails, and is as weak as mercury is strong."—*Ricord's Lectures*, in *LANCET*, p. 65 of present volume.

professor of the Hôpital du Midi employing iodine combined with mercury in the form of iodide of mercury, whereas the London surgeons usually give mercury alone, in the form of blue pill, or mercury with chalk; hence the benefit that we in London derive from potash, which certainly I never observed when studying the disease under M. Ricord; and be the cause, diet, climate, or constitution, certain it is, that the iodide of mercury (even though procured in France) does not agree with the Englishman in London, although it cures the Frenchman in Paris, as I shall take another opportunity of proving. I may here, however, mention, that various authors have pointed out differences or modifications of the disease in the different capitals of Europe—need I allude to the celebrated cases of Dr. Fergusson.* In Wild's excellent work on the "Medical Institutions in Austria,"† we find it stated that indurated chancre is very uncommon, secondary symptoms very slight; whereas condylomata were very frequent in the hospitals of Vienna. In my work on venereal diseases,‡ I allude to the few cases of syphilitic iritis met with in France compared to those in London, and give the probable cause of immunity among the French population.

I should further recommend a trial of iodide of potash in those numerous cases which come before us among dispensary and gratuitous patients, presenting secondary symptoms of the head and scalp in some modified form, in persons whose gums betoken courses of mercury, and who tell you that mercury has been given, salivation produced, yet the disease has relapsed. The salt is particularly advantageous to that large class of individuals in whom dissipation, prolonged courses of mercury, and inattention to the directions of a medical man, may be expected. In private practice, when unable to ascertain the previous course of treatment, or when mercury and the iodide have both been given, without any benefit, and your opinion is asked what further remedies are likely to be useful, I usually support the system by improved diet and change of air, and, after a short interval, commence a course of iodide of potash, combined with tonics, in the manner I am about to recommend. Persons taking iodide of potash, in the usual manner of prescribing it, complain of pain at the pit of the stomach, and heat at the back of the throat, soon after swallowing the salt. To obviate these objections, I am in the habit of prescribing the salt, in solution, in the following manner:—Two drachms are dissolved in three ounces of water, and the patient is desired to put a teaspoonful of the solution in a large cup of tea, night and morning, and to take the same quantity in half a pint of beer, or any other fluid, in the middle of the day. It is impossible to say how long we should continue the use of the remedy; if, however, as usually happens, the patient gains weight and flesh, a surgeon would do wrong in discontinuing it for some weeks, and the dose may be increased or diminished according to circumstances. The late Dr. Williams considered that the average dose should be eight grains, three times a day, less, he thought, could not be recommended; but it must be recollected, that his observations principally applied to the administration of the salt in nodes. The same author believed that "iodine has an affinity for the syphilitic poison, which it modifies and deprives of a part of its power to inflict disease. The iodide of potassium is probably absorbed in substance, and so rapidly, that iodine may often be detected in the urine within ten minutes after the patient has swallowed it. It is found also in the saliva, in the tears, in the milk, and, probably, in the other secretions of the body; but it has not been satisfactorily demonstrated in the blood, being either so rapidly removed as to exist only in quantities too minute for detection, or else, perhaps, resolved into its elements. The best test for the iodide of potash in the urine, is first to add a solution of starch, and then a small quantity of the solution of chlorine, this latter agent immediately setting free the iodine, and producing the usual beautiful violet or indigo tint."—*Elements of Medicine*, vol. ii. p. 167, 168.

The effects of the remedy show themselves in first producing an increased quantity of urine, which is pale and straw-coloured. The general surface of the skin loses its unhealthy character, the appetite improves; the circulation becomes somewhat hurried, and the system rallies. The eruption

loses the coppery hue, the scales separate, and we observe the skin, where the spots existed, assume its natural texture, and the hair regains its gloss, and ceases to fall off. I have found it, however, of no use to continue the iodide of potash, or increase the dose, after the first week or ten days, unless some amendment is visible in that period; otherwise we find it producing a hot skin, a parched mouth, and some fever, or we observe acne on the back or face, accompanied with some headach; in other instances, an unusual quantity of saliva is secreted, the gums become puffy, and bleed when the tooth-brush is used. These effects should induce the surgeon to omit altogether, or reduce the dose, which may again be resumed when these prejudicial results have ceased.

Although I have given the iodine in large doses, and for long periods, I have never yet seen atrophy, or the testes, or diminution of the virile power; on the contrary, this very inclination, which ill health has suspended for the time, returns in its full vigour as the body recovers its former healthy condition; nor have I ever witnessed any effect on the mammary gland in women, as some authors affirmed on the first introduction into practice of the remedy.

In thus lauding iodide of potash, it must not be concealed that relapses of secondary symptoms occur; a few months after the salt has been omitted, fresh spots may appear, much slighter than the last, offering no longer, it is true, the coppery tint, but if no treatment is pursued, the symptoms will increase to a considerable extent; and if we again recur to the iodide, the same success does not attend the second relapse, nor do we find the same rapid disappearance of the symptoms; the system, however, is now in a condition to bear the remedy we shall next treat of—namely, mercury.

Queen Ann-street, Cavendish-square.

(To be continued.)

CONTRIBUTIONS TO THE PRACTICE OF MIDWIFERY.

By J. HALL DAVIS, M.D., Physician to the Royal Maternity Charity.

PROTRACTED LABOURS COMPLETED BY CRANIOTOMY, WITH ILLUSTRATIVE CASES, AND REMARKS.

A first labour; patient's age, thirty-six.—Liquor amnii discharged forty-one hours from the commencement of true pains, the boundary tissue of the uterine orifice being rigid and thick at the time, and the opening itself of a half-crown diameter.—Head symptoms.—Pyrexia, with local heat, dryness and rigidity of soft parts, and violent parturient efforts appearing, were met by general depletion, followed by the exhibition of tartarized antimony in nauseating doses.—The bladder being distended above the pubis was relieved by the elastic catheter of twenty ounces of urine.—Delivery accomplished by the perforator and guarded crotchets, ten hours and a half having elapsed from the escape of the "waters."

WEDNESDAY, October 29, half-past seven A.M., I visited, at the request of Mr. F. H. Screw, Surgeon, of Edward Street, Regent's Park, Mrs. —, aged thirty-six, of stout habit, whose previous health had been good, in labour of her first child. I was informed by my friend that the pains of labour had commenced on Monday, at nine A.M., and that the membranes had given way and the waters escaped at two this morning, without, however, the os uteri having become lessened, but being at the time, as now, thick and rigid, and presenting an opening no larger than that of the diameter of a half-crown piece. The parts having become hot, and no change having taken place in the way of progress, the boundary tissue of the os uteri being in no way in a less unfavourable state than before, but the contrary, and the patient being the subject of considerable pyrexia, with a dry hot skin, and violent pain in the head, with depraved vision, he had for these reasons opened a vein in the arm, and bled her to the extent of about sixteen ounces, at four A.M.

As she had not been able to pass her urine for several hours, and finding the intumescence of a distended bladder above the pubis, that organ was relieved by the elastic catheter, twenty drachms of urine coming away, to the great relief of the patient; an oleaginous enema was also exhibited.

After waiting for about an hour, some disturbance of the head, which for a time had been removed by the previous treatment, again manifesting itself, the lips of the uterus being yet rigid and swollen, the orifice scarcely more dilated, and the passage generally much heated and deficient in its supply of mucus, the action of the uterus, moreover, violent, I was

* *Medico-Chirurgical Transactions*, vol. iv. p. 11.

† "Climate, and the extremes of heat and cold, exert a powerful influence on all venereal affections; indeed, I know of no disease in which so marked a difference may be observed, even in the different countries of Europe and those bordering on the Mediterranean; this difference I have remarked in the northern parts of Spain, and in the various hospitals of Lisbon, Paris, Berlin, and Vienna, as well as in Italy and the north of Africa."—*Austria, its Medical Institutions*, page 186.

‡ *Action on Venereal Diseases*, p. 379.

obliged to urge a repetition of the depletive treatment. My friend took twenty ounces with the effect of again removing the head symptoms, of lessening the violence of the parturient throes, and of diminishing the general and local heat.

Immediately, the tartar emetic was commenced in quarter of a grain doses. Three grains had been taken, which had produced nausea, when the parts became moist, the lips of the uterus lost their rigidity, the head, however, remained at the same point, (i.e., engaged in the pelvic brim,) the pains appearing now, although of adequate strength, not to affect it in the least; and apprehensive that the parts, which hitherto had probably been secured by the constitutional measures resorted to, might eventually suffer by further delay from the effects of pressure, I proceeded at once to delivery by the scissor perforator and guarded crotchets. And considerable reduction of the bulk of the cranium was required to supersede the necessity of much force of traction, on account of the large size of the child (a male), and the imperfect dilatation of the uterine orifice.

This patient required the use of the catheter during the first forty-eight hours after delivery, but beyond this circumstance, which we had led our patient's friend to expect, nothing occurred worthy of remark. Her convalescence was rapid and complete.

Remarks.—The points worthy of comment in the foregoing narrative are, 1. That notwithstanding the membranes had remained intact during forty-one hours of parturient action of average strength, the os uteri was left, on their rupture, rigid, thick, and with an orifice of small diameter; this was one unfortunate circumstance in the case. 2. The appearance of head symptoms, headach, and depraved vision, in connexion with well-marked febrile disturbance, justifying, especially in a first labour and a full subject, apprehensions for an attack of puerperal convulsions. 3. The inordinate uterine action, with no corresponding yielding and development of the os tincæ, with a seeming want of space, relative or absolute, in the pelvis, very likely, as a source of additional irritation, and by interference with the vascular system, to lead to a paroxysm of these convulsions; and for obvious reasons our patient could not be deemed safe on these accounts against the event of rupture of the uterus. These circumstances were considered in the adoption of the constitutional treatment which was had recourse to. 4. The distended state of the bladder was an obvious result of impaction of the head, which further occasioned an atony of the organ for two days subsequently to delivery. 5. The operation of delivery by the crotchets was undertaken, when the parturient efforts had been permitted to exert their influence within what appeared to be, on account of the pressure sustained by the soft tissues, the extreme limits of safety. 6. The speedy recovery of the patient after delivery, free from any attack of pyrexia or inflammation, might fairly, after such a labour, be attributed to the constitutional management of her case during the progress of her labour.

Russell-place, Fitzroy-square, Jan. 1845.

ON THE CAUSES, PATHOLOGY, AND TREATMENT OF DEFORMITIES IN THE HUMAN BODY. (WITH CASES AND ENGRAVINGS.)

By JOHN BISHOP, Esq., F.R.S., Fellow of the Royal College of Surgeons of England, Surgeon to the Northern Dispensary,* late Senior Surgeon to the Islington Dispensary, &c.

NO. I.

Preliminary Remarks.—Neglect of the subject of distortions by surgeons of public institutions.—Treatment of cases left to surgical instrument makers.—Mechanical properties of bones, such as hardness, elasticity, rigidity.—Chemical properties.—Effects of chemical changes on the mechanical properties of bones.—Fragility of bones.

The great number of deformed persons of both sexes who are daily to be met with in every district of the metropolis, must surely tend to impress the public mind with the idea that distortions are either incapable of being cured or prevented, or that the branch of surgery to which they belong is in a very imperfect state. Amongst the circumstances which have concurred to retard the progress of knowledge in this department of surgery, the following are undoubtedly the principal. It

will, I think, be allowed, that the majority of the medical officers of our public institutions, who enjoy the opportunity of examining the greatest number of cases, and who are best fitted by education to investigate their origin, and to suggest the most efficient means of relief, have not hitherto treated this subject with the attention which it deserves; and the consequence has been, that this class of invalids has generally fallen into the hands of mere empirics. Again, the general practitioner, however great his talents, and extensive his practice, has rarely a sufficient number of cases of one kind within his sphere of observation, to enable him to work out fundamental principles, especially in diseases presenting so great a variety as those of deformity, still less has he the opportunity of testing the numerous methods recommended for their cure; and it would therefore be unreasonable to hope for anything approaching to a systematic and scientific treatment from this order of the profession.

An opinion has gone abroad amongst medical men, that the treatment of distortions is a branch of surgery which does not deserve their special consideration—in fact, that it involves no anatomical, physiological, or pathological reasoning of moment, and that such cases may be left to the surgical instrument maker; in other words, that the causes being in the greater number of cases mechanical, the treatment may be left to mere mechanics. Now, what is the result? Nothing less than that stated in our first paragraph;—namely, notwithstanding all that mechanicians have done, we still meet with numerous and melancholy instances of deformity in all parts of London, and every town and village in England has a corresponding proportion of distorted forms. A set of unprincipled men have profited by this state of things, and the subjects of these cases, which involve the most profound consideration, and which properly belong to the scientific surgeon, have either been made the victims of torture under the hands of the mere mechanic, or have been doomed to linger out a miserable existence under the unscrupulous treatment of some empiric.

It is, unfortunately, too true, that many young persons (especially among the lower ranks of society) have been neglected during that period of the disease when the adoption of methods for relief might have been attended with the most beneficial effects; for the parents, being generally unconscious of the mischief working in the frame of their offspring in the early stages, become first aware of their melancholy condition when, perhaps, several bones of the spine having been absorbed, anchylosis has taken place, and the distortion consequent upon it is irremediable. Cases of this kind frequently come under the observation of the surgeon.

Amongst the multitude of persons afflicted with deformities, by far the largest proportion were born with the usual symmetry of figure, and the abnormal condition of the system will be generally found to have commenced with adolescence, to have lessened at puberty, and to have terminated at or before the adult state.

It is not here intended to enter into the subject of congenital deformities, or the etiology of any kind of monstrosities, unless they happen to be of that description which renders them susceptible of cure or relief by surgical treatment. In investigating the physiology and pathological conditions which lead to the production of deformities, we must take into consideration the transition from the normal to the abnormal states of many structures, such as those of the bones, the joints, the ligaments, and the muscles, as likewise the constitutional chemical and mechanical actions involved in these changes.

Bones.—Many portions of the osseous system are concerned in the production of deformities, more especially those which transmit the weight of the head to the ground. These manifestly include the vertebral column, the pelvis, and the bones of the thighs, legs, and feet.

The several circumstances that tend to produce those altered conditions of the bones which lead to deformities, embrace the constitutional derangements of the system which are connected with them, the chemical composition of the bones in their healthy and diseased states, and the influence of that composition on their physical constitution. The physical properties of bones, such as density, hardness, elasticity, and tenacity, render them capable, in a greater or less degree, of supporting the various weights to which they are subjected. These mechanical properties vary in degree in different persons, and in the same person at different periods of life, depending on the chemical composition and structure of the bones. In the normal state of bones there is nearly a constant proportion of earthy and animal matter; and what-

* An orthopedic department is attached to this institution, which supplies the poor gratuitously with single and triple inclined planes, and with every other kind of instrument adapted for the relief of deformity.

ever state of constitution tends to destroy this proportion, changes, at the same time, the mechanical properties; and hence we arrive at the question—What is the physical state of the system which regulates the proportion of the earthy and animal matter in living bone?

Before attempting any analysis of this subject, it will be desirable to investigate the relation between the chemical and mechanical properties of bone. The vital force, by means of which all the chemical and mechanical functions are determined, appears to control, in a greater or less degree, the cohesive force of particles in bones of the same composition; but when the energy is the same, the physical properties—such as specific gravity, hardness, elasticity—will increase as the ratio of earthy to that of animal matter increases, and *vice versa*. These mechanical properties are essential to the various offices of the osseous system, and many beautiful contrivances are introduced in the structure of bones to adjust them to a specific end, with the least expenditure of material: the flat cylindrical and cuboid forms all exemplify this notion of final causes.

In a healthy state of the system the bones are of great strength, and those destined to support the body will bear a weight many hundred times greater than their own, when it is gradually applied to them. They will bear, without breaking, shocks of great violence, and resist the powerful action of the muscles under all ordinary circumstances. Such are some of the mechanical properties of bones in health; but in disease the case is quite different: all the mechanical properties are more or less impaired under certain chemical changes of the constituent parts of bones. A few examples of the proportions of the earthy and animal matter, obtained in the analysis of healthy and diseased bones, will furnish data from which to deduce consequences of great utility, when applied to the consideration of those constitutional conditions and physical states of bone which usually terminate in deformities of the skeleton.

Earthy constituents of bone.—The earthy constituents of bone are, the phosphate and carbonate of lime, and the phosphate and carbonate of magnesia. According to Berzelius, "the phosphate of lime is to the carbonate of lime as 51.04 to 11.30," so that the quantity of the phosphate of lime is nearly five times greater than that of the carbonate. In children, the proportion of the earthy to the animal matter is less than in adults. In the former, Schreger found that in 98.68 parts the earthy is to the animal as 48.48 to 47.20, or as 1.0271 to 1, the quantities of earthy and of animal substances being nearly equal. According to Schreger, the earthy is to the animal material as 74 to 20.18, or as 3.66 to 1; which shows that the adult has more than three times as much earthy matter in his bones as the child. In passing from the adult state to old age, a further preponderance of earthy matter in the constituents takes place; for, according to the authority just quoted, the earthy is to the animal part as 84.1 to 12.2, or as 6.89 to 1.

The quantity of earthy matter in the same volume of bone in different parts of the skeleton of the same person is not constant. According to the analysis of Dr. G. O. Rees, the proportions in different bones are as follow:

	Earthy Matter.	Cartilaginous.
Femur	62.49	37.51
Tibia	61.01	39.99
Fibula	60.02	39.98
Humerus	63.02	36.98
Ulna	60.50	39.50
Radius	60.51	39.49
Squamous portion of temporal bone	63.50	36.50
Dorsal vertebræ (arch)	57.42	42.58
Head of Femur	60.81	39.19

Hence we perceive that although the quantities of the earthy constituents in the several bones are not constant, yet they do not vary very considerably, and that in the series here selected, the dorsal vertebræ have the smallest quantity. In a fetus Dr. Rees found the proportion of earthy matter less than in the preceding table. The analysis already given belongs to healthy structures; but in the abnormal states of the osseous system, as in rickets, the quantity of animal matter predominates over that of the earthy, a condition which, apparently, is never consistent with a healthy state of the system. In a rickety child Dr. Bostock found

The animal matter, 79.75,
The earthy matter, 20.25,

being as 0.253 to 1, or about four times less than the proportion of earthy matter found in the bones of healthy children.

In another rickety child, Dr. Rees found that the earthy was to the animal part as 26 to 74, or as 0.351 to 1.

Here the proportion of the earthy matter is greater than that in Dr. Bostock's case, but it is three times less than in a healthy child.

Mollities ossium.—In three cases Dr. Rees selected for examination parts of the fibula, ribs, and vertebræ, and found that the mean proportion of the earthy part to the animal was as 29.815 to 70.68.

Each bone having been examined separately, he found as follows:—

	Earthy.	Animal.
Fibula	32.50	67.50
Ribs	30.00	70.00
Vertebræ	26.13	73.87

In healthy persons these same bones contain,

Fibula	60.02	39.98
Ribs	57.49	42.51
Vertebræ	57.42	42.58

By these analyses it appears that the fibula suffers the least loss of earthy matter by absorption, and the vertebræ the most; and, consequently, that the absorption in mollities does not go on equally in different bones. There is, however, a near approach to equality of action, and the same order is maintained in the preponderance of the earthy matter in the different bones examined. On mixing the earthy matter obtained from the abovementioned bones, they were found to contain 78 per cent. of phosphate of lime instead of from 81 to 86 per cent., as in health. Hence Dr. Rees concludes that in mollities the decrease of the phosphate of lime is much greater than that of the carbonate. It will be observed that the proportion of earthy matter in rickets is less than that in mollities. These, then, are the principal facts at present known concerning the chemical relations of the earthy and animal matter which enter into the composition of bones in health and disease: and furnish important circumstances for pursuing the inquiry into the effects of the various states of bone with reference to their functions when considered mechanically. It has been seen that in healthy children the quantity of earthy matter is less in proportion to that of the animal than at any subsequent period of life. It would therefore appear that the assimilation of the animal matter is effected more rapidly than that of the earthy.

The elasticity of bones varies with their chemical composition, and, within certain limits, depends on the quantity of earthy matter which they contain. When the earthy matter is less than the animal, the bones begin to lose more or less of their elasticity; they become more compressible, and if driven out of their normal figure by the weight of the body pressing on them, do not readily return to it; but as long as a sufficient portion of their elasticity remains, no deformity of the bones can take place. The elasticity requisite to preserve their figure remains constant as long as the quantity of the earthy matter is not less than that of the animal constituents of the bone. In rickets and mollities, where the proportion of earthy matter is very small, the bones become almost perfectly inelastic: they will bend in any direction by the application of force, and they will not, under ordinary circumstances, return to their primitive figure. In this manner the deformity, once produced, continues, (even after the bone becomes sound,) unless mechanical assistance be interposed. Many, nay, most of our best surgeons believe and maintain, that what is vaguely understood to be the *vis medicatrix Nature* is quite sufficient to restore a distorted limb, provided time be allowed to enable the bone to acquire the hardness and strength necessary to support the superincumbent weight. This is, however, a most deplorable error; no time, no natural play of the vital powers of the system is sufficient to restore a distorted bone to its normal figure, after having lost its elasticity in consequence of the deficiency of its due proportion of earthy matter. At any subsequent period, when the bones acquire the proportions of constituents necessary to a healthy state, the deformed condition will be found to have remained stationary during the increase of their density and elasticity. To make this more clear, let us suppose any bone, such as the tibia of a child, so pliable as to be incapable of bearing the weight of the body, and that it becomes curved in one or more planes. If this bone were elastic, it would return to its primitive state as soon as the pressure was removed; but being otherwise, it retains the figure which the force has caused it to assume. But, as the bone is, in the

first instance, at a minimum of density, and gradually acquires a greater amount of earthy matter, and, consequently, of elasticity, this very elasticity, which would originally have kept it straight, actually retains it in the curved form, which the external force had caused it to assume. But this is not a property peculiar to bone, as it is common to all elastic bodies. By elasticity, we mean that tendency which a great number of bodies possess to recover their pristine figure, after having been bent, twisted, extended, or compressed; and that body is said to be the most elastic which recovers its figure with the greatest energy, supposing the compressing force to have been the same. A perfectly elastic body will recover its figure with a force equal to that which has been employed in distorting it. The preceding definitions appeared to be necessary, as there exist in the minds of many persons very different ideas of the nature of elastic bodies.

The difference in the degree of elasticity of different bones due to different states of chemical combination, may be discovered by means of the sounds which they yield, when properly excited into a state of vibration. For instance, let us suppose the figure of any two bones to be the same; that they are of similar length, breadth, and thickness; that they are made to vibrate in a similar manner, and that they differ only with respect to the proportion of the earthy, compared with that of the animal matter, and also in their specific gravity: then it will be found that the number of vibrations which they yield will be directly as the square roots of their elasticities, and inversely as the square roots of their specific gravities, and any increase of earthy matter will cause the elasticity to increase faster than the specific gravity; and, therefore, the bones which have the greatest proportion of earthy matter will produce the most acute sounds; and if we take similar segments of the bones of old persons and of children, it will be found that the bones of the former will produce the more acute sounds of the two, in consequence of their greater elasticity. In this way the comparative elasticity of most bodies may be found, and it is an experiment that might be easily made. But, although the elasticity of bone is of great importance, in relation to its strength and power to perform its functions in the human body, the further investigation of the subject would lead to a more profound analysis than is contemplated in the plan of this treatise.

In a healthy young man, the proportions of earthy and animal matter in the bones are adjusted to bear the greatest weight, to sustain the most vigorous play of the muscles, and to resist the greatest amount of violence with the least danger of being fractured; but in old age, although the bones are then most elastic, they become more brittle, and are, consequently, more liable to be fractured. In childhood, on the contrary, the bones, in consequence of containing the greatest proportion of animal matter, are more susceptible of bending; they are more compressible, but less fragile on receiving a shock.

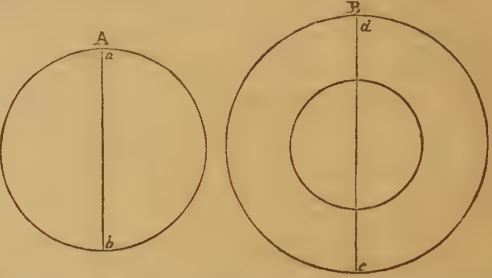
It appears from the experiments of Professor Robison, that the strength of bone is greater than that of freestone, lead, box, yew, oak, elm, or ash, and that, when compared, they stand in the following relation.

Fine freestone	1.
Lead	6.5
Elm and ash	8.5
Box, yew, oak	11.
Bone	22.

Hence we see that bone is twice as strong as oak. Professor Robison also found that a piece of bone an inch square will bear 5000 pounds weight; but we are not informed from what portion of the skeleton the bone was selected, nor whether it was from a young or old person, &c.

In the distribution of osseous matter, utility and economy of substance are perceptible in every part of the body. Wherever strength is most required, bone is made of such a figure as will give the greatest strength with the least expenditure of materials; and in those parts where a large surface is required, the figure is made to correspond: thus, the cylindrical, the cuboid, the prismatic, and the flat, are some of the figures introduced in the skeleton. The weights which cylindrical or prismatic flexible columns will bear perpendicularly, when their bases and compositions are equal, is in the inverse ratio of the squares of their length; therefore, if we take any bones, of similar materials and thickness, but of which the lengths are respectively as 1, 2, 3, 4, 5, they will support weights without flexion in the proportions, 1, $\frac{1}{4}$, $\frac{1}{9}$, $\frac{1}{16}$, $\frac{1}{25}$, so that whilst the lengths increase in an arithmetical progression, the weights will decrease in a geometrical pro-

gression; the necessity, therefore, for dividing the columns which sustain the trunk by means of the joints, independently of the use of the latter for locomotion, is obvious. The lateral strength of two cylindrical bones of equal weight and length, of which one is hollow, and the other solid, is respectively as the diameters of their transverse sections. Thus, let *a, b, d, c* (figs. 1 and 2) represent the sections of the two bones; then the strength of the tube *d c* is to that of the solid *a b*, as the line *d c* is to *a b*.



From this proposition it was long since observed by Galileo, that nature greatly augments, in a thousand ways, the strength of bodies without increasing their weight; and that if a wheat-straw which supports the ear, that is heavier than the whole stalk, were made of the same quantity of matter, but solid, it would bend or break with far greater ease than it now does. The feathers of birds, as well as the bones of animals, present similar provision for the combination of strength, lightness, and economy of material. The strength of bones, however, cannot, as might possibly be inferred from the preceding proposition, be increased with the same quantities of matter indefinitely, because, when the diameter of the tube exceeds certain dimensions, it will become so thin and fragile as to break almost without offering any resistance. The lateral strength of prismatic bones of the same material is as the areas of their sections and the distances of their centres of gravity directly, and their lengths and weights inversely.

From the deductions which may be drawn from the preceding proposition, Galileo very justly concludes that "there are limits set to the magnitudes of the works of nature and art, and that the size of ships, palaces, and temples, trees, and animals, cannot surpass certain dimensions; and he observes, that large animals have neither strength nor speed proportionate to their bulk, and if there were any terrestrial animals much larger than those we know, they could hardly move, and would be much more subject to the most serious accidents; and also, that it is impossible for nature to give bones to men, horses, or other animals, if they were enlarged to immense heights so as to perform their offices proportionally, unless these bones were composed of materials much more firm and resisting, or they were made of a thickness out of all proportion, which would render the figure and appearance of animals monstrous." Mr. Banks has found that an oak-rod one inch thick, supported at each end, will break by its own weight at the length of 57.45 feet, and a similar one of iron at 38.223 feet. Emerson also found that the cohesive strength of bone is double that of oak, whilst its specific gravity is to that of the latter only as 1656 to 1170, or as 92 to 65. In the megatherium and elephant, the length of the bones of the legs is small compared with their diameters, and consequently they possess greater comparative strength as columns for supporting their ponderous superstructures.

In the thigh-bones of most animals, an angle is formed by the head and neck of the bone with the axis of the body, a form which prevents the weight of the superstructure coming vertically upon the shaft, converts the bone into an elastic arch, and renders it capable of supporting the weight of the body in standing, leaping, and in falling from considerable altitudes.

There is a very convenient rule to be observed in all cases where a comparison is to be made of the strength of bones, or of any other bodies composed of similar materials—namely, the breadth, multiplied into the square of the depth, and divided by the product of the length and weight, must be a constant quantity; that is, for example: if we take *b, d, l*, and *w*, for the breadth, depth, length, and weight, employed in an experiment, and *B, D, L, W*, those proposed to be compared, then, to produce a like effect, we must have,

$$\frac{b d^2}{l w} = \frac{B D^2}{L W}$$

Mr. Porter* instituted a series of experiments in order to ascertain the comparative fragility of bones; but the attempt was unsuccessful; and he candidly owns that he was obliged to leave the subject as it stood before, without even attempting a solution of the difficulty. He further says: "We compared the respective thicknesses of the thigh-bone in the adult and in the aged, the section being made exactly in the middle: we weighed equal lengths of similar bones; we softened equal lengths and equal weights by means of dilute muriatic acid, and we burned equal portions and weights also, with a view of comparing them under different circumstances, but could never arrive at any fixed or certain conclusions." It is to be regretted that no mention is made of what was done with the bones after they had been treated in the manner above described, or any attempt made to ascertain whether the fragility, strength, and elasticity increased or diminished with the altered proportions of earthy and animal matter; and though the experiments made were unsatisfactory, still they might, if detailed, have saved future investigators the labour of repeating these kind of experiments in a similar way. There can be no doubt that there is sometimes a difference in the structure of bones, and in the cohesive force exerted between their particles, when the chemical composition is the same; but this is not sufficient to account for a rickety state of the skeleton; and, although the quantity of the earthy compared with that of the animal matter might be found the same in a rickety as in a healthy person, it must be remembered that the examination of the bones is usually made, not at the moment of their state of least elasticity, but more frequently when the bones have acquired their proper density by the acquisition of the earthy phosphate, the deformity being the result of a previous state of morbid action.

Mr. Porter remarks that a deficiency of earthy matter is not one of the essential causes of a rickety state of the skeleton; and M. Ribes observes that the fragility of bones depends merely on a change of action; but this vague term comprehends any kind of change that may take place in the constitution of bone.

Independently of that fragility which is common to the bones of aged persons, they are occasionally observed to become exceedingly fragile under certain morbid conditions of the system. A case of this kind is detailed in Gooch's surgical works. A woman broke her leg, without the slightest violence, whilst in the act of walking from her bed to her chair. Shortly after the accident she suffered from scurvy, and bled much at the gums. The legs and thighs, which were oedematous, became excoriated, and discharged a yellow ichor. From the commencement of the attack until her death the bones continued to become softer. The spine was greatly distorted, so that her height, which had been five feet five, was diminished to four feet. All the bones, except the teeth, were more or less affected, and capable of being cut with a knife without difficulty. The bones of the head, thorax, spine, and pelvis, were nearly of the same degree of softness; but those of the lower were much more affected than those of the upper extremities, the former being found to have changed into a kind of parenchymatous substance, like dark-coloured liver. The thumbs became broad, and the phalanges of the fingers curved by her efforts to raise herself in bed, to which she was confined in a sitting posture. It was remarked that the bones which, in a healthy state, are most hard, and contain the greatest quantity of marrow, were most affected; and it was inferred that as the only patches of osseous laminae left were on the external surface of the bones, the disease must have begun internally, and Mr. Gooch thinks that the marrow in its changed condition had acquired a dissolving quality.

Two cases of extreme fragility of the bones occurred amongst my patients: one of these, a middle-aged woman suffered from a malignant tumour in the thigh, and the bone broke while she was in the act of lifting the leg out of bed. In the other case, a man, about forty-five years of age, whose general health was greatly impaired, became much emaciated. The lower extremities were subject to hæmorrhagic ulcers. He fractured the os humeri on the right side, in the act of merely raising himself in his bed.

* See Cyclopædia of Anatomy and Physiology, vol. i. p. 441.

ON THE TREATMENT OF CHRONIC DISEASES OF THE SKIN.

By THOMAS HUNT, Esq., Herne Bay, M.R.C.S.

(Continued from page 78.)

HAVING attempted, in two preceding papers, to describe an improved method of treating certain cutaneous disorders, the author now proceeds to demonstrate the actual success of this treatment in a series of cases. Some of these will be delineated in their febrile or inflammatory stage, passing thence, under appropriate treatment, into the asthenic condition; others will be exhibited in the chronic form only, never having been in a febrile state.

In determining the order of selection, the arrangement of Willan will be preferred, as having been long familiar to the profession.

ORDER I.—PAPULÆ.

Under this order, Willan has placed three genera—viz., Strophulus, Lichen, and Prurigo. Of these, the two former are generally ephemeral and unimportant.

There is one variety of lichen, however, (*lichen agrius*), which in its chronic form is sometimes a severe and intractable disease. It commences with an eruption of red papulæ, clustered together in close proximity over an erythematous surface, itself surrounded by a very marked red blush. It is frequently attended with fever at first. The pruritis is sometimes very severe; the papulæ, torn by the nails, first bleed, and eventually discharge a viscid serum, which cakes on the surface, until at length nothing is to be seen but an inflamed ground covered by an incrustation of various colours, which obscuring the primitive papulæ, might be mistaken for eczema or psoriasis in their more severe forms. The writer has had no opportunity of fairly testing the arsenical treatment in this case, but on the authority of Dr. Green, "the preparations of arsenic have occasionally succeeded in dissipating chronic lichens that had resisted every other form of medication."—(Green's Compendium of Diseases of the Skin, p. 182.) There is no reason to question the success of arsenic in these cases, when administered under those regulations and restrictions which the writer has already pointed out as securing it safety and efficacy in other forms of eruption.

PRURIGO.

Whether we consider the unrelenting torment of the pruritus which attends it, or the obstinacy with which, in the aged especially, it resists medical treatment, may be reckoned one of the most deplorable afflictions to which the human frame is subject.

Although the papulæ in this disease are rarely discolored, and but slightly elevated above the surface, yet it is not unusual to find the blood drawn from the arm covered by a coat of buff. Prurigo, even when it occurs in the decline of life, is generally associated with increased vascular action, and requires active depletion. The attempt to cure these disorders by ointments, lotions, and baths, is, to say the least, misdirected and useless. These remedies are only useful as palliatives. The disease is constitutional; and if the patient have a full pulse, and other signs of plethora or fever, he must lose a quantity of blood proportioned to his strength, and the force of the circulation. And this operation must, in some cases, be repeated once and again, before the disease will yield. Nothing can more fully demonstrate the inflammatory nature of prurigo, and the necessity of repeated bloodletting in the treatment, than three cases of the disease, minutely detailed by Dr. Green, in his work on cutaneous diseases, (page 188.) A close examination of these cases will show how much more the patients were indebted to Dr. Green's judicious use of depletion and low diet, than to his sulphur fume baths, which, on his own showing, proved positively injurious until the violence of the disease, if not its very being, had passed away. Whether the baths exerted any influence in preventing the return of the pruritis cannot be determined from the narrative. These cases were all examples of prurigo affecting the skin generally, and to some extent involving the whole cutaneous surface. Perhaps the most distressing varieties of the disorder are those in which the pruritus is confined to the genitals, the verge of the anus, and the surrounding parts. Some degree of local inflammation generally exists in these cases, but it is seldom necessary to carry the depletion to any severe extent. The efficiency of arsenic in small doses, administered on the plan laid down in the last paper, will be demonstrated by the following cases selected from the writer's note-book. The first occurred in a

"There is scarcely any subject on which the generality of the world are more ignorant than on the merits of medical men, and as to what are the data on which the opinion of those merits should be formed."—*Memoir of Dr. Hope.*

gentleman in the prime of life; the second in an elderly lady: both are characteristic.

CASE OF PRURIGO SCROTI OF AN OBSTINATE CHARACTER
YIELDING TO ARSENIC.

Mr. G., a gentleman of healthy constitution, aged 30, had for about two years been under medical care for the treatment of severe pruritis in the scrotum, verge of the anus, root of the penis, and contiguous parts; but the disease advanced in spite of remedial measures. There was a slight appearance of papulæ, scarcely more red than the surrounding skin. He placed himself under the care of the writer.

April 14th, 1836.—He described the pruritis as intolerably severe, especially at night, and complained of sensations of stinging, and burning itchiness. He found no relief from scratching or rubbing the parts; on the contrary, when he could not abstain from violence of this kind, it only aggravated his sufferings. He was almost a stranger to sleep, but the general health had not been materially deranged. Pulse 80, full; functions unimpaired. Sixteen ounces of blood were taken from his arm, and the affected parts were bathed with hydrocyanic acid, largely diluted with tepid gruel.

15th.—He has had some sleep, and the itching is less intense. The blood is slightly buffed on the surface, but not cupped. He was put on low diet; a dose of calomel and colocynth was prescribed, and a saline purgative night and morning.

16th.—The bowels have been fully relieved, but he is not better. He has been tossing about all night in unmitigated misery; thinks he shall go mad or destroy himself. Pulse firm. Sixteen ounces of blood were taken from his arm, and a strong solution of nitrate of silver in laudanum applied to the parts.

17th.—No relief. The caustic lotion has produced vesication of the scrotum, but the old torture continues. Blood not buffed. Five minims of Fowler's solution of arsenic were given three times a day in a draught.

22nd.—No amendment. The dose of arsenic was increased to seven minims.

23rd.—He procured some sleep last night by going to rest in a cold hip-bath, his shoulders being supported by pillows. In this way he passed several nights in comparative comfort. When he is out of the water, the pruritis returns with its accustomed severity.

29th.—He is not essentially better, but imagines there is some mitigation of the heat. No evil effects appearing to arise from the arsenic, the dose was increased to eight minims thrice a day.

May 1st.—He has now taken the arsenic for a fortnight. The pruritis is nearly gone, and the conjunctiva is inflamed. The dose of arsenic was reduced to five minims.

4th.—There is scarcely any pruritis remaining. He has had a cathartic occasionally, is reduced in strength, and his appetite is failing. Fowler's solution of arsenic, five minims; compound tincture of gentian, half a drachm; water, ten drachms. Make a draught, to be taken three times a day.

7th.—Skin quite well; he complains of indigestion; the draughts to be continued. Mercury, with chalk three grains; aromatic confection. One pill to be taken every night.

9th.—The health is improving; the eyes not so weak; but the pruritis has returned in some degree. The dose of arsenic was augmented to seven minims thrice a day, and steadily persevered in for a week.

17th.—Pruritis gone; conjunctiva considerably inflamed, as also the mucous membrane of the nose, throat, and bronchi, with catarrhal fever. The arsenic was discontinued, and saline diaphoretics substituted.

18th.—Febrile symptoms abated; cough troublesome. Cough mixture, consisting of syrup of poppies, &c.

22nd.—Better, but weak. A dose of sulphate of magnesia, dissolved in infusion of roses, twice a day.

24th.—Quite well; no pruritis. He returned to London on the following day, where he was seen by the writer ten months subsequently. He had then experienced no return of the pruritis, of any consequence, and assured the writer that he should certainly hear from him in case of a relapse.

December, 1845.—No further tidings of the patient up to this time.

At the period at which this case was under treatment, the writer was not aware of the advantage which he has since discovered, of commencing with the larger dose; nor of the immense benefit derived from mixing the arsenic with the food; by which expedient it more readily gets into the circulation, arrests the disease in smaller doses, and in less time, and creates far less distress (or rather, none at all) in the mu-

cous membranes. It is clear, however, that the arsenic controlled, and finally cured, the prurigo in the above case. The catarrh was, probably, endemic.

CASE OF PRURIGO PUDENDI MULIEBRIS IN AN AGED FEMALE,
DECIDEDLY CHECKED BY ARSENIC.

Mrs. S.—, a lady advanced in life, (probably seventy,) of short stature, moderately stout, and having excellent general health, had been under treatment, for about three years, for an intense pruriginous affection of the external genitals, the pruritis extending to the mucous lining of the vagina, and making life a burden to her. Leeches had been twice applied to the vulva with doubtful benefit. Various remedies had been tried, but though she had experienced temporary relief from lotions, the disorder had gradually and steadily advanced.

Sept. 22nd, 1845.—The disease is now more troublesome than ever. She is excluded from society, and prays for death. There is intense and unappeasable pruritis in the labia, nymphæ, and whole course of the vagina, which assumes a more aggravated character soon after she lies down in bed, and continues the greater part of the night. During the day it torments her in a more tolerable degree. There is a slight degree of tumefaction in the affected parts; no discharge from the vagina; no visible papulæ; but there are two or three scaly patches on the trunk which were probably papulous in their origin. The pulse is quiet and weak; the skin cool, and the bowels regular. She was ordered to take a nourishing diet, and, with each meal, forty drops of the following solution—viz., take of Fowler's solution of arsenic, one drachm; of distilled water, seven drachms. Mix.

24th.—She is suffering from a severe attack of gastric spasms, with vomiting, which she attributes to some sour grapes she had eaten. The arsenic was consequently discontinued, and suitable remedies having been successfully administered, the arsenic was resumed on the 27th, and continued steadily for a fortnight without relief, and without any obvious effect whatever, proving that the gastralgia was not the effect of the arsenic.

Oct. 14th.—She now complains that her eyes are excessively weak, and supposes she has taken cold. The lower eyelids are puffed and swollen, the conjunctiva red, and the tears ready to start. In answer to inquiries concerning the pruriginous affection, she replied, for the first time, and with emphasis, "Better, certainly better. I have had two or three heavenly nights." Unfortunately, she was called to a distance, on urgent business, on the following day, and although she promised to return for further treatment, if she had any relapse of her malady, she has not been heard of to this time, (Dec. 7th, 1845.)

The pruritis in this case had produced an irritability of temper, bordering upon madness, and very foreign to her prevailing disposition, which was described by her attendants as mild and amiable. It was gratifying to observe how placid she became when she got rid of her annoying complaint. She departed in high spirits, and considered herself well. There is reason, however, to apprehend a return of the disease. From the experience of the writer in similar cases, (of which the notes have not been preserved,) he cannot withhold the expression of an opinion, that had this lady persevered in the arsenic for three or six months, in doses only sufficiently large to keep the conjunctiva slightly tender, she might have reckoned upon a permanent restoration. This was one of the rarer cases in which there is no fever or inflammatory tendency.

Arsenical treatment is only applicable to cases in which there is neither any obvious disorder in the general health, nor yet any incidental cause for the local affection. The variety called prurigo formicans sometimes occurs in the uncleanly, the half-starved, the subjects of decayed health, and worn-out constitutions. Among the wretchedly poor it is sometimes found associated with swarms of pediculi, with dirt and cold, which has fretted the skin into chaps and fissures, and with every imaginable form of cutaneous misery. The writer trusts he will not be suspected of the folly of proposing to treat such cases by bleeding and arsenic. The thousand decencies and comforts of civilized life, could they be procured, would, at least, be entitled to precedence.

There are other local causes of certain pruritic affections. Stone in the bladder produces a sensation of itching in the meatus urinarius; ascariæ excite irritation in the rectum, and certain conditions of the uterus are accompanied by pruritis on the external genitals. Scabies and other diseases are likewise characterized by intense pruritis. In all these

cases, the remedies must be directed to the cause. Arsenic is only useful in prurigo when there is nothing wrong, locally or generally, which can be rectified by other measures.

Writers on the skin, for the most part, speak of pruritis merely as a symptom of prurigo and other affections; but Mr. Erasmus Wilson has treated of pruritis as a disease, and classed it under a separate division, entitled, "Disordered Sensibility of the Dermis." The distinction may be philosophical, but it is of no practical importance, inasmuch as the treatment of pruritis, as of pruriginous and other morbid affections of the skin, must be regulated not so much by the visible character of the eruption, or even by its presence or absence, as by other considerations. Pruritis will yield to arsenic under favourable circumstances, whether there be visible papule or otherwise. It is passing strange that patients should be irritated to madness without any visible lesion of the skin, or any sympathetic cause discoverable in distant organs; and it is equally surprising that arsenic should soothe the cutaneous nerves in such a case as effectually as it subdues the morbid action of the vessels of the dermis in cases of visible disease. Does the fact afford any support to the opinion that arsenic cures cutaneous diseases generally through the medium of the nervous system? The subject is worthy of further investigation.

ORDER II.—SQUAME.

This order contains four genera—viz., *Lepra*, *Psoriasis*, *Pityriasis*, and *Icthyosis*.

The two former of these are identical in their nature and primitive character. In many instances the leprous and psoriatic patches run into each other, and blend indistinctly in some portions of the skin, although they may be more distinctly marked elsewhere.

Lepra and *psoriasis* are both characterized by the formation of scales as a primitive product of inflammation of the dermis. The scales are silvery white, opaque, and laminated, bearing some resemblance to mica, and in these respects differ widely from crusts or scabs produced by the drying up of purulent or serous discharges. The latter can scarcely be called scales, nor are they ever white or silvery, but commonly yellow, brown, or black.

These diseases are of constitutional origin, and appear in two stages or conditions—the acute and the chronic. But a sub-acute form, chronic in duration, and occasionally becoming complicated with general vascular activity, is what we most frequently have to deal with in practice. All the different varieties of *lepra* and *psoriasis*, which are idiopathic, (i.e., non-syphilitic,) yield to small doses of arsenic continued for months together, and preceded or accompanied by such amount of depletion and general antiphlogistic treatment as the case may require. As there are no chronic affections of the skin more common than these, and few more unmanageable in their inveterate forms, it is with peculiar satisfaction that the writer records the fact, that in no class of skin diseases has he met with more uniform success than in the inveterate squamose.

The following cases of *lepra* are selected from the writer's note-book; the first showing that where febrile action exists, arsenic is of little efficacy without bleeding; the second, demonstrating the all-sufficiency of arsenic in asthenic cases; and the third, illustrating the value of minute doses in a system naturally intolerant of the mineral.

CASE OF LEPPA VULGARIS, EXHIBITING THE NECESSITY OF BLEEDING AND LOW DIET, AND THE EFFICACY OF ARSENIC IN THE FINAL CURE.

Mr. N—, aged 52, a gentleman of plethoric appearance, and full, rosy complexion, having naturally irritable bowels, became the subject of *lepra vulgaris* about the year 1839. The disease commenced in the spine of the left scapula, extended towards the hips, then attacked the hairy scalp, and travelled over almost every region of the body except the face. The disorder continued to make advances for years, in spite of various treatment. He had taken mercury, cantharides, iodine, tar, and even arsenic, for a long time without benefit. Externally, tar and other ointments, lunar caustic in solution and substance, vapour and sulphur baths, had been duly tried without any marked benefit. He had been kept on low diet until he had lost flesh and spirits, and found his general health failing. The bowels had become excessively irritable, and the whole case wore a very discouraging aspect, and had evidently exhausted the patience of his medical friends, who had accordingly sent him to try sea-bathing, and recommended him, if that failed, to repair to Harrowgate.

He accidentally fell under the writer's care just as he was about to commence sea-bathing, from which he dissuaded him, having found it generally injurious in squamous disorders.

July 6th, 1844.—The scalp is nearly covered with leprous scales, which give the patient great annoyance, and itch very much at times. One of the patches extends to the forehead, just below the margin of the hair, and the ears are slightly affected. One well-marked patch on the back, commencing at the left scapula, and extending ten inches downwards, measures nearly thirty in circumference. It is almost circular, surrounded by an elevated inflamed ring, which encloses a surface apparently depressed, and covered by a mass of laminated micaceous scales, always peeling off, and showing a red surface, or a newly-formed scale beneath. There are several smaller patches of various dimensions, from the size of a dollar to that of a split pea, on the hips, elbows, knees, clavicles, groins, and wrists: even the scrotum and præputium are covered with scales, and several of the finger nails are in a morbid condition. The disease is attended with almost constant itching, which deprives him of rest. He is reduced in flesh and strength, his bowels are much relaxed, and his tongue is foul. Take of Fowler's solution of arsenic one drachm, distilled water seven drachms: mix: forty minims to be taken thrice a day, mingled with the usual beverage at meals.

9th.—No improvement. Pulse ninety, skin hotter than natural. He complains of thirst and feverishness; has a great dread of bleeding, and requests a few days trial of other remedies. A dose of cathartic pills was administered, a saline effervescent mixture directed to be taken at intervals, and the arsenic continued.

10th.—Cooler and better. The salines and arsenic to be continued.

25th.—No improvement during the last week. He now consented to lose sixteen ounces of blood from the arm, which was not buffed or cupped. The arsenic was persevered in until the

29th.—Much better; skin cool, pulse quiet, tongue improved; bowels less irritable: leprous patches for the most part exhibiting a faded appearance. Conjunctiva inflamed, lower eyelids swollen and puffy. Take four drops of the arsenical solution thrice a day.

Aug. 19th.—Eyes tender, skin hot, disease of the skin rapidly declining. Dose of aperient pills and a saline mixture. Three minims of solution of arsenic thrice a day.

Sept. 23rd.—He has persevered with the reduced dose of arsenic until now. No external application has been used except a little white precipitate ointment to the scalp. His eyes are still weak, but not worse than they were. All the leprous patches are smooth and denuded of scales. They have healed from the centre, which is now of the natural colour of the skin; the elevated rings have become depressed, and exhibit a dullish-red appearance.

He now removed to a distance, and was recommended to persist in the arsenic for some months, under the eye of his usual medical attendant; but he considered himself well, and acted on this advice but partially. In the spring of 1845, the disease returned and threatened to become as virulent and extensive as before. He again consulted the writer.

April 27th, 1845.—The disease has returned on the scalp, the back, and other places where it was seen previously. His pulse is full and quick, and his skin hot; he has gained flesh and strength. He was now forbidden all fermented liquors; a dose of cathartic pills was administered, with some saline aperients, and the full dose of arsenic was resumed—viz., five minims of Fowler's solution three times a day.

July 16th.—He has fluctuated a good deal, but the disease is now well. He is to continue the arsenic in small doses, and still to avoid vinous liquors, as every past indulgence has created fresh irritation in the skin. His bowels are much less irritable.

Aug. 11th.—He has had no return of the scaly disease, but the patches are beginning to assume an angry and suspicious appearance. He has met with an old friend, with whom he has "drawn a cork." The conjunctiva is more inflamed, and he complains of pain in the orbits. Eight leeches to the temples; cathartics and low diet; continue the arsenic.

30th.—Much better, but a scaly appearance has succeeded to the redness of the past week. Eight leeches to the temples. Continue the arsenic.

Sept. 22nd.—Quite well. Continue the arsenic, taking four minims thrice a day.

Nov. 27th.—He has left the neighbourhood, but writes word that "there is no return of the disease in the skin," and that he is persevering with the arsenic without inconvenience.

In this very instructive case, it is worthy of notice, that the arsenic was useless until venesection had been resorted to; that the irritable mucous membrane of the bowels was rather soothed than excited by the arsenic, and recovered its tone when the skin was restored to health; and lastly, that neither bleeding alone, nor dieting alone, nor arsenic alone, nor any two of them together, but an adaptation of the three remedies to the varying exigencies of the case, cured the disease.

In the selection of alterative remedies for intractable squamous disorders, empirical principles are too often allowed to guide the practitioner; and even to this day, the "trial" of one remedy after another, without knowing exactly what to expect as the result of the trial, is formally sanctioned by respectable authorities. This unscientific method of procedure is in fact no more justifiable in the treatment of cutaneous than of visceral disease. If any maladies require more than others an intelligent and judicious application of the established principles of therapeutics, these are the very diseases, seeing they will rarely happen to yield to the treatment suggested by the customs of careless and indiscriminate routine.

The simple treatment required in the following case stands in striking contrast with that of the preceding; yet they were both well-marked cases of lepra vulgaris.

CASE OF LEPROA VULGARIS OF MANY YEARS STANDING, TREATED SUCCESSFULLY BY SMALL DOSES OF ARSENIC, WITHOUT DEPLETION.

Mrs. M—, aged twenty-five, a lady of clear complexion, nervous temperament, and excellent general health, the mother of three children, has been for several years almost constantly afflicted with a scaly disease of the skin; she does not distinctly remember ever being quite free from it. She has been subjected to a variety of treatment without benefit, and has been given to understand that it is incurable. She consulted the writer.

June 26th, 1845.—She is nursing her third child, and is in good general health. She is somewhat *embonpoint*, but not plethoric. On the arms and legs are several broad and nearly circular scaly patches, of various sizes, circumscribed by an elevated ring of a pallid reddish hue, not showing any great degree of vascularity. The scales are thin, silvery white, and constantly dropping off, disclosing underneath either a more recently formed scale to which they have been attached, or a clear surface, of the colour of the outward ring. One of these patches occupies two-thirds of the left leg, beginning at the knee, and extending nearly to the ankle, covering the whole front of the leg, and nearly meeting in the calf; the patches are likewise scattered more or less thinly over the whole body, the face and neck only excepted. The area of these patches does not appear so much depressed as is usual in lepra, and the ring is less raised and inflamed than when the disease occurs in a plethoric subject, or assumes an acute type; there is no smarting or itching, no fever or heat of skin, no acceleration of the pulse. She was directed to make no change of diet, but to take five drops of Fowler's solution of arsenic at and with her meals thrice a day.

July 12th.—She complains of the eyes being weak; the conjunctiva is slightly inflamed; the patches are everywhere fading; the scales are dropping off, and leaving sound skin underneath; a spot which the writer had noticed on the bosom in an incipient state, is certainly disappearing, instead of spreading in the usual way. Reduce the dose from five to four drops.

20th.—Disease nearly gone; the eyes still weak. The drops to be continued.

30th.—Scarcely a vestige of lepra remains; there are no scales, but a dullish-brown discoloration of the cuticle indicates their previous locality. To continue the drops steadily.

Aug. 19th.—In consequence of the anxiety and fatigue attendant upon nursing a sick and dying child, she has neglected her medicine for three weeks, and the leprosy patches are reappearing in all their original positions. (It is more usual in relapses for the disease to attack a portion of the skin previously affected than to select a new locality.) Ordered to resume the arsenic.

Oct. 3.—She has taken the medicine steadily for six weeks, with a result exactly similar to that of the first experiment. The disease has again vanished. She now left the neighbourhood, and was advised to continue the medicine, in small doses, for an indefinite time, and to present herself every two or three weeks; but instead of doing so she writes—

Nov. 23rd.—"I regret much that I cannot leave home immediately, as I am in want of more drops, having used the supply

you gave me, some time past, and I find, that since I have discontinued them, the spots are returning."

So far as it goes, this is a satisfactory case. Twice the disease yielded to the medicine, the improvement being, in both instances, contemporaneous with the affection of the conjunctiva; twice she discontinued the medicine, and each time the disorder returned. She has only to take a small dose of the arsenic for about twelve or fourteen months together, and she will be subject to no further annoyance.

CASE OF LEPROA ALPHOIDES IN A DELICATE FEMALE, YIELDING TO MINUTE DOSES OF ARSENIC.

Miss D—, a middle-aged lady, who had been a valetudinarian for twenty years, has recently become the subject of a scaly eruption, appearing in small round spots on the arms and legs. The centre of these spots is covered by very white scales, the circumference being scarcely distinguishable from the centre in colour, and very slightly raised. The disease gives her no trouble, but is gradually increasing. She first called the attention of the writer to these spots.

Dec. 28th, 1843.—The spots are of various sizes, never exceeding that of a silver fourpenny piece. The scales are easily rubbed off, and the skin which underlies them is of a pale rose-colour. There is no fever; the pulse is weak, and the bowels regular. This lady has always been unusually susceptible of the action of medicines, particularly of the mineral class; nevertheless, the writer commenced the attack on this disease with five minims of Fowler's solution of arsenic three times a day.

31st.—She has taken the medicine only three days, and complains of excessive weakness in the eyes, effusion of tears, and general tremor. The dose was reduced to two minims.

Jan. 4th, 1844.—The conjunctiva is still inflamed, and the nervous system very irritable. The dose was reduced to one minim.

10th.—Conjunctiva is still slightly inflamed; the eruption is fading fast. Continue the arsenic in doses of one minim.

16th.—The eruption has, in most places, entirely disappeared, and there are no recent spots. She is nervous and fanciful, and begs to discontinue the medicine; request granted.

30th.—Cutaneous affection gone; no ill effects from the medicine.

July 9th.—She has had a return of the eruption in a very slight degree, which yielded to half a minim of the solution thrice a day for one week.

Feb. 3rd, 1845.—The eruption has made its appearance a third time, complicated with neuralgia of the facial nerves, to which she has long been subject. Two minims and a half of the solution thrice a day, and an opiate at night.

10.—Conjunctivitis. Reduce the dose to one minim.

15.—Conjunctivitis. Reduce the dose to half a minim.

20th.—Conjunctivitis. Reduce the dose to a quarter of a minim. This extremely small dose was taken for a month, at the end of which period the neuralgia was much better, and the lepra had entirely disappeared.

Jan. 17th, 1846.—Nor has it again relapsed. The neuralgia has likewise left her, and she has enjoyed better general health since her seven weeks' course of arsenic, than she had experienced for eighteen or twenty years.

PSORIASIS.

It has already been asserted that lepra and psoriasis are one and the same disease; the difference in the mere figure of the eruption being probably accidental. They are accordingly both equally manageable under similar treatment, as the following cases will illustrate, which are so selected as to exhibit the three prevailing varieties—viz., psoriasis diffusa, psoriasis inveterata, and psoriasis guttata.

CASE OF PSORIASIS DIFFUSA, SUPERVENING ON THE DECLINE OF ERYSIPELAS, REBELLIOUS TO VARIOUS TREATMENT, BUT YIELDING AT LENGTH TO SMALL DOSES OF ARSENIC.

Mrs. Y—, aged fifty, of sanguine and irritable temperament, was attacked with erysipelas in the face, in the month of February, 1833. The disease was moderately severe, and attacked in turn the face, ears, and head, taking the usual course of the disease, and terminating in resolution at the end of ten or twelve days. About two months subsequently,

April 12th.—A red patch appeared in the left ear, extending downwards to the neck, which speedily became covered with well-marked squame. These assumed the form of psoriasis diffusa, extending, in irregular patches, to the shoulders, arms, and back, and thence over nearly the whole

body, including the scalp and even portions of the face. The disease was attended by severe pruritis and slight fever, which was abated by the application of leeches, the use of aperients, and the antiphlogistic regimen. The irritation and scaliness, however, remained for months, in spite of sulphuretted baths, lotions of hydrocyanic acid, and other remedial measures. The scaly patches continued to increase, until at length the liquor arsenicalis was prescribed in doses of five minims three times a day. Under this treatment, a marked change soon became visible, the irritation ceased, the scales were detached, leaving a more healthy condition of skin behind them, and after three months' perseverance, the whole surface was restored to its natural condition. The disease has not relapsed, except in a very slight degree, when a few doses of the arsenic proved sufficient to remove it.

CASE OF PSORIASIS INVETERATA, OF TWENTY-SIX YEARS' DURATION, CURED BY ARSENIC.

S. T.—, a female servant, unmarried, aged fifty-two, of stout make, large proportions, and phlegmatic temperament, requested my advice.

Feb. 22nd, 1836.—Nearly the whole body is covered with opaque and whitish scales, which are constantly becoming detached, and may be removed from her bed in the morning "by handfuls." The skin is very generally hypertrophied. The disease is most severe in the internal flexures of the joints, and here, as also in other places, there are deep fissures (rhagades) raw and gaping, surmounted by red and swollen edges, excessively sore, painful, burning, and tingling. From these, upon slight exertion, a discharge of blood appears, the result of mechanical friction, or laceration. There is likewise a copious serous discharge exuding from certain portions of the skin, but no appearance of vesicles. The head and ears, trunk and extremities, present one continuous mass of morbid cuticle, the face only escaping. The disease has existed in various degrees of severity, for twenty-six years. She has frequently been under medical treatment, and is familiar with the interior of hospitals, both civic and provincial; but the only relief she obtained was slight and temporary. At length, her general health is beginning to fail. She has restless nights, loss of appetite, shortness of breath, and general fever. The pulse is somewhat accelerated, but exceedingly weak, and she evidently is not a subject for depletion. A pill with two grains of calomel was directed to be taken every night, a vegetable diet was ordered, and stimulants forbidden.

March 7th.—No sensible improvement. Three grains of calomel to be taken every night, and a lotion with diluted nitric acid, very weak, applied to the most irritable portions of skin.

16th.—The bowels have not been affected by the calomel, nor has it sensibly touched the gums. No material amendment in the skin. A drachm of sulphate of magnesia every morning, and five minims of Fowler's solution of arsenic three times a day.

26th.—Slight conjunctivitis. Itching much less troublesome; skin less tender, and a general improvement in the health. Persevere in the arsenic, and smear the scalp with a little white precipitate ointment at bed-time.

April 4th.—Conjunctiva more inflamed; eyelids tumefied; skin rapidly improving; many of the scales, becoming detached, have left a perfectly healthy surface underneath. The pain and tingling are nearly gone. She rests well, has a good appetite, and is in excellent spirits. Her bowels being costive, she was ordered a dose of calomel with extract of colocynth every other night; the vegetable diet to be continued, and the arsenic to be reduced to doses of three minims thrice a day.

June 4th.—She has taken the arsenic to this time without any inconvenience. The skin has a reddish-brown colour, but the rhagades have all become softened down, and there has been no vestige of squamæ for a month or more. She continues quite well in health, and is allowed to take animal food in great moderation. A few months subsequently she married.

July, 1839.—She has had no return of the disease. Three years have elapsed since the treatment.

September, 1845.—"A little troubled with the scurvy now and then, but nothing of consequence," was her reply to inquiries concerning her health.

Few cases of psoriasis are met with in practice more severe in character, or hopeless in prospect, than this. Writers on the skin speak of this disease as frequently rebellious to every mode of treatment, and Mr. Erasmus Wilson pronounces it "so unmanageable as to deserve to be considered incurable."*

It is well known, however, that these cases have been cured by arsenic, but the inconveniences and dangers attending the usual method of administering the medicine (by gradually increasing the dose) are so formidable, that it rarely succeeds without bringing the patient's life into urgent peril. Hence, few practitioners are bold enough to try the experiment. The reader is earnestly requested to compare the simplicity and safety of the treatment detailed in the case just related, with the difficulties and dangers encountered in the following case, which is extracted verbatim from Mr. Plumbe's "Practical Treatise on Diseases of the Skin." (Third Edition, p. 170.)

"The case in question (psoriasis inveterata) was treated by M. Gaskoin in the hospital of St. Louis in Paris. The arsenical solution was commenced in doses of two drops exhibited twice a day. The case was attentively watched, and the dose gradually increased, without any untoward symptom occurring for the space of two months, at the end of which period, no less than thirty-eight drops were exhibited for each dose. At this time, nausea and sickness being complained of, the medicine was suspended, a very important and rapid change in the state of the disease having occurred within the last few days. Three days after, the severe colicky pains commonly following the exhibition of the medicine, even in much smaller doses, if less gradually administered, came on, followed by cold perspirations, and great constitutional disorder. Opiates and cordials soon relieved these symptoms; and so satisfied was the patient of the good effects of the treatment, that, though a trifling degree only of the disease remained, he was anxious to return to the use of the medicine. The case was ultimately, though of years' standing, completely cured by adhering to the same plan."

This case exhibits very clearly the accumulating power of the medicine to which reference has been made in a former paper, and demonstrates (by contrast) the superiority, both in safety and curative powers, of the method of gradually decreasing the dose. It is possible to protect the bowels from the "colicky pains" above described, by simply mixing the medicine with the food, but nothing could justify the general use of arsenic for merely local ailments, if it were necessarily attended with so much risk to the vital organs.

Psoriasis is a disease, which, however slightly it may set in at first, usually gets worse and worse, until it terminates either in psoriasis diffusa, or psoriasis inveterata: but some individuals are liable to temporary attacks at certain seasons, or under peculiar conditions of the system. Some females, for instance, are always annoyed with it during the period of lactation, and at no other time. In these cases, arsenic will not only give temporary relief, but is competent to prevent or materially mitigate the severity of any future attack. The following case illustrates this.

CASE OF PSORIASIS GUTTATA RETURNING AT THE PERIODS OF LACTATION, CURED BY ARSENIC.

Mrs. E. aged forty, a delicate subject, mother of several children, has suffered from attacks of a scaly disease of the skin during several successive periods of lactation. She is generally free from the disorder at all other times.

Aug. 23rd, 1841.—She is nursing an infant about four months old; has an eruption of small squamous patches generally of an irregular form, in various parts of the body. These patches in some places assume the rounded form and snowy whiteness of lepra alaphoides, but their more prevailing character is that of psoriasis guttata. This is particularly the case at the elbows, where the scales are more prominent. There is very little show of inflammation in any part of the skin, and she suffers little from the complaint except itching in the scalp, and occasional irritation in other parts of the body. She has a weak pulse, appears jaded and emaciated, and complains of general debility. The bowels are costive, and the pulse soft and feeble. Take of infusion of calumba ten drachms, tincture of orange peel one drachm: mix: make a draught, to be taken twice a day between meal times. Take of Fowler's solution one drachm, distilled water ten drachms: mix: take forty drops three times a day with the meals.

Some calomel ointment was applied to the scalp with a view of more easily detaching the adherent scales, and a drachm of the milk of sulphur was given internally at intervals, to prevent constipation. This plan was followed up closely for six weeks.

Oct. 1.—The squamæ have wholly disappeared, except in the scalp, and here they consist only of dry scurf adherent to the hair, the skin showing the natural colour. The general health is also much improved.

Two years subsequently, this lady reported herself sound,

* Erasmus Wilson on Diseases of the Skin, p. 229.

and upon inquiry whether she had any return of her complaint, she answered, "Very trifling."

The utility of bleeding and arsenic in cases of lepra and psoriasis, attended with increased vascular action, does not rest alone on the testimony of the writer. In Dr. Green's "Compendium of Diseases of the Skin," there are two severe cases of lepra detailed. Both patients were treated first by bleeding, then by arsenic; and although medicated baths were used, there is nothing in the notes of the cases which would lead a wholly unbiassed mind to the conclusion, that the baths afforded any essential assistance in the cure. In both cases they aggravated the disease until the circulation was quieted by depletion; and when they were borne afterwards with impunity, "little progress had been made in the cure" until a second bleeding was had recourse to. And, even after this, there was no very satisfactory advance, until the arsenical course had been persisted in for a sufficient time to affect the constitution. These observations apply with at least equal force to Dr. Green's cases of psoriasis, of which he relates two. The first appears to have got well under bleeding and arsenic, the medicated bathing having previously been tried in vain; the second case (that of a lady) improved very strikingly under bleeding and purging; but Dr. Green candidly expresses his doubts as to the permanency of the cure, although she had taken thirty-six sulphur fume baths. But then, she took no arsenic. These cases are really full of instruction, and well worthy of study; and the profession is indebted to Dr. Green, not only for the spirit and enterprise he has shown in carrying out the French mode of treatment by vapour, hot air, and sulphur fume baths, but for a much higher boon to the interests of science—viz., the accuracy and truthfulness which adorn the narration of his cases.

Herne Bay, Jan. 1846.

(To be continued.)

AN IMPROVED MODEL BOUGIE FOR EXAMINING THE URETHRA IN STRICTURES.

By THOMAS BALMAN, Esq., Surgeon, Liverpool.

VARIOUS instruments have been recommended from time to time to aid the surgeon in forming an accurate diagnosis of stricture of the urethra.

The "sonde exploratrice," devised by Ducamp for taking a correct model of the diseased part, is likely to lead us into error, and to put the patient to much inconvenience, owing to the extreme softness of the materials of which it is composed. If, for example, a tight stricture is situated immediately anterior to the bulb, and this instrument is passed down to take its impression, the probability is, that the point, in place of entering the stricture, will become twisted and bent, or, what is still more likely, leave some of the composition behind, either of which circumstances must lead to some difficulty in withdrawing it without forcibly stretching the canal: for similar reasons, this instrument is altogether unsuitable for resisting any temporary spasmodic contraction of the muscles surrounding the canal, so that an impression left on the bougie from this cause might lead the operator to suppose that there is a stricture when none exists, or convey an erroneous idea of its character, when the urethra is in reality the seat of some morbid contraction. Sir C. Bell long ago recommended the use of silver ball-probes, in order to ascertain the extent of a stricture; and more recently, MM. Amussat and Segalas have introduced more complicated instruments, but similar in principle, and possessing no advantages over the ball-probe, to show the existence of a stricture in its commencing or rudimentary state, when it is likely to escape detection by ordinary methods: neither of these instruments, I believe, are at present used, owing to the exquisite pain which they invariably produce, their liability to induce spasm, or become entangled in the mucous lining and follicles of the urethra. The same objections are applicable to the simple canula suggested by Mr. Arnott and Ducamp, for facilitating the passage of a bougie, or any other instrument, in bad cases of stricture.

To avoid the necessity of having recourse to any of these instruments, and the still more mischievous practices of those who endeavour to compete with this disease *vi et armis*, in direct opposition to the solemn injunctions of Hunter, and most distinguished surgeons since his time, I have to submit to the notice of the profession a modification of the common wax bougie, as represented in the accompanying diagram.



On passing this instrument down to the seat of stricture, the square body at its extra-vesical extremity, serving as a handle for its introduction, may likewise be supposed to correspond with four imaginary lines in the urethra, (say as the seat of the disease.) In withdrawing it carefully, I note the relations of the bougie with the urethra by the figures 1, 2, 3, 4, printed on the index; and supposing, for example, the centre of the bougie is found moulded equally at the point by the strictured orifice, it is obvious that the aperture is situated in the centre of the diseased part, and that the point of an instrument ought to be carried in a corresponding direction on its approaching the stricture; but supposing the impression be on one side only, by keeping in mind the relations which the impression bears to one of the surfaces or figures represented by the index, we shall know precisely the side of the canal at which the aperture is situated, and thus be enabled to give the instrument or bougie to be afterwards introduced the requisite curve, that its point may be so directed as to correspond exactly with the opening in the stricture.

In recommending this instrument, which is intended to simplify and improve our diagnosis of a disease which often baffles the ingenuity of our best surgeons, I trust that it may, in some degree, tend to remove some of the difficulties which beset the operator in his endeavour to pass instruments into the bladder, and still more assist those who, utterly regardless as to the form and situation of the disease, burrow and tunnel the walls of the urethra, to the discredit of themselves and to the irreparable injury of the patient.

This instrument is made by, and can be obtained from, Mr. Coxeter, of Grafton Street East, London.

Oxford-street, Liverpool, January, 1846.

REVIEWS.

The Nature and Treatment of Cancer. By WALTER HAYLE WALSH, M.D. London: Taylor & Walton, 1846. pp. 590.

THIS treatise is divided into two parts, the first of which treats of "cancer in general," the second of "cancer of particular parts." In the present notice we shall confine ourselves to the consideration of the first division, reserving our estimate of the work, as a whole, till we have placed before our readers the principal points which it contains.

The introduction is given to the nosological position of the disease, and to the significations of the term cancer. The genealogy (so to speak) of cancer, is traced with great care and precision. The two primary groups of disease are the dynamic or purely functional; and the organic, or those involving changes of structure. Beginning with the organic, these are divided into those affecting the animal forms, and those implicating the animal textures. Textural diseases, again, are divisible into those involving some change in the normal elements, and those in which some new and adventitious product is developed. Adventitious products resolve themselves into those which are *physiologically inorganic*, as calculi, and those *physiologically organic*. Products *physiologically organic*, include those produced directly from the nutritious matter of the blood, which may be termed *blastemal formations*, as originating from a structureless fluid, and those which may be termed *parasitical*, as springing from germs. The cell-structure is the characteristic of *blastemal formations*. The cells generated may be inapt for the maintenance of life, when they may be called *evanescent*, constituting deposits: they may have the power of generating new cells possessing generative force previously to their own destruction, in which case they may be termed *non-permanent*, and the formations they produce, growths; or, thirdly, they may possess the faculty of transformation into tissue resembling the natural structures, in which state they permanently remain, this variety being *persistent* and constituting the order of pseudo-tissues.

Growths, the second of these orders, are divided by Dr. Walshe into those which accumulate in certain parts of the body, and in proportion to their increase, push aside the healthy structures; and those which, while they act in this manner, tend also to spread amongst the elementary

molecules of the natural tissues, destroying existing, and preventing the evolution of new particles, possessing, in fact, the property of *infiltration*. The absence or presence of this property is the basis for dividing growths into *infiltrating* and *non-infiltrating*. Dr. Walshe is of opinion, "that a single genus of formation represents the subdivision of *infiltrating growths*. This genus is Cancer."

Dr. Walshe proposes to limit the general terms cancer, or carcinoma, to three varieties of morbid structure—namely, *scirrhus*, *encephaloid*, and *colloid*, agreeing, as he believes they all do, anatomically, physiologically, and pathologically, and being, moreover, separate and distinct from all other forms of organization.

In the chapter on the Anatomy of Cancer, the different kinds of the three varieties are described; but the nomenclature is too profuse to admit of their enumeration. Mere morphology is the chief foundation of the names which are appropriated to the numerous subdivisions of carcinomatous disease which have been made by all authors, and probably the progress of pathology will greatly diminish the number.

The chapter given to the "Chemistry of Cancer" is very curt and imperfect, not as regards Dr. Walshe, but as regards the knowledge at present extant on this important subject. A severe critic might ask why Dr. Walshe did not himself contribute something in the way of analysis, to lessen the great dearth existing in this respect? As it is, we know nothing of the chemical composition of the *cancer* blastema, save that it is perhaps composed of altered liquor sanguinis. On this important subject, to use the author's words, "direct experiment has not yet spoken." Muller and others assign the chemical position of cancer to be among *protein formations*. Hecht, Morin, and Collard de Martigny made analyses which gave gelatine as a component of encephaloid, while Foy and Maunoir are said to have ascertained that this substance yields no gelatine. Equal discrepancy exists respecting *scirrhus*, and still less is known of the constitution of *colloid*.

In the chapter devoted to the physiology of cancer, the "origin, growth, decay, elimination, cicatrization, and local regeneration," are discussed. We are not sure that the phrase, "physiology of cancer," is judicious, applied, as it is, to these numerous phenomena. The reason assigned is, that "cancerous structures, precisely like the original tissues of the body, exhibit certain series of phenomena characteristic of, and necessary to, a state of perfect health of their proper substance. These phenomena it is a matter of importance to distinguish from certain contingent states, indicative of actions actually morbid in respect of that proper substance." Query—Are decay, elimination, and cicatrization, characteristic of the perfectly healthy condition of cancer? For physiological purposes it is only necessary to speak of the three species of cancer collectively, all being closely similar in respect of their physiological processes. It is fair to say, that in the preface, Dr. Walshe gave, as the epigraph of his labours, his belief, that the higher orders of adventitious products "were real existences developed within existences, and possessed of two distinct modes of life—a life subject to its variations of health and disease, irrespective of the organism in which it had taken birth, and a life influenced by the conditions of the various structures and functions of that organism."

After disposing of the traditional ideas respecting the origin of cancer, Dr. Walshe combats, *seriatim*, the hypotheses of Broussais, Hodgkin, Cruveilhier, Carswell, Velpeau, and others, and then proceeds to the development of his own views. The first element, according to Dr. Walshe, is the blastemal fluid, the matrix, out of which the peculiar cells and other structures proper to carcinoma are produced. This fluid blastema, however, has no more tangible existence than that which it derives from analogies and logical speculations. It has not been seen or tested in the primitive state, before the formation of other substances of a supposed secondary nature,

which are susceptible of examination. Whether the theory of Dr. Walshe will follow the fate of its predecessors, time can alone determine; at present, it can only demand the merit of acuteness and ingenuity. The origin of cancer still remains a mystery.

The next physiological consideration, that of growth, offers more certain footing. The ultimate solid constituents of carcinoma are, granules, cells, nuclei, fibrous substance, fatty matter, compound granule corpuscles, saline matter, blood vessels, lymphatics, and nerves. The most interesting points said to be made out are, that the cells are of both endogenous and non-endogenous kinds. The growth takes place, in the one instance, by the successive development of new cells within the primary ones, in the manner shown by Schwann; in the other, the new cells are developed without the primary cells, by an influence exerted by the latter, which is compared to the influence of mucous membrane in exciting the development of epithelium cells upon its surface. Cancerous growths are possessed of vessels of two kinds,—those connected with the general vascular system and those originating *de novo* in the morbid structure itself. The blood in these latter vessels manifests an independent oscillation, having no connexion with the surrounding circulation.

In the concluding sections of the physiological chapter, the subjects of decay, elimination, cicatrization, and local reproduction, are ably handled.

The conclusion naturally deducible is, that cancer increases in size by the continued afflux of blood to the diseased parts in the way Dr. Walshe has pointed out, but the intimate cause of the first vitiation of the nutritive process is at present hypothetical; so also is the formation of a carcinomatous blastema, as the transition stage between the healthy blastema of nutrition and the proper cells and globules of cancer. Dr. Walshe states that the fact, "that out of the same fluid blastema, and at one and the same time, are produced cancer cells, and cells destined to form structure closely similar in its properties to one of the natural tissues of the body," "almost suffices in itself to prove that the mode of development of cancer blastema—the evolution of its cell—must be identical with that of the blastema of the natural tissues." May it not be actually the same? May not the pathological point be that of the instant of transition from natural blastema to cells, without the intervening development of a special blastema?

The mortuary registers of Paris have afforded Dr. Walshe very valuable information respecting the proneness of different organs to cancer. These registers give the results, in this respect, of no less than 9,118 cases. It occurred in the uterus, stomach, female breasts, liver, and rectum, with the greatest frequency, in the order in which we have named the organs. Encephaloid and *scirrhus* are almost universal in their location, while the *colloid* variety is more limited in its seats. The author remarks, encephaloid selects the testicle, lungs, kidneys, spleen, and meninges; *scirrhus* is most frequent in the uterus, female breasts, stomach, lower lip and skin; *colloid* infests the alimentary canal and omentum.

The observations on the dissemination of cancer throughout the system are of especial interest. The disease may extend itself from the organ or locality first attacked to other organs, from contiguity of structure and the extension of the infiltrating process, or it may manifest itself in distant organs, when a new explanation becomes necessary. With respect to its extension by means of absorption in the lymphatic system, Dr. Walshe expresses a doubtful or even unfavourable opinion, and that chiefly because glands at a distance are sometimes affected, while those in the vicinity of the original disease remain healthy. The following are his remarks on this topic:—

"If contamination be admitted to arise as a result of absorption in some instances, it would perhaps appear a necessary inference that such contamination must ensue in *all* cases,

inasmuch as the process of nutrition, accomplished in the usual way, is constantly going forward in cancer. Now, as a matter of fact, this contamination does not always follow, yet the difficulty is not insurmountable; in the latter class of cases, the absorption is of a kind which I may, for convenience' sake, call *unproductive*. It is perfectly assimilable to that which occurs in abscesses, (the pyogenic membrane constantly absorbs and secretes,) wherefrom no pus, possessing its sum of natural properties, finds its way into the circulation; but wherefrom corpuscles in a state of disintegration and alteration are carried into the blood. Such absorbed pus must be esteemed, by means of the changes effected in its physical constitution, divested of pathogenic properties, for the event proves it to be incapable of giving rise to secondary abscesses. On analogy, in nowise strained, I think it may be admitted that disintegration of the elementary particles of cancer is the cause of the occasionally *unproductive* character of the absorption they undergo. In a word, effete cancer is in these instances absorbed. I may anticipate what will be elsewhere said, (chapter vii.,) so far as to observe, that herein lies the reason why the absorption of a tumour, effected by artificial means, may constitute the cure of the disease."—p. 105.

This passage is not a favourable specimen of Dr. Walshe's style; he is too evidently desirous of producing an effect by the use of quaint and technical phraseology.

The spread of cancer to organs possessing no direct lymphatic communication is explained by supposing the veins to be the agents of transmission; very cogent reasons are given for the adoption of this idea, and particularly that the fact, the lungs and the liver, organs both containing special systems of capillaries, are the organs most frequently affected by secondary carcinoma. Dr. Walshe is decidedly opposed to those writers who suppose that cancer may extend from one organ to another by virtue of the nervous sympathy, or synergy, existing between different organs. The opinions of Bayle and Blundell are quoted to show that coincident carcinoma of the uterus and mamma, organs most decidedly connected, through the medium of the nervous system, is extremely rare—that the liver and the spleen, and the pancreas and salivary glands are seldom affected conjointly. He considers that "these facts suffice to overthrow the doctrine of 'sympathy.'" It must, however, be borne in mind, that it is only during the child-bearing period of female life that the breasts and the uterus sympathize with each other to the fullest extent. After the catamenial climacteric, these organs lose their former intimate connexion, and it is now that carcinomatous disease becomes most frequent. With respect to the connexion between the pancreatic and salivary glands, and between the liver and the spleen, doubts may be entertained concerning the existence of any special nervous routes between them. The pancreatic and salivary secretions resemble each other, and the liver and spleen are neighbouring viscera, but it cannot be said that irritation of the pancreas excites insalivation, or of the spleen, a flow of bile.

The three species of cancer affect the system, secondarily, with different degrees of frequency. Scirrhus when involving the mamma, and encephaloid occurring in the testes, are, perhaps, of equal importance in this respect, while colloid is the most rarely productive of secondary disease.

The section on the state of the fluids and solids generally, is, perhaps, the most imperfect portion of the volume, three pages and a half being all that are given to this important subject. The chief facts are, the observation of Louis, that in persons dying of cancer the mean volume of the heart is less than in those affected with any other disease; the gradual diminution of the quantity of the circulating fluid; the increase of the proportion of fibrin, the diminution in the proportion of red corpuscles, and the tendency to passive serous effusions.

We have not space to follow Dr. Walshe at length through the symptomatology, course, terminations, duration, frequency, mortality, etiology, and affinities of carcinoma, such being the order adopted. We are arrested by the section

on the nature of the disease, in which the problem—On what does the destructive nature of cancer depend?—is dealt with. Dr. Walshe would banish the term *malignity*, as one giving rise to serious misapprehensions from the different senses in which it is used by different pathologists. He sums up the question of the local or general evidence of cancer by the following apparent truism:—"A cancerous tumour, under all circumstances, even should it remain single and stationary for years, is but the local evidence of a general vitiation of the system." The following passage is extremely well put, in answer to the question—Whence arises the destructive characters of carcinoma?

"A certain constitutional state exists, and may continue to exist for a variable period without giving functional evidence of its presence, although the blood and solids of the body are specially modified. In consequence of local injury, or otherwise, exudation takes place; upon that exudation the constitutional state has impressed special attributes and tendencies, among these attributes ranks an intrinsic power of vegetation. This vegetating faculty of the exudation re-acts on the system by constantly draining it of a portion of its nutrient materials,—the progeny feeds upon the parent organism, and the first phasis of evolution is accomplished. But the natural tissues have been so modified in properties by the constitutional state, that they are incapable of resisting the encroachments of the vegetating exudation, and hence become the seat of atrophous, ulcerative, and other modes of destruction. Discharges of various kinds now still further drain the system of its fluids, and impair its vital energies, and the second phasis is established. Meanwhile secondary alteration of the blood is effected; this fluid becomes the vehicle for the circulation through the system of elements possessed of a germinating force,—these stagnate, are deposited, and new local vegetations spring into life and activity. The same series of phenomena is again and again gone through, until the system, drained of its reparative fluids in feeding exudations and supplying discharges, exhausted of almost every drop of pure blood through the influence of secondary cancerous impregnation, paralyzed in its nervous energies by physical anguish and deficiency of pabulum, sinks in the struggle against the superior powers of the new existences it has created,—and in death is closed the third phasis of the disease."—pp. 189, 190.

The prophylactic treatment, applicable to the descendants of cancerous patients and others, is simply hygienic. The curative treatment is divided into the internal and external; and every remedy which has been used receives full and impartial consideration: of these it will be only necessary to refer to the more important. The only advantage Dr. Walshe has seen accrue from the administration of conium, pushed to ten-grain doses twice a day, has been the "alleviation of pain and irritability, especially in cases of cancer of the stomach." He believes the iodide of iron specially appropriate in certain forms of cancer, where anæmia exists. Here he is of opinion that it may be used without increasing febrile action, but rather with the effect of lowering the irritable excitement of the system; he adds, however, that he has had "comparatively few opportunities of observing this in cases of cancer."

Writing of arsenic, Dr. Walshe premises that "the least reflection upon the nature of cancer must lead to the conclusion that the more powerfully alterative a medicine is, the greater the chance, *ceteris paribus*, of its proving beneficial in that disease. This is an *à priori* argument in favour of a trial of arsenical preparations, by no means to be disdained; and it, of course, possesses additional force, if these can be combined with any other alterative of a powerful character. Now, in the iodide of arsenic these conditions are realized." This mode of therapeutical reasoning does not seem particularly cogent. What follows is more valuable.

"1. Given in doses of one-sixteenth to one-twelfth of a grain twice daily, two hours after eating, the iodide of arsenic is well borne, and may be continued without risk for several months. 2. The system generally soon gives evidence of its

action,—unusual perspirations, with dryness of the fauces and alimentary canal, occur. Sometimes slight headach is complained of, but this is rare; and I have known most violent periodical headach, which had afflicted a lady for years, disappear while she was under the influence of the salt. 3. The pain of the tumour decreases in violence. 4. The size of the breast generally diminishes; and, if the tumour itself does not actually lessen in bulk, I have at least found that its enlargement, previously more or less active and apparent, becomes, as far as can be determined, suspended. There is difficulty in establishing the fact, on account of the change in dimensions of the breast generally. 5. The general health improves.”—pp. 201, 202.

Numerous other remedies are mentioned, but we have only given those in which the personal experience of the author is advanced.

Of external remedies, depletion by leeches is recommended in the very earliest stages, or during the existence of inflammatory symptoms; but leeches are not to be applied when the tumour adheres to the skin, or in cancer of the os uteri, leeching in such cases being liable to produce ulceration. Cases are mentioned from other authors, in which the operation of tying the nutrient arteries proved serviceable.

Of the utility of iodine, Dr. Walshe is inclined to speak in favourable terms. He expresses considerable confidence “in the power of iodine-friction, particularly when combined with the use of the iodide of arsenic internally.” He also quotes with approbation the following passage from Mr. Travers:—

“By an indolent scirrhus,” says this writer, “I mean an incompressible permanent tumour, possessing, for many years, no distinguishing character of that disease; but in a deranged state of health assuming its genuine character, and at a particular period of life breaking up into an actual cancer. I do not entertain a doubt that such a tumour may be, and often is, absorbed in its first stage, and need not therefore of necessity follow this course. I feel assured that most of the hard breasts of young and middle-aged women admit of being reduced by the iodine or the mercurial ointment, if early resorted to, and steadily persevered in, having often succeeded in procuring their absorption by such means, when, from the characters they presented, I should otherwise have felt compelled to urge their removal by operation. . . . Nothing is more certain than the susceptibility of absorption in many such tumours at an early stage of their existence.”—p. 206.

*Of compression Dr. Walshe speaks in high terms; and particularly of a very efficient plan of exerting it, devised by that scientific mechanician, Dr. Neil Arnott. Dr. Arnott’s apparatus “consists of a spring, an air-cushion supported by a flat resisting frame or shield, a pad, and two belts. The spring, which is of steel, is the compressing agent, its strength being varied with the amount of pressure it may be desirable to obtain.” The pressure thus applied is applicable to cancer “in every situation where a bony or other solid support exists behind the growth, and when a point for counter-pressure can be had.” In the advanced stages of cancer, or when the bulk of the disease is very great, pressure is inapplicable, but in favourable cases we are confidently told that,—

“The effects produced by pressure are removal of existing adhesions, total cessation of pain, disappearance of swelling in the communicating lymphatic glands, gradual reduction of bulky masses to small, hard, flat patches or rounded nodules, (which appear to be, both locally and generally, perfectly innocuous,) and in the most favourable cases total removal of the morbid production. The relief of pain afforded by the instrument is, without exaggeration, almost marvellous; this effect is insured by the peculiar softness and other properties of the air-cushion, the medium through which the pressure of the spring is transmitted to the surface. Females unable to obtain sleep even from enormous doses of laudanum, cease instantaneously to suffer on its application; and sleep thenceforth, as though they were perfectly free from the disease.”—p. 211.

One case is given by Dr. Walshe, in which the application of pressure by Dr. Arnott’s apparatus, continued for about a year, entirely removed a tumour, apparently cancerous, from the breast of a married female.

Of escharotics, the chloride of zinc is recommended in preference to arsenical preparations, because of the poisonous qualities of the latter. Mr. Ure is said to have been successful with a paste, containing “one part of the chloride (zinc) to two of sulphate of lime.” Caustic agents are recommended, as a general rule, to be applied so as to produce their full effect at once, otherwise they irritate, and give an impetus to the disease.

On the question of the removal of carcinomatous growth by the knife, Dr. Walshe advances a number of propositions, and from these he deduces, as inferences, that “the operation cannot, in any individual case, be recommended as likely to cure the disease;” and that “excision cannot be undertaken without imminent risk of placing the patient in a worse position than he or she was before the use of the knife;” and lastly, that “the operation should, as a general truth, be abstained from.” Nevertheless, it is admitted, that, in certain cases, the chances of benefit from operative measures may rise above the mean, and hold out faint hopes of permanent recovery. These are, where the disease is traceable to a blow; where the constitution is unimpaired, and where no hereditary taint can be discovered; where the lymphatic system is as yet unaffected; where the disease is of the scirrhus variety; where no infiltration can be perceived; the tumour being of moderate size, and without adhesion. It would appear that cancer affects the constitution more intensely during the early part of its career, and that when the operation is performed, it should only be at a comparatively late period, and after other treatment had entirely failed.

(To be concluded.)

An Act for the Regulation of the Cure and Treatment of Lunatics, with explanatory notes and comments. Edited by FORBES WINSLOW, M.D. London: Benning & Co., 1845, pp. 163.

THIS work, besides the one hundred and eighteen clauses of Lord Ashley’s Act, and the numerous schedules containing the forms connected with the licences, reception of patients, medical certificates, notices to the commissioners, &c., contains a considerable quantity of valuable matter, by Dr. Winslow. This comprises a history of former legislation on the subject of lunacy; observations on the Act of the last session, having particular reference to the changes it introduces into the management of persons confined in licensed asylums, hospitals, &c.; a lucid and concise analysis of the Act itself; and an appendix on the condition of lunacy and lunatics in England at the present time.

Information on all these points must, of course, be valuable to those professionally engaged in the treatment of insanity; and we are glad that a medical man should have produced an edition of the present law, with addenda of the proper kind. But it would also conduce to the progress of good legislation in lunacy if medical men in general gave some attention to the subject. We think this, because we are of opinion that the execution of a proper law ought naturally to devolve on the medical profession. It is abundantly evident, from Dr. Winslow’s description of former legislation, that the profession has been untrue to itself. Great powers were formerly possessed by the College of Physicians, and these were never exerted in such a way as to command the approbation of the legislature or the public. In the first legislation on the subject, in 1774, the whole jurisdiction in lunacy may be said to have been given to the College of Physicians. The president and members of the then College of Physicians were to elect five fellows, who were to grant licences, and to act as commissioners. If this board had properly fulfilled their important duties, the members of the medical profession would stand in a different relation to the question of lunacy than they now do. For upwards of fifty years the College of Physicians held these extensive powers, till at length a gradual

accumulation of the most flagrant abuses in the treatment of the insane was the cause of an entire change in the laws of lunacy. Mr. R. Gordon, in introducing his Bill in 1828, urged as a specific reason for fresh legislation, the gross dereliction of duty on the part of those hitherto charged with the supervision of insane persons. The consequence was, that the nomination of the commissioners of lunacy was transferred from the College of Physicians to the Secretary of State for the Home Department. If, however, in former times, the governing bodies of the profession have fallen short of their duties, the faculty in general may claim a large, indeed almost the entire, amount of the credit due to the philanthropic exertions which have raised the poor lunatic from the state of a caged beast to that of a patient suffering from a heavy disease. In the present law, the balance has not been restored, but we are severely punished for the omissions and commissions of former generations. Now, there are for the administration of the law of lunacy, two masters in lunacy, (barristers,) five, honorary commissioners, (non-medical,) three paid commissioners, (barristers,) and three paid commissioners, (physicians or surgeons,) the whole of the appointments being vested in the Lord Chancellor. Thirteen appointments in a medical department, only three of which are medical! We shall take an early opportunity of reverting to this subject, in order to show the derogatory character of this arrangement to the profession.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

JANUARY 3, 1846.—DR. CHAMBERS, PRESIDENT.

(Concluded from p. 103.)

TWO CASES OF DISEASE OF THE BRAIN FOLLOWING THE APPLICATION OF A LIGATURE TO THE CAROTID ARTERY. By JOHN P. VINCENT, Esq., Surgeon to St. Bartholomew's Hospital.

The author states that the two following cases appear to possess an interest that entitles them to be placed under the consideration of the Society.

James M—, aged forty-eight, in July, 1829, was admitted into St. Bartholomew's Hospital with an aneurismal tumour under the right ear. It had been forming eight months, and was about the size of a small orange. On July the 18th, the author tied the common carotid artery. In about an hour and a half after the operation, the patient was discovered to be slightly convulsed on the right side. He afterwards sunk into a state of stupor. He was bled to thirty ounces. After this he became more sensible. He had twitchings of the right side. He was again bled during this and the two succeeding days, and altogether lost eighty-four ounces. His left side became paralyzed; his urine and feces passed off involuntarily; he swallowed with difficulty; and on the 24th he died. On examination of the body, it appeared that the veins of the right side of the brain were not so filled as on the left. The substance of the brain on the right side was quite soft and cream-like. There was no deposition of blood in any part, but a little more serum in the ventricles than usual.

On the 9th of April, 1845, William B—, aged twenty-eight, was admitted into the hospital, having stumbled, a few hours previously, against a door whilst smoking a pipe, which penetrated the tongue anterior to the right tonsil. The patient felt a portion of the pipe in the wound, but was not able to remove it. There was some bleeding, which gradually subsided. The voice was husky. He complained of pain, which was increased on his attempting to swallow or to open his mouth. On introducing a probe into the wound, no foreign body could be detected. The parts around the wound were greatly swollen. During the next five days the swelling gradually increased, and impeded deglutition. On the morning of the fifth day his breathing became difficult. On the 16th, hæmorrhage took place, to the extent of twenty-four ounces, which was arrested by pressure. The author was sent for, and fearing that if the pressure was remitted the hæmorrhage would prove fatal, he proceeded to tie the carotid artery. This could not be accomplished without much difficulty, arising from the swollen and sloughing state of the parts, and from the effusion of pus and blood, and also from the excessive restlessness

of the patient. It was observed during the operation that the patient made violent efforts with his right side, but that he never moved the left extremities. During the night the left extremities were frequently convulsed. His pulse, which had been 132, sunk to ninety-six. During the next two days the twitchings of the right side and paralysis of the left side continued. About midnight of the 18th, whilst coughing, about an ounce of arterial blood flowed through the nose and mouth and from the wound in the neck. He was sensible. On the 21st a fit of coughing, with hæmorrhage, to the extent of two or three ounces, from his nose and mouth, terminated his existence.

Examination of the body.—The wound in the neck presented a sloughing appearance. At the bifurcation of the carotid, on the right side, there was a large and firm coagulum, in the middle of which was the extremity of the tobacco-pipe, which had penetrated the artery at the point of division into external and internal carotids. The convolutions of the brain on the right side were flattened and softened. On dissecting the brain, irregular shaped cavities, filled with ash-coloured effusion, with shreds and particles of a greenish hue, were discovered. One of these encroached on the corpus striatum.

The author adds, that if the portion of tobacco-pipe had been detected at the time the patient was brought to the hospital, and withdrawn from the wound, he must have died instantly from the gush of blood that would have taken place, as this body seemed to have plugged the artery. The author had understood that such a sudden fatal event has occurred under similar circumstances.

Dr. COPLAND remarked, that in most of the cases in which the carotid was tied, hemiplegia, or more partial palsy, ensued. He alluded to the great loss of blood which had taken place in the first case, and said that he should have been inclined to combat the symptoms with other remedies than the lancet.

Mr. BRANSBY COOPER thought the quantity of blood taken in the first case was excessive, but Mr. VINCENT, no doubt, saw good reasons for this proceeding. In the second case, the patient died from the irritation kept up by the tobacco-pipe, and not from hæmorrhage, although twenty-five ounces of blood were lost from the wound in the common carotid, just at its division. He (Mr. Cooper) had tied the common carotid twice; once in a gentleman from Barbadoes, who suffered from an aneurismal tumour near the parotid gland; it was of little inconvenience to him, but he wished to be operated on. Sir B. Brodie recommended the proceeding, as the patient was about to return to a hot climate, where he would be subjected to arterial excitement. Before the operation, the patient was kept low, and blood to a moderate extent abstracted. The operation was followed by no ill consequences whatever; the patient making a complete recovery. In the second case, a ligature was applied to the common carotid for a wound of one of its branches inflicted in an attempt at suicide. The patient did well after the operation, which was followed by no cerebral symptoms, but expired at the end of three weeks from mental disturbance and irritation in the wound.

Dr. GEORGE BURROWS, in reference to the effect of large depletion in causing disorganization of the brain after ligature of the common carotid, stated, that the conclusion he had arrived at, after referring to a number of cases on record, was, that large bloodlettings, either before or after the operation, were not followed by paralysis. In support of this view, he alluded to several cases in which the artery had been secured, large losses of blood following or preceding the operation. In one of these instances, Mr. Preston, of Calcutta, tied the common carotid for the cure of epilepsy. Bloodletting was resorted to freely, both before and after the operation; there was no subsequent paralysis, and for three months the patient did not suffer from epileptic attacks. In another instance, both the carotids were tied by Dr. Hohl, of Leipsic; the first operation was for aneurism of one side of the head, resulting from a fall, attended by much hæmorrhage. After the first operation, the patient became insensible and convulsed on the opposite side, but eventually recovered; aneurism, however, on the opposite side presented itself, and the corresponding carotid was tied; no bad symptoms resulted, and the patient got well. It was remarkable that no bad symptoms ensued in those cases in which there was much hæmorrhage.

Dr. COPLAND observed, that there was only a word of difference between himself and the last speaker, and that was, the word *excessive*. Bleeding might be requisite to fortify or fifty ounces, but not to eighty or ninety.

Mr. BRANSBY COOPER. And also the difference between loss of blood prior to and following the operation. In Dr. Burrows' cases, the bleeding might be considered as preparatory, as it occurred previous to the operation.

Dr. SNOW said that the convulsive twitchings on the side of the body on which the carotid artery had been tied, in these two cases, showed that the operation produced disorder of the opposite side of the brain. The brain did not receive the atmospheric pressure on all sides, but chiefly through its bloodvessels; and it would seem that when one of the carotids was tied, in some cases, the increased quantity of blood flowing through the other arteries caused a congestion on the other side of the brain, proportional to the deficiency of blood on the side of the operation, and that this congestion was the cause of the twitchings in these two cases. He conceived it was for this congestion that the venesection was adopted in the first case, and, of course, not for the paralysis of the other hemisphere, which resulted from its supply of blood having been cut off, and which caused the paralysis of the other side of the body.

Mr. H. C. JOHNSON mentioned two cases in which the common carotid had been ligatured, without the production of any cerebral disturbance.

Mr. BLIZARD CURLING narrated the case of a sailor, who came under Mr. Hamilton, at the London Hospital, in consequence of a penetrating wound of the tongue, produced by a tobacco pipe. Mr. Hamilton probed the wound, and extracted a piece of tobacco pipe four inches in length; a gush of blood ensued, and the patient sunk. On examination it was found that the tobacco pipe had traversed the tongue obliquely, penetrated the throat below the left tonsil, and transfixed the jugular vein and carotid artery, to which wound it had acted as a plug until its removal.

Mr. SOLLY recommended for the perusal of members an article by Dr. Norman Chevers, in a late number of *Guy's Hospital Reports*, on the subject under discussion.

Mr. ARNOTT said that in cases where tobacco pipes had wounded even the internal carotid, and had been withdrawn, death did not necessarily result. This had been illustrated in a case which had been in the Middlesex Hospital some time since. Two of these pipe cases had come under his observation. A man smoking and drinking in a public house, went out to make water, and falling forwards, the extremity of his pipe was driven into his mouth. He was brought to the hospital, and it was ascertained that the pipe had penetrated under the tongue, from which situation it projected, and a piece of it, three inches long, was withdrawn. Tumefaction, considerable inflammation, and dyspnoea, came on, and the man expired. On examination, another piece of pipe, two inches in length, was discovered deep under the base of the tongue, and the lingual artery was ulcerated. In the second case, a man had met with a similar accident, but the tobacco pipe had passed into the velum, near the right tonsil. A bulging being observable at this point, the surgeon pushed his lancet into the swelling, but failed in detecting the foreign body. Some hours afterwards, the house surgeon, seeing some substance near the wound, drew it out with his forceps; it was a piece of tobacco pipe. A quart of blood immediately followed; but the hæmorrhage was promptly arrested, by placing the thumb on the carotid. This was tied, but hæmorrhage recurred; and on the supposition of its being recurrent, it was attempted, but, of course, without success, to secure the internal carotid, above the injured part. The patient afterwards died, but not of hæmorrhage; and as the parts were in a state of decomposition, it was not clearly discoverable, but there was every reason to believe, that the wound was of the internal carotid. With regard to palsy resulting from the application of a ligature to the common carotid, in addition to the paper mentioned by Mr. Solly, another had been, ten years since, published in *THE LANCET*, in which several cases in point were related. Mr. Arnett recollected one case in which the carotid was tied in consequence of hæmorrhage from a deep wound inflicted under the angle of the jaw; palsy occurred. An "abscess of the brain" was found after death. Individual experience of these cases was insufficient to enable us to speak confidently, but he had always considered that the disorganization of the brain which ensued in these cases was not the result of excited action, but the consequence of cutting off a supply of so large a quantity of blood, and analogous to mortification, and other changes which sometimes followed in a limb from tying its main artery, and therefore as not to be benefited by the large bleedings already alluded to and advocated by Mr. Cooper.

MEDICAL SOCIETY OF LONDON.

MONDAY, JAN. 19.—DR. THEOPHILUS THOMPSON, PRESIDENT.

BRIGHT'S DISEASE IN CHILDREN.

Dr. G. O. REES, in answer to a question, stated that he had never seen Bright's disease in a very young child; the earliest age at which he had known this disease to occur being thirteen years. This case came under his notice some years since, at Guy's; it was an instance of complete morbus Brightii. The patient had not suffered from scarlet fever.

Dr. I. THOMPSON recollected a case in which the kidney was slightly affected with granular disease, in a child two and a half years of age. For some weeks the little patient suffered from symptoms of a perplexing character; there were feverish excitement, intolerance of light, restlessness, dry skin, and at one period, suppression of urine. The head symptoms became more urgent, and the child expired. After death, the skin was found remarkably waxy in appearance; the blood was fluid. The capsule of the kidney was torn off with more than usual readiness, and there was a granular deposit about the cortical substance. The child had evidently died from the change which had taken place in the kidney, the symptoms being those of Bright's, unassociated with any other affection.

He recollected another case in which a child was affected with very nearly the same symptoms, but he recovered. Cases of this disease occurring in children were recorded by Sabattier, Solon, and Christison.

REMARKABLE CASE OF PARAPLEGIA.

Dr. G. O. REES related the following case. About three weeks since, a woman, aged 32, was admitted into Guy's hospital, suffering under head symptoms, and paralysis of the lower extremities. It appeared that on Christmas day last, while out in the street, her legs felt very cold, and she was suddenly seized with a desire to make water, with a total inability to do so. She had received no injury of the spine. Feeling generally ill, she went to bed. On endeavouring to lift herself out of the recumbent position, she found that she could not move her legs, though she had complete power over, and sensation in, the upper extremities. When admitted into the hospital, shortly after, she was labouring under great mental confusion; as the nurse said, "she was not herself; there was difficulty of articulation, and sluggishness of the pupils. There was no dyspnoea, and no symptom whatever of spinal affection; the spine, under the suspicion that it might have been injured, having been most carefully examined, and no injury whatever being detected. Catamenia regular. Sensation remained perfect in the legs, but the motive power was entirely gone. Various and repeated efforts were made to develop excito-motory action, but without the least success. The case was altogether a puzzling one, but he was inclined to the opinion, from the head symptoms, that there was some mischief about the crura cerebri, that probably the corpora striata had been suddenly impinged upon by effusion in that neighbourhood, and that the symptoms presented were dependent on that pressure. However this might be, the case was altogether unique as far as his experience or reading went. The patient was given calomel and opium until the mouth became affected; the mercury was then discontinued and the iodide of potassium substituted. The patient rapidly recovered under this plan of treatment, the power over the bladder returning as the general symptoms gave way.

Mr. BISHOP was more inclined to the opinion that there had been some injury to the spine, probably inflicted during intoxication, and that the brain symptoms were merely secondary effects. It was difficult to understand, if the prime mischief were really in the cerebellum, why motion should be lost, and sensation retained. Injury to the anterior column of the spinal cord would explain the difficulty. Injury to this column might be received and no symptoms present themselves until a day or two after, or, indeed, even much longer. Such cases had come under his notice. Besides, it must be remembered that mischief might be going on in the body of a vertebra and not be detectable by pressure or any other means. In support of his views, he briefly alluded to a case, in which a boy received a blow somewhere in the course of the vertebral column, and there was a transmission of the impression to the base of the brain, by which symptoms of disease of that part were developed.

Mr. ROBERTS said, that if the brain symptoms had not been present, he should have allied it to those cases of paralysis of the lower extremities resulting from paralysis of some internal organ. He had seen paralysis of the kind—temporary, however—the result of stricture, disease of the prostate, swelled testicle, or other affections producing retention of urine; the bladder

became over-distended, and consequently paralyzed; the morbid influence was communicated to the spinal cord, and partial paraplegia was the result. Might not the head, in these cases, sympathize with some renal affection?

Dr. G. O. REES had seen paralysis of the lower extremities, of a very short duration, however, from a paralyzed bladder. In his case the kidneys were healthy; their secretion normal. The suddenness of the attack was against the suspicion of there being disease of the body of a vertebra, as suggested by Mr. Bishop. There was nothing incompatible with the supposition that the main cause was in the brain; there was everything in the brain competent to the production of paraplegia.

Dr. ALISON agreed in the last-expressed opinion, and related the case of a woman who received a blow on the head from a stone, by which a portion of the skull was indented. The chief symptoms from the injury was partial loss of sensation and motion of the lower extremities.

Mr. ROBERTS related the case of a gentleman who had paraplegia for many years. There was no disease of the spine. He died of apoplexy. The spine was healthy, but an aneurism was found at the base of the brain.

Mr. STEDMAN had seen cases of loss of power in the lower extremities, the result of sleeping in a damp bed.

BRITISH AND AMERICAN MEDICAL JOURNALS.

EXTRA-UTERINE PREGNANCY, AND REMOVAL OF THE CHILD BY THE CÆSAREAN SECTION.

The following case is related in a late number of the *British American Journal*, by Dr. McCulloch:—

"A female of French extraction, who had already borne a living child, consulted the writer when she had been pregnant a second time during a period of fifteen months. During the first nine months of that period she frequently experienced severe pains in the right iliac region; but after the completion of the usual term of utero-gestation, the motion of the child was no longer felt, and she thought her sufferings, in consequence, became much less severe. About the same time the milk began to flow from her breasts, and a lochial discharge appeared, and continued several days. Notwithstanding this remarkable change, the abdomen did not decrease, and the fluctuation only of an immense quantity of fluid could be detected.

"She remained nearly in the same condition from May until the following November, when Dr. McCulloch endeavoured to alleviate her sufferings, and about thirty-six pints of liquid, of the colour and consistence of pale ink, were drawn off by tapping. The child could now be distinctly felt under the integuments, and the position of its body and limbs easily traced. She experienced no inconvenience or bad consequences from the operation. Diuretics, and occasionally a purgative, were for some time administered, and she afterwards remained free from any symptoms of dropsy. She continued to suffer daily from fever and debility until the month of June following, when putrid matter, mixed with quantities of hair from the child's head, began to ooze from her navel. The skin was inflamed a few inches round an opening that admitted the point of the finger, and nature was, in this way, evidently making an effort to expel the child, and save the life of the mother; but she had become so feeble and emaciated as scarcely to leave a chance of her surviving a few days. Under the circumstances, the Cæsaean operation was proposed as the only hope. Her alarm was increased by observing two worms escaping from the navel, and she, without hesitation, agreed to submit to whatever might afford a chance of recovery. An incision was made in the linea alba, extending five or six inches downwards from the navel, and in the third year of her pregnancy, a putrid child of the ordinary size at birth was removed. She did not lose an ounce of blood, and bore the operation with courage. No vestige of a placenta remained, and the child was found in a sac that had formed adhesions all round to the walls of the abdomen, and appeared to be the Fallopian tube enormously distended and thickened. It contained, besides the child, a quantity of very offensive matter. Nearly all the bones of the toes and fingers were found detached, and some of them adhering to the sides of the cavity were carefully removed; a small tent was placed at the bottom of the incision to favour the escape of matter, and its edges were kept in contact with adhesive plaster, supported with a bandage. She afterwards continued to improve daily, although the thermometer, at the time of the operation,

and for several days after, was upwards of 90° in the shade. Her progress from a state of extreme prostration to perfect health was so rapid, that she was able, without inconvenience, to be taken six miles to church a month after the operation.

"She has since enjoyed excellent health, and, without regret, remains childless."

The operation here described, it will be perceived, differed from the Cæsaean section, as commonly performed, when the pelvis is too narrow to admit of delivery through it, or in cases of ruptured uterus. In this instance, a distinct cyst enclosed the foetus, and separated it from the peritoneal cavity, which was not necessarily opened. In similar respects it differed also from the operation required for removing ovarian tumours. The success of this operation cannot be received as an argument in favour of the latter.

From the same source we take the following

"SINGULAR CASE OF CEREBRO-SPINAL IRRITATION IN A YOUNG LADY."

Its details deserve perusal. They are strikingly illustrative of the facility with which symptoms of hysterical or nervous disease are confounded with those of acute inflammation. They further show how the treatment consequent on such an erroneous diagnosis aggravates the symptoms of a disease which such treatment has no tendency to relieve. Painful examples of similar errors are daily presented to notice; they can only be avoided by a careful study of present and preceding symptoms, and by observation of the effects of remedies.

"The amaurotic eye, the face deathly pale," &c., should have told Dr. COVERNTON, the practitioner in this instance, that it was time to change his practice. The constant succession of nervous symptoms, and the change from one to the other, are also interesting features in the case. Dr. Covernton writes thus:—

"Miss H. T.—, aged seventeen, a tall and muscular young person, light hair and eyes, florid complexion, for two years previous to the present seizure had been subject to severe headache, frequently followed by syncope; in the beginning of June, 1841, she experienced so violent an attack of these symptoms, that her parents sent for me. On visiting her, I found her countenance flushed, eye heavy and languid, tongue but little coated, pulse about ninety, respiration and action of the heart normal, catamenia regular, no perceptible tenderness on pressure along the spine; bowels opened by medicine previously administered. The intense pain of head was then referred to the centre of the coronal suture. I abstracted blood to twelve ounces, and prescribed ten grains of colocynth pill, with three grains of the calomel at bed-time, and effervescent saline draughts every four hours. The next day there was but little alteration in her symptoms, and the medicines were ordered to be continued. On the evening of the third day, I was summoned in haste, and found her in a state of insensibility, countenance flushed, pupil dilated, pulse slow and oppressed. I again bled to eighteen ounces, ordered the hair to be cut, and applied evaporating lotions, counter-irritation with spirits of turpentine along the spine, blisters to calves of the legs, and placed two grains of submuriate on the tongue every four hours. Towards the middle of the night she made urgent attempts at vomiting, but immediately lapsed into insensibility. In the afternoon of the next day she recovered from this comatose state, but was perfectly blind, the brightest light having no action on the pupil. Together with this amaurotic condition, there was found to be a perfect loss of sensation of the left half of the body, and of power over the sphincter muscles. She appeared now to be in a state of great exhaustion, face deathly pale and voice feeble. The right arm and hand were affected with muscular twitchings and spasms, greatly aggravated by the least mental emotion. These symptoms were followed the next day by most violent convulsive fits, brought on by apparently the most trivial causes, such as the heavy tread of a person on the floor, shutting a door, or noise of vehicles passing on the road, the sudden bark of a dog, or the lowing of cattle. Her strength in these fits was extraordinary, five or six strong persons being sometimes hardly sufficient to keep her in the bed; she frequently exhibited a perfect state of emprosthotonos. In the intervals, the stomach was so irritable that everything was immediately rejected—very hot tea in small quantities being the only liquid retained; liquids given cold occasioned dis-

treassing cramps. These symptoms were succeeded in about three weeks by most violent and prolonged hiccough, brought on in the same manner as the convulsions, by the least noise or excitement of mind. For a period of six months she continued to be subject, daily, either to convulsion or hiccough, (according to the degree of irritation,) the only amelioration of her condition being a recovery of sight. The vomiting, pain of head, and loss of sensation, remained the same. Although, from the commencement of her illness, she has taken barely sufficient to sustain life, there is but little emaciation, bowels regular, and tongue clean. At Christmas, 1841, I first noticed a remarkable feature in the case. Immediately on raising the head from the pillow, she became perfectly insensible; if raised merely by the addition of a couple of pillows, the insensibility lasted for five or six minutes; but if bolstered up in a sitting posture, until she was again laid on the bed. Instantly on raising her, the action of the heart became scarcely perceptible, the countenance bloodless, the eyes partly open, having a fixed and glassy stare. When in this state, the attendants could dress an issue in the loins, or attend to her in other ways, without the slightest consciousness being perceptible, whereas, if attempted when in the supine position, it would almost directly occasion either a violent fit of hiccough or convulsion. In January, 1842, for the space of a fortnight, the vomiting was so constant and intractable, that she was principally supported by enemata of beef-tea and chicken-soup—all attempts at relieving it by counter-irritation over the stomach, along the course of the phrenic, exhibition of hydrocyanic acid, effluents, creasote, &c., proving futile.

"The above notes were made in August, 1842. From that period to June, 1845, her condition has been much the same. The sensation of the left half of the body has been principally restored by the use of strychnine, sprinkled on a blistered surface. Some time after the use of this, obstinate constipation and retention of urine, requiring the daily employment of the catheter, occurred. The insensibility on change of posture remains unchanged. At the commencement of her illness, before the irritability of the stomach was excessive, suspecting there might be visceral obstruction, I administered croton oil in combination with extract of colocynth, giving alternately with it neutral salts. The treatment afterwards consisted in long-continued counter-irritation by blisters, setons, &c., along the course of the spine, nape of neck, and temples. Hydrocyanic acid, in combination with hyoscyamus, for a long time afforded some relief to the pain and vomiting; afterwards, when it failed in arresting them, morphine sprinkled on a blistered surface was of temporary use. With the exception of one short interval during the whole period of this long illness, she has menstruated regularly; and to judge by her appearance in a recumbent posture, a stranger would imagine her to be in perfect health. Convulsion or protracted hiccough is now of rare occurrence, but still occasionally results from sudden noise or emotion of mind."

It is probable that iron might be advantageously administered in this case.

CHEMISTRY, PHARMACY, AND MATERIA MEDICA.

ON THE QUESTION WHETHER ALKALINE CARBONATES EXIST IN THE BLOOD. By BARON LIEBIG.

THE food of the carnivora contains only alkaline phosphates; that no alkaline carbonates, therefore, can be found in their blood, scarcely requires any special proof. But the case is altogether with respect to the graminivora, since their food contains a number of alkaline compounds with vegetable acids, which pass into their circulation, and are subsequently separated from the blood through the kidneys, and appear finally in their urine as alkaline carbonates. Now, if these alkaline carbonates exist as constituents of the blood of this class of animals, and if the elimination of carbon in the respiratory process is to be referred to their agency, it is obvious that we must be able to detect and to demonstrate their presence in the blood.

The following experiment was made to determine the question whether alkaline carbonates are present in the blood of graminivorous animals or not, and it must, I think, be deemed conclusive.

A mixture of between four and five pounds of the blood of an ox was boiled with twice its volume of water, and the coagulated mass formed subjected to powerful pressure. The fluid obtained was about the weight of the blood employed in

the process; it had a powerfully alkaline re-action. Now it is evident that this fluid must necessarily contain in solution any alkaline carbonates which existed in the blood.

On evaporation in a retort, (consequently not exposed to contact with the atmosphere,) until it occupied about forty cubic centimetres, it became a thick greenish-brown liquid, of the consistence of syrup, and had still a strong alkaline re-action. I took half this concentrated fluid, and placed it in a graduated tube in contact with carbonic acid gas, and allowed the mixture to stand for twenty-four hours, when I found the fluid had absorbed three times its own volume of the carbonic acid. Now it is evident, that if the capacity of this fluid for absorbing three times its own volume of carbonic acid gas depended on the presence of carbonate of soda, and, consequently, the formation of bi-carbonate by the addition of the acid, the other half of the liquid obtained from the blood must evolve carbonic acid gas when acted on by a stronger acid, to the extent of about two-thirds that of the gas absorbed by the first half.

But this liquid, when brought into contact with hydrochloric acid in a bell jar over mercury, mixed with the acid without evolving the slightest perceptible trace of carbonic acid.

This experiment confirms the conclusions of Enderlin's analysis of the ashes of the blood of the graminivora—namely, that this blood contains no perceptible amount of alkaline carbonates. A subsequent and more minute examination has shown that the alkaline re-action of the fluid, obtained from the blood in the manner described, is owing to the presence of phosphate of soda. The residue was examined for urea and for sugar, but we failed to detect the presence of either of those substances.

ON THE PREPARATION OF TINCTURES. By J. PERSONNE.

The Société de Pharmacie of Paris having instituted a prize for the best answer to the following questions:—

1st.—Whether the proportion of alcohol employed in the preparation of tinctures is sufficient to dissolve the active principles of the substances acted on? and if not, what is the proper proportion?

2nd.—What degree or degrees of strength should the alcohol used in making tinctures possess?

It was awarded to a memoir by M. Personne.

This paper gives in detail 300 experiments, (we may observe, *en passant*, that the author is very little of a chemist,) from which he deduces the following conclusions:—

1st.—The different degrees of strength of alcohol prescribed by the French codex (0.848, 0.865, 0.923,) are not always the most favourable for dissolving the greatest amount of the principles contained in the substances employed in the preparation of tinctures.

2nd.—These degrees can scarcely be admitted in a general way; except for certain tinctures, experiments only can show which is suited for each.

3rd.—Four parts of alcohol to one of substance, as prescribed by the codex, is scarcely sufficient, in any case, to extract all the soluble parts of substances.

4th.—Five parts of alcohol are generally required, and even this is not always enough.

5th.—It is sufficient that the vehicle should thoroughly moisten the substance acted on.

6th.—The most suitable degrees of strength in the alcohol are 0.865, 0.923, and 0.942.

"When the proportion of alcohol employed in making tinctures," says M. Personne, "is greater than is necessary to exhaust the substances acted on, a less amount of extract is obtained on evaporating the spirit, than when only just sufficient is used, so that a double loss is incurred by not adapting accurately the amount of spirit in tinctures."

The following table gives M. Personne's experience relative to the strength and quantity of alcohol required in various cases:

One part substance and five parts alcohol, of 0.865 specific gravity, for the tinctures of yellow bark, jalap, cinnamon, pyrethrum, castor, and myrrh.

One part substance and five parts alcohol, of 0.923 specific gravity, for the tinctures of rhubarb, grey bark, ipecacuanha, nux vomica, gentian, yellow bark, digitalis, senna, squills, black hellebore, contrajerva, bistort, and ginger.

One part of substance and five parts of alcohol, of 0.942 specific gravity, for the tincture of valerian, white hellebore, colchicum, (corns,) aconite, hemlock, belladonna, hyoscyamus, and stramonium.

The best method of preparing these tinctures is by cold maceration. The strength of them is, that twenty minims equal about five grains of the substance.

THE LANCET.

LONDON: SATURDAY, JANUARY 31, 1846.

THE conduct of the LAWLESS COMMITTEE has produced its natural result,—the disgust of the Minister who had undertaken, in the House of Commons, the management of the cause of MEDICAL REFORM. All the Medical Bills are now relinquished by Sir JAMES GRAHAM. The good portions and the bad have shared the same fate. The following letter has been addressed by the Minister to the President of the Association:—

“Whitehall, Jan. 16th, 1846.

“SIR,—I am directed by Sir JAMES GRAHAM to acknowledge the receipt of the letter, dated the 8th inst., which was addressed to him by certain gentlemen appointed on behalf of the National Association of General Practitioners and the Society of Apothecaries; and I have to acquaint you, for their information, that Sir JAMES GRAHAM does not at present contemplate the introduction of a Bill for Medical Reform, such as he laid upon the table of the House of Commons before the close of the last session.

“It appears to Sir JAMES GRAHAM inexpedient that a measure of such importance should be again introduced, unless with a reasonable probability of its giving satisfaction to the profession generally. The communications which he has received on the subject during the recess, do not justify him in entertaining any such expectation.

“I have the honour to be, Sir, yours, &c. &c.,

“H. MANNERS SUTTON.

“To R. R. Pennington, Esq.”

Few can regret the abandonment of the last Medical Bill; but it would be a circumstance deeply to be deplored if the executive government should cease to feel an interest in the medical question. There is at this moment no necessity for taking a detailed review of the proceedings of the Committee of the National Association, because it is acknowledged that those proceedings have not produced stronger feelings of indignation and disgust in the mind of the Minister than amongst the profession generally. Although the Medical Bills have disappeared, THE CAUSE still exists. The principle of REPRESENTATION in medical affairs is as sound and as bright as ever, and the demand for its application to medical government is so thoroughly just and wise that it *must* ultimately prevail.

The refusal of Sir JAMES GRAHAM to hold any further communication with the LAWLESS COMMITTEE,—as a body pretending to represent the feelings and interests of the medical profession in this country,—is an important event. Freed from the snares and trammels which the conspirators had cunningly fabricated and set for him, the Minister must now feel himself to be at perfect liberty to exercise his own independent judgment on the important subject of medical legislation. Judging from the past, it is possible that the LAWLESS COMMITTEE,—that Committee, now justly spurned by the Minister whom they had deceived, and the profession whom they had betrayed,—may resort to a variety of arts and devices to enable them to maintain a position in which they could inflict additional insult and injury on their medical brethren. Something of the kind has, indeed, already been set in motion in the City of London. At least, we infer as much, from the character of the annexed advertisement, which appeared in the daily journals of Tuesday last:—

“SIR JAMES GRAHAM'S MEDICAL BILL.—Association of General Practitioners of the City of London.—At a SPECIAL MEETING of the Committee of the above

Association, held on the 23rd of January, 1846, the following resolution was unanimously adopted:—

“The Committee of the Association of General Practitioners of the city of London having learned the determination of Sir James Graham not to re-introduce at present the subject of medical affairs in Parliament, desire to express their satisfaction at the abandonment of the Medical Bill of the 28th of July last, and to record their unabated confidence in the Committee of the National Association; they are sensible of the great exertions made by that body, and of the good they have effected, and beg to express their hope that the Committee will continue their efforts until they obtain for the general practitioners their chartered incorporation under the title of Practitioners in Medicine, Surgery, and Midwifery, or until their rights and privileges, conceded to be their due alike by the public and the profession, are secured to them in such a way as shall after mature deliberation seem most expedient.”

“JOHN ROBERTS, Chairman.”

The following note seems to furnish a pretty accurate explanation of this proceeding:—

“To the Editor of THE LANCET.

“SIR,—You must have seen an advertisement in the *Times*, of a meeting stated to have been held in the City, on the subject of Sir JAMES GRAHAM'S Medical Bill. The surgeons of the City of London are acquainted with no such meeting. It was not advertised to be held; they did not attend it; to this hour they do not know *where* any such meeting was held, nor *when* it was held. The advertisement, you will perceive, does not state *who* were present, nor *how many* were there. Is not this scandalous? Let us hope that you will expose this hole-and-corner attempt to deceive the profession, and bolster up a committee that has sacrificed us all, and expended nearly two thousand pounds of our hard-earned money. I do not know if it be true, but it is reported that three or four apothecaries belonging to the Worshipful Society,—one, if not two, of them being on the Court of Examiners,—did, in conjunction with Mr. ROBERTS, in private, prepare this advertisement, and publish it, and that they gave *their* meeting the title under which it is advertised. You may infer the high medical qualifications of the persons present at the meeting, from those of their chairman. JOHN ROBERTS is not a graduate of medicine, nor a member of any College of Surgeons, nor a licentiate of any Apothecaries' Hall. If an individual thus destitute of university and collegiate testimonials was worthy of being placed at the head of the persons present, what must have been the tail of such a body? I trouble you with this note, because I feel that such contemptible manoeuvres ought not to remain unexposed, and should not be allowed to interrupt the progress of the cause of the respectable medical practitioners of this country; and I would fain hope that the provincial Surgeons will not be induced to believe that the qualified practitioners of the City of London sanction such attempts to cover the retreat of a worthless Committee.

“I have the honour to be, Sir, your obedient servant,

“OBSERVER.

“New Broad-street, City, Jan. 28th.”

It is unnecessary to add a word to the remarks of our correspondent regarding this advertisement, or the meeting which is noticed in it. As the first effort of the kind, however, it ought to attract attention, because it is not improbable that the *members* of the Committee will, in their respective localities, endeavour to prevail on little insignificant knots of their friends to assemble, and pass, in their favour, resolutions of “unabated confidence.” But it really is to be hoped that very few of the profession will exhibit so much of absurdity and folly as such proceedings would make manifest. “Unabated confidence” in the members of a body who declared (the moment they believed that they were elected *permanently*) that *laws were unnecessary for their government*,—a body which has conducted the whole of its proceedings *in secret*,—although the fact is universally known that the Committee was organized for the purpose of procuring a *representative*, and therefore a *responsible*, system of government in medical affairs!

But it is useless to pursue this subject further at present. On another occasion we may draw out a Bill of Indictment against the lawless clique. The question is not, now, what will be done by a Committee which is everywhere regarded with distrust, and treated with contempt; but, what step will the members of the Association take, and what will be done by the profession, generally, to obtain a triumphant termination for their past labours?

In placing such interrogatories before the medical community, THE LANCET has no novelties to offer in reply to them. This journal has nothing to retract, no expressions to modify, no suggestions to recal or alter. At the outset of the struggle, earnestly did we recommend that a body, chosen by the profession, should assemble in the metropolis,—a body faithfully representing the opinions, feelings, and interests of their professional brethren,—and come to some agreement on all the leading principles and details of a medical Bill to be offered to the Government for its acceptance. Had that recommendation been adopted, and carried into effect, when it was given, twelve months since, who can doubt that at this moment an Act of Parliament would be before us for regulating and controlling the medical government of this country, on a just and liberal system of representation? Instead, however, of acting upon that advice, ungenerous insinuations were directed against our motives by the now detected, exposed, and spurned conspirators, and their unreflecting adherents. At that time, as now, the ministers of the Crown, in their private conversations with the profession, inquired, "What law do you want? Can you agree amongst yourselves? Do the Colleges agree amongst themselves? Can the profession agree to the principles and details of a Bill, apart from the Colleges? If you cannot decide for yourselves, how is it possible that the executive government can effect a satisfactory adjustment of so complicated a question?"

At the conclusion of the last session of Parliament, Mr. WAKLEY gave notice that he would, early in the present session, "move for leave to bring in a Bill to amend and consolidate the laws for regulating the profession of physic and surgery, and the practice of pharmacy, in Great Britain and Ireland, with a view to obtain,

I.

"The registration of 'every person who, at the time of the passing of the Act, shall be legally practising, or entitled to practise, as a physician, a surgeon, or an apothecary, in some part of her Majesty's dominions.'

II.

"An equality of rights and privileges for registered medical practitioners throughout the kingdom.

III.

"Representative systems of government in the Colleges of Physicians and Surgeons.

IV.

"The election, by those Colleges, of a National Medical Council, having for its President a Principal Secretary of State.

V.

"The introduction of comprehensive systems of education in the Schools of Medicine and Pharmacy.

VI.

"The appointment of Courts of Examiners by the Colleges of Physicians and Surgeons of England, Ireland, and Scotland.

VII.

"The admission of the Examiners into the hospitals and

other public institutions, for the purpose of enabling them to test the knowledge of the candidates, for diplomas in medicine and surgery, at the bedsides of the sick.

VIII.

"The repeal of those sections of the Charter that was granted to the College of Surgeons of England in 1843, which displaced the members of that College from the professional rank they had previously enjoyed.

IX.

"The right of every registered practitioner in medicine and surgery to recover reasonable charges for medical and surgical advice and attendance, without other licence than the registry.

X.

"The examination and registration of chemists and druggists, in England and Scotland, by the Royal Pharmaceutical Society of Great Britain; and, in Ireland, by the Society of Apothecaries of Dublin.

XI.

"The more effectual protection of the public against the dangerous proceedings of unqualified medical practitioners and unlicensed chemists and druggists, by making the offences of such persons questions for the summary jurisdiction of magistrates.

XII.

"The prohibition of the sale, by retail, of certain poisons, except by licensed chemists and druggists.

XIII.

"The separation of the practice of physic and surgery from the sale of drugs and medicines."

He naturally feels that unless such a measure were to receive the previous sanction of a body representing the profession, or a considerable portion of the profession, it would be discussed in Parliament under a very great, probably a fatal, disadvantage. By inviting the attention of the profession to the draught of such a Bill before it is presented to either House of Parliament, he feels that he is only paying due respect to the feelings and judgment of his professional brethren, and that he is taking a step which ought to protect him from a charge of rashness or inconsiderate presumption. The offer is thus made to the profession to consider the provisions of a Bill to be introduced into Parliament for the better government of the medical institutions and the medical profession of this country, faithfully and truly, on the principle of representation. The profession have, therefore, the most ample opportunity of embodying their views in a measure which is to be submitted to the consideration of the House of Commons; and should they, fortunately, effect amongst themselves a satisfactory adjustment of the many conflicting difficulties which beset and cloud the subject, the framer of the Bill would be delighted by their placing it in the hands of Sir JAMES GRAHAM as a measure which they had decided after mature deliberation and discussion, was entitled to his support.

The strength and power of the government are necessary in such a case, in order to deal satisfactorily with the old corporations; but that strength and that power are not likely to be exercised unless the profession take a proper attitude and position in the conduct and management of their own affairs.

Or the many examples in which the medical profession has been treated with mean injustice by the state, one of the most flagrant is that presented in the history of vaccination, from its discovery to the present time. We need not here recount the noble and unrestricted manner in which that great boon was given to the world by its illustrious author.

JENNER's mind was not of that class which could dream of turning a blessing, capable of universal application, to his own personal advantage. Some years from the date of its promulgation, after it had received the sanction of the wise and good, and when its benefits were diffusing themselves at home, and rapidly spreading in foreign countries, a Parliamentary Committee met to consider the claims of JENNER, already hailed as a public benefactor, to national gratitude, when the sum of 20,000*l.* was proposed to be presented to him for his inestimable discovery. But in the House of Commons, objections were raised to this amount, and it was ultimately pared down to 10,000*l.* Formerly, a donation of 5000*l.* had been voted to Mrs. STEEVENS, for revealing the secret of preparing a quack nostrum, said at the time to cure the stone, and composed of soap, lime, pepper, and other materials; and of course found, after all, to be quite inert. Vaccination, let it be told, was at that time estimated at just twice the value of an old woman's lithontriptic! Subsequently, indeed, this sum, mean in itself, and still more mean from the manner of its bestowal, was increased by a further vote of 20,000*l.* The amount may seem large, but it must be remembered that the discoverer of vaccination had spent the best years of his life in bringing it to maturity, and that many physicians have realized five times the sum by successful practice alone. JENNER was, further, placed at the head of the National Vaccine Establishment, but these, we believe, were all the honours and rewards of a public kind which he received at the hands of his country. At his death, he was simply EDWARD JENNER, M.D., owning an imperishable fame, as RUDOLPHI wrote, "*dear to the human race*," but bearing no greater title among his countrymen than the doctorate obtained, years before, from his profession. Pilgrimages have been made to the village of Berkeley by distinguished foreigners; abroad, annual festivals commemorate the first experiment for delivering mankind from one of its greatest scourges; but although more than a quarter of a century has elapsed since his death, Westminster-Abbey and St. Paul's may be searched in vain for any monument to his memory.

Let us examine the value of the discovery of JENNER, for the purpose of comparison with other achievements thought worthy of great rewards. Under his hand, it may be said, that a rural tradition, the property of swains and milkmaids, in which other and even great minds had seen no meaning, became transformed into a scientific induction, the fruits of which were destined to deliver millions annually from a fatal disease, in all the coming ages of time. In London, before the introduction of vaccination, one-fourteenth of all who were born died from small-pox. This was the average of a calculation made by Dr. JURIN, and which reached over the bills of mortality for forty-two years. The present population of London is computed at two millions, so that if JENNER had not lived, upwards of one hundred and forty thousand of the present generation in the English capital must have died from small-pox! Extend the calculation to the whole of the United Kingdom, with its population of 28,000,000, and this disease, now so comparatively powerless, would destroy in thirty years 2,000,000 of the inhabitants, a number equal to the whole population of Holland.

The man who wins great battles, at whatever cost of human life, or who, with the point of his sword, traces a new line on

the surface of the globe,—giving to England another province, and another horde of barbarous subjects,—may hope to be raised to the highest honours, to get amply pensioned, and to transmit wealth and title to his descendants; but the nobler man, who, by the more immortal victories of peace, creates or saves in one generation a new population within the bosom of the Island herself, meets no such honourable reward. WELLINGTON numbers his palaces; the descendants of MARLBOROUGH still sit in the halls given to their great ancestor; but some of the near relatives of JENNER, although highly respectable, have already sunk to comparative poverty.

Thus much for the reward of JENNER; and now for a few words on the treatment of his discovery itself. In foreign states, the practice of vaccination was soon placed under government control. With us, on the contrary, it was left to make its own way almost entirely under private management. For upwards of forty years the poor were left to their own caprice, or the humanity of the medical profession, and the propagation of small-pox by inoculation was permitted, and extensively practised, by ignorant or prejudiced persons. This country has been the last to avail itself of vaccination to the fullest extent. By the late Act for the Extension of Vaccination, inoculation is made a punishable offence, and regulations are adopted for the proper performance of vaccination among all classes. The execution of this law has unfortunately devolved upon the New Poor-law Commissioners, and their proceedings are an insult to the whole medical profession. Recently they have sanctioned the sum of eighteen pence as the amount to be paid for the vaccination of each person, and in their correspondence with the medical men in the Brentford Union, they have the intolerable assurance to call this "a fair rate of remuneration"! For this insignificant pay, the public vaccinator is bound to attend to all who may apply to him, whether paupers or not. He has, in each case, to prepare the vaccine lymph, to perform the operation, to examine the child at least once afterwards. Not unfrequently the first attempt is unsuccessful, and he has to introduce the lymph afresh. He has to keep a minute record of his proceedings, with respect to cow-pox and small-pox, in two separate books, and present them, once a quarter, to the Poor-law authorities. He has, besides, to give to each patient a certificate of vaccination, and it is thought necessary by the Commissioners, "that the several vaccinators be instructed to visit the homes of the poorer classes, when they have reason to believe that there are any children unvaccinated, and to urge upon the parents of such children the expediency of the operation "being performed forthwith." For all this he gets the paltry sum of one-and-sixpence on each successful case! The unsuccessful cases,—as, for instance, where it is uncertain whether vaccination has been previously performed, which cases are more troublesome than others—are not paid for at all. Such is the monstrous way in which the profession that produced JENNER is treated by the Poor-law Commissioners. What would lawyers say if their public services were paid for after the same manner? Is parish-law remunerated in the same fashion? Every thoughtful and honourable man, in or out of the profession, must feel shame that such things as these can be told in the present day. The whole matter ought to be taken out of the hands of the Poor-law Commissioners. They have so sunk it in meanness, that the

labours of the last five years of public vaccination have produced no public good,—have not, so far as we are aware, advanced medical science one single step, although they must, if properly directed, have infallibly proved of great value.

This Commission is an incubus on the medical body. It aids in keeping the profession in a state analogous to what may be called the poor-parson stage of the church. We feel pity for the humble curate of fifty years since; and, fifty years hence, the same pity will be felt for the medical assistant, the parish surgeon, the poor doctor of the present day, compelled, as they are, to perform suit and service for such paltry remunerations.

HOSPITAL REPORTS.

UNIVERSITY COLLEGE HOSPITAL.

ON PERICARDITIS.—By JOHN TAYLOR, M.D., Professor of Clinical Medicine in University College, and Physician to University College Hospital, London.

CASE 22.—A stout man, of rheumatic diathesis, was seized with pain in the cardiac region, and great irregularity of pulse. Heart's impulse increased. A double morbid sound. Subsequently epileptiform convulsions. Headach and disturbance of intellect. Death after fourteen weeks.—Post-mortem examination: Turgescence of bloodvessels of membranes and substance of brain. Bloody serum in the pericardium. Substance of heart very soft. Mitral and aortic valves indurated. Sero-sanguineous engorgement of the lungs.—Remarks. Diagnosis. Cause of undulatory movement in cardiac region. Complications. Carditis? Cause of the convulsions, and of the great irregularity of the heart's action. Causes of the cardiac inflammation. Treatment. Persistence of the pericarditis and of the friction sound long after pytalism was produced.

HENRY W—, aged thirty, admitted June 11th, 1835; a coal-wagoner, stout and strong; had an attack of acute rheumatism nine years ago, which confined him to bed for six months, and a second attack six years ago, which confined him for three or four months; has since had good health; has now been ill three weeks, complaining of cough, dyspnoea, a sense of tightness and pain in the chest, and palpitation of the heart. On admission, he had an occasional cough; slight expectoration, sometimes streaked with blood; pain at the lower part of the chest, increased by every inspiration; pain in the region of the heart, increased by pressure over the intercostal spaces, and especially by pressure upwards under the left false ribs.

Physical signs.—Sonorous rhonchus under both clavicles, and sibilant rhonchus over the rest of the chest; respiratory murmur sometimes inaudible over some parts, but it is restored by coughing; sound on percussion healthy; heart's action very irregular; impulse much greater than natural; a bellows murmur is heard with the systole over the left ventricle; pulse about 70, very irregular, and counted with difficulty; tongue furred and dry in the centre, but the margins moist; a nauseous taste in the mouth; appetite bad; stomach rejects all food; urine high-coloured and scanty. Ordered venesection to sixteen ounces, and ten grains of blue pill three times a day; low diet.

June 12th.—The blood drawn is firmly contracted, but not cupped, a few buffy spots on its surface; the pain in the cardiac region was relieved by the venesection, but returned more violently this morning, especially towards the epigastrium; pulse 70 to 80, and very irregular; skin moist; coughs rather more, and after a severe fit of coughing he vomits; has constant nausea, great thirst, and a disagreeable taste in the mouth. Has had house-physic and castor-oil, and the bowels have been freely moved. To be cupped over the heart to twelve ounces.

13th.—Pain much relieved, but he still feels it, and also palpitations after coughing; tongue white and dry; bowels freely opened.

15th.—I noted the following symptoms:—Cough not very troublesome; expectoration trifling; sonorous and sibilant rhonchi over all the anterior and posterior surfaces of the chest; pressure under the left hypochondrium gives pain, but pressure over the heart does not; no pain shooting to the left scapula, shoulder, or arm; the apex of the heart is felt

and seen to elevate the walls of the chest, producing an undulatory motion an inch and a half below, and one inch external to, the left nipple; the action of the heart is very rapid and irregular, four or five strokes are made in quick succession, and are immediately followed by one or two intermissions; the pulse somewhat, but not much, increased; on percussion, the sound elicited is not dull over too great an extent; over the apex is a morbid sound, in character intermediate between a bellows murmur and a friction sound; it accompanies the systole, and the healthy first sound is lost in it; over the greater part of the left ventricle there is a double morbid sound, rough, similar to the last, but less intense; at the base, the healthy second sound is heard as well as the morbid one; pulse at the wrist cannot be counted; there are three or four undulations, and only every now and then a distinct beat; urine high-coloured, and deposits a copious laceritious sediment.

16th.—Gums very tender. To take the blue pill once a day only: a pint of milk.

18th.—Cough very trifling; no expectoration; pain quite gone; still tenderness under left hypochondrium; pulse feeble and equally irregular.

20th.—Passed a bad night; slept only about ten minutes; cough troublesome; sibilant rhonchus continues; the morbid sounds are still heard over the heart, and the action is very irregular.

23rd.—Pulse between 120 and 130, and very irregular. To take a quarter of a grain of muriate of morphia every night, and a draught three times a day composed of tincture of digitalis and tincture of squills, of each ten minims, spirit of nitric ether a drachm, iodide of potassium two grains, acetate of potash half a drachm, and camphor mixture an ounce and a half.

25th.—Sweats profusely, and has done so for two or three days and feels relieved by it; cough better; heart's sounds the same; urine increased.

29th.—Heart's action still very irregular, but less so than it was; morbid sounds very distinct.

July 9th.—The morbid sounds are still audible, and the tenderness under the left hypochondrium remains; pulse very irregular in force and frequency; appetite good; has had a meat diet during the last week.

18th.—The tenderness continues under the left hypochondrium.

23rd.—Discharged; relieved of the bronchitis, but not of the heart symptoms.

August 28th.—Re-admitted. Since his discharge has been in the surgeon's ward for fistula in ano, and was operated on last week. Yesterday morning, about eleven o'clock, he suddenly became insensible; was violently convulsed; foamed at the mouth; the eyes were prominent and turgid; the urine was voided involuntarily; and the heart beat with great rapidity and violence. The convulsions lasted only about three minutes, but the insensibility continued nearly all the day. At present the head is hot and painful. The patient's mind seems confused, and he does not answer questions readily; respirations short and quick; cough frequent; sibilant and sonorous rhonchi over the whole of both lungs; great pain on pressure under the left false ribs; the action of the heart is very violent and irregular; the sounds are marked by the rhonchi in the lungs; pulse 120, irregular in force and frequency; skin hot; tongue white; bowels open. Venesection to twelve ounces.

29th.—Severe pain in the head; mind confused. Repeat the venesection, and to take five grains of calomel every three hours. A blister to the sternum, and another to the nape of the neck.

30th.—Blood buffed and cupped; the head was relieved, but only for a time, by the venesection. This morning strabismus and convulsions supervened, and constant muttering delirium, and the patient died at nine p.m.

Inspection of the body thirty hours after death.—Head: Scalp very much congested; membranes of the brain exceedingly vascular; but no trace of lymph on them; brain exceedingly soft, and the medullary portion had a greyish aspect, owing to the great number of small vessels in it; an earthy concretion the size of a horse-bean was found in each plexus choroides.—Chest: The pericardium contained a quantity of bloody serum; the heart was dilated, and so soft that its structure could easily be broken down; the lining membrane was softer and much darker in colour than natural; the mitral and aortic valves were indurated and felt leathery; tricuspid valve healthy.—Lungs very soft, and enormously gorged with bloody serum; the pleura separated with unusual readiness from the surface of the lung.—Abdomen: Liver of natural size, very soft, and

the torn surface exhibited a granular aspect; mucous membrane of the stomach healthy. *Intestines*, not examined. *Kidneys* very soft, and the vascular part darker than natural. *Spleen*: very soft, reduced to a dark-coloured pulp.

SUMMARY OF THE CASE, WITH REMARKS.

Symptoms and diagnosis.—The history of this case and the post-mortem appearances are very imperfectly detailed, yet they leave little room for doubt that there existed acute pericarditis.

The affection was an acute one, and apparently inflammatory. There was pain in the region of the heart, increased by pressure over the intercostal spaces, but more especially by pressure directed upwards under the left false ribs. The function of the heart was greatly disturbed. The ventricular contractions were morbidly strong, excessively irregular, and frequently intermitted. The pulse, at first only 70, afterwards rose to 120 or 130, and could scarcely be counted, on account of its indistinctness and irregularity.

There was a morbid sound from the first in the region of the heart. The description of this on June 15th, compared with that on admission, is probably applicable only to a friction sound. There may have been a bellows murmur in addition, but of this there is no proof. The mere quality of the sound was not distinctive. At first it was systolic only, but afterwards accompanied both the heart's movements. At this time there was no evidence of any serous effusion into the pericardium, and there could not have been much. Hence the strong impulse, the general diffusion of the friction sound, and the presence of the healthy second sound at the base of the heart. If this view be correct, the undulatory movement described on the 15th deserves to be noticed. It could not have been due to adhesions of the pericardium, nor probably, as we have seen, to much, if to any, serous effusion. The only cause remaining is enlargement of the heart, and this agrees with the position of the movement so low down, and so far to the left side. When the heart was last examined just before the patient's death, no sounds, either healthy or morbid, were heard, and this quite accords with the absence of lymph and the presence of serum observed in the pericardium when the body was examined.

The vomiting, which was urgent at first, and frequent afterwards, was probably connected with the inflammation in the pericardium. The stomach was found to be healthy.

Complications.—1. There was some old disease of the heart. The valves of the left side are described as being leathery. There was perhaps some previously existing hypertrophy, and both might be the sequelæ of acute rheumatism, from which the patient had suffered severely. 2. Was there inflammation of the substance of the heart? The description of the anatomical appearances does not enable us to answer this question. The heart was unusually soft and dilated, and these might be effects of carditis. The excessively dispirited action of the organ might also thus receive an explanation; but the softness might be due to incipient putrefaction, and we are not informed whether this was present or not. The body was examined thirty hours after death, at the end of August, and the ready separation of the pleura from the lung is sufficient to lead to a suspicion of commencing decomposition. 3. Were the convulsions and other nervous symptoms due to inflammation of the brain and its membranes, or were they sympathetic phenomena connected with the disease in the pericardium? Many would probably at once refer these symptoms to inflammation within the head, yet the evidence in favour of this view seems to me not unequivocal. The symptoms were such as inflammation often produces, but it is equally certain that they may all arise without any structural alteration in the brain; and the post-mortem appearances are not satisfactorily detailed, and leave us quite at liberty to suppose that there might be no more than the mechanical congestion likely to result from the dyspnoea which the convulsions and chest disease produced. The impression at the time was, that there was inflammation of the brain and its membranes, but I cannot now feel much confidence in this impression not otherwise corroborated.

If these epileptiform convulsions were sympathetic, they appear to point to an unusual susceptibility in the nervous system—and the excessively disturbed action of the heart itself; if not due to carditis, was probably another effect of the irritation reflected from the nervous centres.

Causes.—The causes of the cardiac inflammation cannot be stated with certainty. There is no evidence of any renal disease which is the chief cause of non-rheumatic pericarditis. There was no inflammation of the pleura, or lungs, or diaphragm,

which could, by its extension, have implicated the heart. The cause was, therefore, either rheumatism, or it is unknown. In favour of the possibility of the pericarditis being rheumatic, several circumstances may be noticed. 1. The patient had had two severe attacks of acute rheumatism at a former period, and was therefore predisposed to the disease. 2. His occupation (a coal wagner) would expose him to cold and wet. His habits are not mentioned, but a large proportion of such persons are intemperate. 3. The co-existence of very decided bronchitis renders it probable that the patient had been exposed to cold. 4. The profuse sweats mentioned on the 25th June as having been present during several days. 5. We have seen, in the last three or four published cases, how very trifling the affection of the joints may be in rheumatic pericarditis. The very imperfect account of the present case affords no guarantee that a similarly slight articular affection may not have been present, and escaped observation. 6. It is very possible, and even probable, from the cases already referred to, that pericarditis and that state of the system which is peculiar to acute rheumatism, may be present together without any articular affection whatever. In other words, that the rheumatic diathesis, according to the opinion expressed by Dr. Todd,* may be a cause of disease of the heart.

Treatment.—When first admitted, the patient was bled to a pint, and afterwards cupped to twelve ounces. The only obvious effect of the loss of blood was relief of the pain. Mercury was freely given, and the gums became affected on the sixth day. It deserves to be remarked that the friction sound continued, notwithstanding the ptyalism, for at least several weeks, and that there is no evidence whatever that the course of the disease was in this case at all modified by the mercury. Comparing the symptoms present when the patient was discharged (viz., the great irregularity of pulse, the morbid sound, and the tenderness under the left hypochondrium) with the appearances found after death, there can be little doubt that the disease had never been cured, but had passed from the acute to the chronic form, which was ultimately fatal. The total duration of the cardiac inflammation, on this supposition, would be about fourteen weeks.

ON A NEW BLACK DRAUGHT.

To the Editor of THE LANCET.

SIR,—In the LANCET for January 10th, 1846, you have done me the honour, and the profession a service, to record a paper of mine on the composition of a New Black Draught, and in addition, you have deemed it needful to append, in the form of a note, an editorial remark, relative to the view professional men will take of that communication. Unable clearly to comprehend the exact intelligence of your observation, I claim a small space once more in your columns to explain to your readers the motives which induced my first contribution. So far, however, as I am capable of appreciating your note, it is certainly jocose enough, but if in earnest, your interpretation of the word "quackery" differs essentially from the common acceptance conveyed by that term, and materially from the definition given by the best English authorities. Dr. Johnson defines the word "quack" "a tricking practitioner in physic," and "quackery" "mean or bad acts in physic." What was there "mean" or "bad" in my communication, Mr. Editor? The liquor sennæ was put forth as capable of effecting a certain given object, a specific effect, not many and contrary objects and effects.

I assure you, Sir, there is not, and never has been, the slightest particle of a quackish spirit in my composition, ergo, no quackery in my acts; and if Dr. Johnson's definition of those terms be correct, I beg to submit, your remark does not apply. If, by any stretch of the imagination, I could have thought that by my contribution I was exposing myself to such unworthy imputations—if I could have believed that any professional gentleman would regard my information as a direct colouring to quackery—if I had thought that there existed the slightest pretext on which to ground such a charge, I would cheerfully have abandoned my intention of communicating that which in my innocence I deemed a good, and left the profession to discover, as best it might, the most elegant form in which to administer a pleasant and effective aperient. I certainly did not dream that the mode of preparation would be required of me, as I never required it of Mr. Colchester—much less did I think that my desire to place in the hands of the profession that which had never been ob-

* Practical Remarks on Gout, Rheumatic Fever, &c. London, 1843. P. 111.

tained before, my intentions should be placed in such a light. I was satisfied with the possession of a fact, which, the moment I had maturely realized, I published.

If I, as a general practitioner, had manufactured the article alluded to, and then puffed it forth to the world with a novel name, and a flaming and exaggerated account of its properties—capable of producing every opposite effect—sold and dispensed only by me or my agents—the secrecy of manufacture known only and kept to myself,—then, and in such case, I think your stricture would have been merited; but when my attention was first directed to the liquor sennæ comp. by Mr. Colchester, I had no other object than to obtain a knowledge of its effects as an agent in fulfilling the indications he proposed; and upon the acquirement of such information, sufficiently proved, without hesitation I put you into possession of the simple fact, that through you such fact should be communicated to the profession generally.

Some years ago you did me the honour to publish in *THE LANCET* a paper, by me, on the effects of the ethereal tincture of lobelia inflata. I there stated that I obtained the preparation I employed from Apothecaries Hall; you did not then require the formula of the tincture, of which I was, and still am ignorant; but the absence of this knowledge, either to me, to you, or others, has never lessened the efficacy of the lobelia; nor will the publication of the exact form employed in the manufacture of the liquor sennæ comp. deteriorate, in the minutest degree, from the high and deserved praise which Mr. Colchester has won for himself, in having produced that which no other pharmaceutical chemist ever yet produced anterior to him; nor will it add one additional virtue to his preparation, though it would, I have little doubt, considerably diminish the favour which liquor sennæ comp. would gain among medical men.

You, Mr. Editor, are generous enough to allow me to differ without suspecting unworthy intentions; you are not illiberal enough to quarrel with me because I express an opinion strongly and emphatically adverse to your own; and therefore permit me to remark, that I am fully satisfied that the profession at large cannot, and will not, regard my paper as one savouring of "quackery;" and you, I imagine, upon reconsideration, will do me the justice to cancel your observation, and acknowledge it was too hastily penned.

I have not been a reader of your excellent journal, now a period of fifteen years, without observing, that upon all occasions you have ever expressed yourself as most jealous of the honour of the profession; and the slightest deviation from that high dignity which should ever be preserved by professional men, has met, on every occurrence, with the severest censure and condemnation from you. That which you claim for the profession and its privileges, I claim an equivalent for the pharmaceutical chemists and their privileges. Let me solicit an equal care and protection for him, who, if he be an honourable man, has a most legitimate right to credit and emolument, accruing from a discovery, which, after much time, expense, and trouble, and labour, art, and knowledge, he has perfected, and that, too, for the good of humanity.

Thinking and feeling as I do, and anxious as I am that every man should wear the wreath his own skill and handiwork has wove, I cannot require the information you seek of Mr. Colchester; nevertheless, I have placed the number of your journal in his hands, and must leave him to act as may appear best.—I am, Sir, yours respectfully,

Curtain-road, Shoreditch, Jan. 1st, 1846.

ALFRED BOWER.

ON A NEW BLACK DRAUGHT.

To the Editor of *THE LANCET*.

SIR,—I beg to observe, in answer to your note at the conclusion of Mr. Bower's letter, in *THE LANCET* of the 10th January, respecting my compound senna liquor, that the only active medicinal agent in its composition is senna in a concentrated form, deprived of its mucilage and other impurities, combined with a very pure extract of liquorice root, and a little sassafras, with a small proportion of spirit. I consider this explanation of the preparation sufficiently satisfactory for the medical profession to make use of it with perfect confidence.

Considering the time, trouble, and expense bestowed by me upon the compound senna liquor, in order to bring it to its present state of purity, uniformity, and elegance, I feel it no injustice to the profession to withhold entering further into the minutiae of its manipulation, upon which its uniformity of action and pleasantness of taste so much depend; and, indeed, were I to make public every particular with regard to its preparation, I feel certain that the members of the profession

would not thereby be benefited, being themselves unable, for want of time or the necessary apparatus, to make the article; they might be induced to purchase the compound senna liquor of other makers, some of whom, as the preparation is troublesome, complicated, and tedious, would probably do with this as has been done with some other valuable preparations, soon reduce the strength, alter the method, shorten the time absolutely necessary for its manufacture, &c., until the compound senna liquor would lose the reputation it has obtained, and perhaps be rejected by the profession as useless, inert, and altogether unworthy their patronage and confidence.

Hoping you will be so kind as to insert this in an early number of your valuable publication,

I remain, Sir, yours respectfully,

WILLIAM MARKHAM COLCHESTER.

Old-street-road, Jan. 1846.

THE SECRET LAWLESS COMMITTEE.

To the Committee of the National Association of General Practitioners in Medicine and Surgery.*

GENTLEMEN,—It having been announced, on authority, that her Majesty's Secretary of State has determined on abandoning his medical Bill, a crisis has arrived in the affairs of the medical profession, which renders it incumbent on you, in the faithful discharge of the duties confided to you, to declare publicly and explicitly what you have done to produce this result. You are bound to show to the profession that your efforts have been honest and disinterested; that your intentions are honourable; in a word, that you may have been deceived, but have not deceived them.

Your enemies—and they are neither few nor insignificant—already assail your character as a public body; while your friends, although still trusting that the result arrived at is not your fault, though it may be your misfortune, are constrained to acknowledge that the cause confided to your hands has been most unfortunate since you undertook its protection. With a liberality as unwarranted as unexpected, compromise and concession have followed each other in quick succession, until, at length, having nothing left to concede, you yourselves declared that "concession had reached its utmost limits." True; it could go no further.

Your mysterious secrecy was especially unfortunate, as, although the position of many of your members placed them almost above suspicion, there are also many with whom it is otherwise, whose corporate interests tend to the present unhappy aspect of medical reform, and are best promoted by the defeat we have just sustained. Their presence on your Committee required that your proceedings should have been less private, and causes the integrity of your conduct to be suspected.

Not twelve months since, the cause of medical reform was confided to your hands—it was then all but triumphant; the exertions of medical reformers had succeeded, after years of toil, in exciting the attention of the public as well as of the profession, and in awakening her Majesty's Secretary of State to a due sense of our grievances, and to the expression of his intention of remedying them; the press of every political shade supported us; victory was all but in our hands. We confided in you, and cheerfully left the laurel we had hardly earned to be gathered by you. Alas! a few short months have sadly changed the scene. Under your auspices, the grievances of the profession have been disregarded—their rights frittered away—injury tamely submitted to has been followed by insult; and, to fill the cup of our degradation, her Majesty's Secretary of State has declared us unworthy of his notice.

In that happy state of ignorance as to their political affairs, in which it has pleased you to maintain the members of the medical profession, I know not what we should expect—conjecture alone remains. Allow me, then, to adopt the language of interrogation, as best suited to my condition, and inquire as follows:—

Are we still to possess twenty heads, but not one home?

Are the members of the profession to be still deprived of all corporate rights and privileges?

Are the few to continue to monopolize the honours of the profession, to the exclusion of the thousands, and reap the advantages purchased with their money and procured by their exertions?

Are the members of the College of Surgeons to be still degraded by the stamp of inferiority, whilst their juniors in age,

* We had not space for the whole of this letter. The Committee, as it is at present constituted, can do nothing but mischief. There ought to be a GENERAL MEETING of the members of the Association.—ED. L.

and inferiors in station and attainments, are raised above them?

Is the Apothecaries' Hall to be still allowed the privilege of prosecuting the well-educated and qualified member of the profession, whilst it leaves the hospital porter, or the druggist's clerk, to practise with impunity?

Is it still to derive thousands annually from the profession, and not contribute one shilling to its advancement or support?

Is the self-styled doctor or surgeon, or the less deceitful chemist and druggist, to be permitted still to deceive the public, degrade the profession, and traffic in the sufferings of her Majesty's subjects?

Is the assassin still to be supplied, *ad libitum*, with his pennyworth of arsenic or prussic acid, that he may dispatch his victim with impunity?

Is the profession still to be left exposed to injury, and insult, and degradation, without one of all its corporate heads interfering in its behalf?

These questions will be answered, if not by you, by the profession. We may have been defeated, but are not conquered: urged on by the weight of our grievances, and trusting in the honesty of our cause, and in the love of justice of our fellow countrymen, we shall again take the field, and once more place the question of medical reform in that proud position which it occupied when confided to your protection. How soon success may again attend our efforts it is now impossible to say; it may be postponed, but it must and will be attained.

You are bound to act promptly, as well as efficiently. The profession have remained too long quiescent; silence is now culpable, and patience ceases to be a virtue: they must now think and speak and act for themselves, if they may, with you; if not, without you; if needs be, against you.—I have the honour to be, gentlemen, your former supporter, and still very obedient servant,
M. W. HILLES.

Pimlico, Jan., 1846.

PLACENTA PRÆVIA.
To the Editor of THE LANCET.

SIR,—A great deal has lately been said and written about the best plan of proceeding in cases of placenta prævia. In these as in most other contested matters the best practice may lie in the peculiarity of each case, or, in other words, one method may not be the best in all occurrences; in some cases, plugging the vagina seems proper; in others, removing the placenta before the birth of the child; and in others, the old practice of rupturing the placenta and membranes, and extracting by the feet, as the following case may perhaps be thought to illustrate:—

Mrs. Wilkie, aged thirty-two, had an abortion at three months, about the latter end of 1844. On November 22nd, 1845, she was taken in labour at 4 A.M., accompanied with great discharge of blood; had a similar discharge more or less for a fortnight previous, twice during that time rather profuse; found her at half past ten A.M., pale, sick, and sleepy, every pain accompanied with retching and considerable discharge of blood. The os uteri was about the size of a crown piece, thin, and easily dilated, the edge of the placenta implanted over it, on endeavouring to remove which, I found from its large size upwards and firm adherence to the uterus, that the doing so would occasion more loss of blood, besides unnecessary pain to the woman and needless trouble to myself, when the old plan of rupturing the placenta and membranes, and bringing down the feet, could be so easily accomplished, by which means she was delivered in a few minutes without further loss of blood. The child was dead; the woman made a tedious recovery from the loss of blood, but is gradually gaining strength; she has suffered a good deal from nervous headache.

The placenta measured about nine inches in diameter, was thin and firm, thus giving a circumference of twenty-seven inches, which would fully cover one side of the impregnated uterus—rather a large surface to take much liberty with in an exhausted patient.—I am, Sir, your most obedient servant,
W. HENDERSON, M. D.

Corstorphine, near Edinburgh, Jan. 1846.

CONFUSION OF TERMS IN ANATOMY.
To the Editor of THE LANCET.

SIR,—In reading over the description of various authors on the subject of inguinal hernia, we find the terms—inter-columnar fibres, intercolumnar fascia, fascia spermatica, and fascia propria, frequently used. One says the two first are

analogous; another, that the second and third are the same; a third author, that the third and fourth are one. Amidst all this confusion, the student is in a great measure perplexed, and has great difficulty in obtaining a correct knowledge of this part of anatomy. Would it not be better to adopt a new nomenclature, so that the student would have fewer incumbrances to contend with in this matter. The inter-columnar fibres, or those which pass from Poupert's ligament over the external abdominal ring towards the linea alba, might be designated the supra-annular fibres. The intercolumnar fascia, or that closing up the external ring as it passes from one column of the ring to the other, might retain this name. But the spermatic fascia might be given to that inclosing the cords, being derived from the fascia transversalis. Hoping these suggestions may be useful, I am, &c.,
MEDICUS.

Manchester, January, 1846.

THE SECRET COMMITTEE.

IN consequence of the appearance of an advertisement calling a meeting of the Committee on Wednesday last, several reporters attended at the offices in Regent-street, and sent in, to the chairman, requests that they might be permitted to attend the meeting, in order to report the proceedings. Amongst the gentlemen who so attended, were reporters from *The Times* and *THE LANCET*. The following is the reply which one of them received, in writing, from the chairman:—

“Copy of a resolution carried in consequence of Mr. Clarke's proposition:—

‘That it is not consistent with the practice of the Committee to admit reporters to their meetings, and therefore respectfully decline to accede to Mr. Clarke's proposition.’”

The gentleman thus refused admission is a member of the College of Surgeons of many years standing, and also one of the oldest members of the Association.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted members on Friday, January 23rd, 1846:—J. H. O'Sullivan, R. Davis, J. G. Cambell, J. Greene, H. T. Hartnoll, J. H. Eddowes, T. Willmott, J. Ryan, A. Hewgill, E. J. Such.

APOTHECARIES' HALL, LONDON.

Names of gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, 22nd January, 1846:—Thomas Benjamin Horne, Basingstoke, Hants; Thomas Brooks Bumpsted, Langford, Somerset; Richard Penrose Bell, Yorkshire; Samuel Gibbon, Kettering, Northamptonshire.

CORRESPONDENTS.

A Gownsmen of King's College.—True, the subjects abound in the capital mentioned, but even if in sufficient numbers to find supplies for other cities, the difficulties of transportation would offer almost insurmountable obstacles to receiving them in London. It is not likely that the consent of both governments would be obtained; and the mere cost of carriage, independently of every other consideration, would render the plan of our correspondent impracticable.

Mr. Wilkins is requested to furnish us with his address.

The communication of *Mr. E. C. Tyte* will be published.

Is it true that the New Quack-fraud entitled “*THE PEOPLES' MEDICINES*,” is managed by a member of the Royal College of Surgeons?

Mr. Black will receive from us a private letter.

A Birmingham Student should write to Edinburgh for official information on the subject of his inquiry.

A Short, M.D.—Such a person could fill the office and perform its duties, without incurring any penalty at law. In reply to question 2 we have to say, that the person mentioned could not be regarded as “legally qualified” to perform acts of surgery, although the law imposes no fine upon his proceedings.

Communications have been received from Mr. James Bower Harrison, (Broughton,) A General Practitioner, (Nottingham,) Mr. T. H. R. Thomson, (Edinburgh,) M. D., Mr. Taylor, Amor Veritas, E. M., A. Z. (Greenwich,) M. W., (Essex,) A Country Surgeon, Mr. Bate, (Swansea,) Dr. Buchanan, George T. P. Hill, Mr. E. Bascome, and S. D. T.

We shall give every particular relating to the Militia Act, in connexion with the medical profession, next week.

INTRODUCTORY LECTURE
TO A
COURSE ON AUSCULTATION
AND THE
DISEASES OF THE CHEST.

DELIVERED AT THE LIVERPOOL NORTHERN HOSPITAL, SESSION 1845-46.

BY JAMES TURNBULL, M.D.

PHYSICIAN TO THE HOSPITAL.

GENTLEMEN,—I have selected diagnosis as the subject of the following observations, because it forms a branch of practical medicine which will occupy much of our attention in the present course of lectures; the physical examination of the chest by auscultation and percussion having been the means of removing much difficulty and obscurity from the diagnosis of two most important classes of diseases—those, namely, of the organs of respiration and circulation.

Diagnosis is that part of medicine which teaches us to recognise and distinguish from each other different diseases, and the pathological states of the various organs of the body. In order to make a correct diagnosis, a medical man must have a knowledge of the anatomy and physiology of the organs, so that he may be able to judge of the symptoms furnished by their departure from the healthy condition. The correct diagnosis of disease is the only sure basis on which a safe and efficient plan of treatment can be founded; and the progress that has of late years been made in the localizing of disease, or the ascertaining of its precise seat, has been owing, in a great measure, to the careful study during life of the symptoms, in connexion with observation after death of the changes in the organs which had been affected; and it is thus that medical men, by precise diagnosis, have been enabled, in the majority of cases, to raise themselves above the treatment of mere symptoms, to the treatment of the disease itself.

The presence of such symptoms as quick, full pulse, heat of skin, thirst, and even pain, is far from being always sufficient to guide us correctly in the choice of therapeutic means, unless so combined with physical signs as to indicate the particular organ, and, in many instances, the particular tissue of the organ, affected. It is true that the presence of such symptoms is generally sufficient to indicate the presence of inflammation, and some might also observe that inflammation is the same disease, and requires similar treatment, wherever seated. But though this is, to a certain extent, true, so that one might, in many instances, treat inflammation successfully without knowing the organ or tissue in which it might be seated, yet one would be far from being able to combat the disease in the most efficient manner without more precise knowledge of its seat. Suppose, for example, that an individual ignorant or careless of precise diagnosis was treating a case of thoracic inflammation—he might have it seated in the pericardium, or in the pleura, or in the tissue of one or both lungs, or in the bronchial mucous membrane; and he would have to treat inflammation of all these tissues in almost the same manner, not knowing the extent of the disease, the progress it might have made, or the effects to which it might have given rise. On the other hand, one who did not rest satisfied with having merely discovered the presence of inflammation in some part of the chest, but endeavoured, from combining physical signs with general and local symptoms, to ascertain its exact seat, would, in most cases, if well versed in the diagnosis of thoracic diseases, be able to discover, with ease and certainty, which of these parts the disease had attacked. I need scarcely add that the treatment would not be precisely similar in all of these cases—that in pericarditis it would require to be different from that of bronchitis, as well as more prompt and vigorous, owing to the immediate and ultimate destructive effects of inflammation seated in such a vital organ as the heart; and again, in the second stage of pneumonia it might require to be different from that of pleuritis after effusion had taken place, for while in the former slight mercurial action might have all the effect we might desire, in the latter it might be necessary to continue it for a longer period, and to combine it with other means calculated to promote absorption, even after most of the symptoms had ceased to indicate the presence of inflammation or its effects.

For the precision which we have attained in the diagnosis
No. 1171.

of these and of all the other diseases of the lungs and heart. we are chiefly, and very greatly indebted to the discovery of auscultation, by Laennec. By means of the ear, applied either directly or with the stethoscope, we can often obtain a knowledge of what is taking place within the tissue of these organs, and are thus enabled not only to select the most appropriate plan of treatment, but to vary it with the changes in the disease. The light, however, which has been thrown upon diagnosis by auscultation, has not been entirely confined to these diseases, for indirectly it has added much to the facility and certainty with which we distinguish several others. Thus, for example, if, in examining a case of dropsy, we were to find the patient free from disease of the heart and lungs, this negative information would direct our attention to the state of the kidneys and liver, from disease of which organs also we know that dropsy might arise.

In order to point out to you the relation of physical signs to symptoms, and the respective value of each, I shall now make a few observations on symptoms, and on the mode of examining patients.

We acquire a knowledge of the symptoms and signs of disease, by means of our senses, but more especially by sight, touch, and hearing. Every organ and part of the body, by departure from the natural condition, may furnish us with symptoms or signs of disease. We should, however, carefully distinguish between those which are indications of mere functional disorder and those which result from changes in the structure of the organs. Our knowledge of the changes which the organs undergo, in their structure, in disease, has been carried to a high degree of perfection, so that we can scarcely now expect to derive much additional information from the cultivation of this department of medicine. A very recent practical writer, Dr. Latham, observes, in reference to this point, that "the age we live in cannot be better characterized than as the age of morbid anatomy. Almost the only instrument of pathological research has been the scalpel. Now that great good has resulted from morbid anatomy it would be unjust to deny, but this good there is a tendency to exaggerate; and such as it really is, it has certainly fallen short of what might have been anticipated from the universal study of almost half a century. At length it has now confessedly done its best, and all great improvements, pathologically or practically, must henceforth be looked for, not from morbid anatomy but from other sources."

I may observe, that until only a very few years back, the attention of medical men was so exclusively directed to the investigation of the changes produced by disease in the structure of the organs,—to the pathology of the solids of the body, that some were even disposed to deny the possibility of functional derangement taking place, without some change of structure in the part affected.*

I shall, however, have occasion to point out to you that many of the symptoms of disorder in the functions of different organs arise quite independent of structural change, and must be sought for in the composition of the blood—a vital and most important fluid part of the living body, which constitutes, on an average, from twenty-five to thirty pounds of its entire weight, and circulates through every organ and tissue, imparting energy of action and functional vigour, when sufficiently abundant in quantity, and possessing the natural proportion of its various constituents; or languor, imperfect action, and functional disorder, when deficient in quantity or in the relative proportion of its parts.

If we are not to derive new light from the study of morbid anatomy now, it may be asked from what other sources the practice of medicine may be expected to make advances. In changes of structure we see something fixed, over which medicine can exercise little or no influence; and we must therefore endeavour to go back and discover the disease at an earlier period, when merely functional. It seems probable, that when organic chemistry—which now occupies so much attention, but from which medicine can scarcely be said to have profited as yet—becomes so far advanced as to admit of practical application, we shall be enabled to detect some diseases in derangements of the processes of assimilation and excretion in their earliest stages, and thus at a period when more under the control of remedies. By means of the microscope we have acquired a knowledge of the physical structure of some of the constituents of the blood; we have also attained

* En somme, bien que l'on ne puisse concevoir aucune maladie sans une lésion quelconque de l'organisation, il n'en est pas moins vrai que certaines lésions se dérobent quant à présent, et se déroberont probablement toujours, à nos moyens directs d'exploration.—Bouilland, *Essai sur la Philosophie Médicale*.

greater precision in the diagnosis of renal disorders, and we may expect that it will throw further light on the process of nutrition in the healthy and morbid states. Many very interesting facts as to the state of the blood in different diseases have been discovered by Andral and Gavarrit, from analyses of this fluid, most of which have been recently confirmed by the researches of Becquerel and Rodier; and these latter observers have shown that there is no disease which affects the constitution, that does not alter the blood more or less. There are many other facts which give us reason to believe that there are not a few diseases which have their origin in, or even essentially consist of, alteration in the composition of this fluid. As I regard, therefore, the composition of the blood as worthy of our attentive study, I shall take the opportunity, in the present course, of directing attention to the state of the blood in some of the diseases which will come under our consideration; and I shall treat fully of the functional disorders caused by anæmia and plethora, which will form a part of that section of the course devoted to the diseases of the organs of circulation, anæmia being a chief cause of the nervous or functional affections of the heart, and being most certainly discovered from examination of the veins and arteries by the stethoscope.

Let us now pass from the symptoms which arise from functional disorder to the consideration of symptoms in another point of view.

French writers on diagnosis have divided the symptoms and signs of disease into two classes—viz., those which comprise everything bearing upon the history and progress of the disease previous to our seeing the patient, and those which constitute the actual state of the patient at that time. The first they have called the “*circonstances commemoratives*,” the second, the “*etat actuel*.”

The history of the disease should comprise any peculiarity of temperament or constitution, hereditary or acquired, the causes of the disease, the period and mode of its attack, and its progress up to the time of our seeing the patient.

To acquire a knowledge of the present state, we must observe the general aspect; the appearance of the countenance and of the surface generally; its temperature; and the state of the tissues, as regards their nutrition. A further knowledge of the present state is to be acquired by examining the manner in which each of the different organs performs its functions. We may begin by examining the state of the organ which seems most affected; or we may begin with the organs of circulation, as their functions are more or less affected in most diseases. We examine the state of the pulse, the action of the heart, and we ascertain the presence or absence of palpitation, &c., and if we find reason to suspect disease of this organ, we acquire a further knowledge of its condition by auscultation. Respiration being intimately connected with the circulation of the blood, we may next examine the state of the lungs, observing the frequency of the respiration, and the presence or absence of cough, pain, dyspnoea, or expectoration. Here, again, when necessary, a more perfect knowledge of the state of these organs is to be acquired by means of the physical signs. We ascertain the state of the digestive organs, by observing the appearance of the tongue; and we inquire as to the presence of thirst, the state of the appetite; also, if there be sickness or vomiting, or pain after food, or on pressure of the epigastrium. We ascertain, likewise, the state of the secretions, from the various abdominal organs; and, when necessary, we examine that of the urinary organs. In women, we direct our inquiries, so as to ascertain the condition of the uterus, the regularity of the catamenia, and the presence or absence of pregnancy. And here auscultation may again be of service to us, in enabling us to discover, with the stethoscope, the pulsations of the foetal heart, when beyond the fourth month. Our attention should be directed to the condition of the cerebral organs,—to discover the state of the intellectual faculties, and the presence or absence of delirium. Any rigidity or loss of muscular power must be observed, while the state of the general sensibility will be ascertained by examining the surface, and the soundness of the organs of special sensation, (sight, hearing, &c.,) by examining the functions of each.

By examining in this way the state of each of the principal organs separately, we can scarcely fail to come upon the one which is chiefly affected, and then our inquiries and examination may be more searchingly directed to the part, so as to ascertain its exact condition. It is not always necessary that we should examine separately and fully the state of every organ, for, in general, our first inquiries, as to where there is pain or suffering, will direct our attention to the part which is chiefly affected, after which, we may inquire into the dis-

orders which have taken place in the functions of other organs that may have become secondarily deranged. Such a mode of examination as this becomes of use to us in cases of difficulty, by rendering us certain that we have not omitted to ascertain the condition of any important organ in the body; and I would recommend it, not only because it facilitates diagnosis, but also on account of its enabling us more easily to keep notes, and draw up reports of cases.

We have seen that symptoms may proceed from structural change, or from simple derangement of function. They are also local or general, according as they proceed from derangement of the functions of the organ which is the seat of disease, or from disorder of the functions of other parts of the system, which have become secondarily affected. Thus, the pain, the difficulty of breathing, and the rusty expectoration in inflammation of the lungs, are local symptoms furnished by embarrassment in the functions of the organ which is the seat of disease, whilst the changes in the phenomena of organic life—the temperature, the circulation, digestion, secretion, &c.—are what have been called general symptoms.

The signs furnished by auscultation and percussion are called physical signs, because they are derived from physical examination of the chest, which enables us to ascertain the conditions and relations of the thoracic organs. Dr. Williams observes, that “physical signs and vital symptoms respectively have their value in making known the nature and extent of disease. Physical signs are more certain, because they appeal more directly from the seat of disease to the senses; depending on simple and more constant causes—physical properties, they are more constant, and less subject to variation than vital symptoms, which result from more complex and therefore more variable vital properties.” The knowledge which we acquire of the state of the lungs by auscultation and percussion is much more direct and positive than that furnished by vital symptoms, for we may thus ascertain with great certainty whether they are both permeable to air or not, or the presence of mucous fluid in the air cells, or any increase that may have taken place in the density of their structure. In many cases, the discovery of the disease from symptoms is extremely difficult, or altogether impossible, and yet with the aid of physical signs, it is very easy and very certain. To illustrate this, let us compare the two diseases—chronic pleurisy and pulmonary consumption. The symptoms are so similar, that in many instances it would be almost impossible for any one, from symptoms alone, to make the diagnosis. In both diseases, there may be pain in one side, with shortness of breath, cough, and expectoration of muco-purulent matter, and hectic fever, with great debility, emaciation, and night perspirations, or diarrhoea, and yet, notwithstanding the similarity in the symptoms, the two diseases are very different in their nature, in the plan of treatment which they require, and in the probability of a favourable or unfavourable termination, the one being in the vast majority of cases fatal, whilst in the other, a judicious plan of treatment will generally save the patient, provided the disease be free from complication with tubercles. Here, the value of physical signs is very great, but it is still further shown by referring to those diseases which have been called latent, from frequently running their course without being accompanied by the ordinary symptoms. Thus, the lungs may become solidified from inflammation, with scarcely any cough, dyspnoea, acceleration of breathing, pain, expectoration, or fever. In typhoid pneumonia, the symptoms are generally indistinct, and in albuminous nephritis I have seen both lungs become rapidly solidified without any pain, and with the other symptoms but imperfectly marked. In pleuritis, too, the disease is not unfrequently latent, and attended with no pain, and very little local or general derangement. In all these cases, though the symptoms are indistinct or wanting, the physical signs enable us to trace the progress of the disease, and guide us in the treatment.

To illustrate still further the value of auscultation, and in reference to the organs of circulation, let us take inflammation of the heart and aneurism of the thoracic aorta. There are perhaps no diseases in which physical signs are more valuable than in pericarditis and endocarditis, for in both of these affections of the heart the only diagnostic signs are those furnished by auscultation; and pain, palpitation, oppression, and irregular action of the heart may be either wanting, or may not occur, until too advanced a period of the disease for its successful treatment. Dr. Latham tells us, that previous to the discovery of auscultation, the connexion of acute rheumatism with pericarditis rendered its diagnosis pretty well understood, when the symptoms referable to the heart were present; but that when they were wanting, or did not occur until a late period of the disease, it often proved fatal, either

from the disease being altogether overlooked, or from the proper treatment being adopted too late. "But," he observes, "the like mistakes could hardly occur now; it is scarcely possible that pericarditis coming on just at the suspected time, and just under the suspected circumstances, could now be overlooked. Every prudent physician, I presume, searches after it day by day with his ear, in all cases of acute rheumatism; and although the heart itself shows no vital consciousness of its ailment, either by feeling or function, by pain or dyspnoea, yet will the mere mechanism of the disease proclaim the fact of its existence to the ear." Endocarditis is a disease which may serve to point out, if possible, still more forcibly the value of auscultation, for previous to the discovery of this addition to our powers of diagnosis, although pathologists were familiar with the valvular lesions which are its effects, they were ignorant of its very existence as an acute disease. Now the diagnosis, at the earliest possible period of this disease, which lays the foundation of the majority of the fatal organic diseases of the heart, is a matter of most momentous importance, in order that the treatment may be adopted sufficiently early to eradicate the disease completely. If one of the tendons of some of the external muscles; if one of those of the hand, for example, should inflame and become contracted, as sometimes happens, a slight deformity only, or inconvenience in the part, results; but should one of the small tendinous cords which stretch the mitral valve become contracted, or should one of the semilunar valves of the aorta become shortened, thickened, or indurated, from the effects of inflammation, such apparently trifling lesions affecting this vital part of the economy may induce the most complicated fatal organic disease. We should therefore never forget that this endocardial inflammation may occur in the most insidious manner, with little or no inconvenience referrible to the heart; and that without auscultation it may be overlooked, and become known to have existed weeks, months, or years after, by the signs of irremediable organic affection of the heart.

Pain at the heart, palpitation, and irregular action, are symptoms which may or may not be present; but a bellows or endocardial murmur is the most certain evidence of the existence of endocardial inflammation; and, though not invariably present, it may often be discovered before there are any symptoms referrible to the heart. The complete removal of the inflammation being of such vital importance in this disease, in order that permanent injury may be prevented by the earliest possible treatment, physical signs become of the highest value; and Dr. Latham urges upon us never to omit to listen to the præcordial region whenever we visit a case of acute rheumatism. "All," he says, "may seem to be going on well. The general symptoms may be far from severe. The chest may be free from pain. The heart's action may not awaken suspicion by its force or irregularity. Nevertheless its internal lining may be inflamed, and if you listen, the endocardial murmur may convey the momentous fact directly to your ear."

There is another class of diseases of the organs of circulation—viz., the organic affections, where auscultation is still required for the purpose of correct diagnosis, but where, unfortunately, the irremovable nature of the diseases takes away from the diagnosis much of its value, though it does not in all cases entirely deprive it of practical utility. We have selected aneurism of the thoracic aorta as an illustration of this class.

In the early stage of this disease there is no symptom, or combination of symptoms, which would enable us to penetrate the obscurity in which we would be involved if we were to trust to symptoms alone, without the aid of auscultation and percussion. The symptoms are, oppression at the chest; dyspnoea, with or without palpitation; also those resulting from pressure on surrounding organs, asthmatic paroxysms; wheezing respiration, or croaking voice, from pressure on the bronchi; pain and difficulty of swallowing, from pressure on the œsophagus; pains like angina pectoris, from pressure on the brachial plexus, and pains like rheumatism, from erosion of the vertebrae. Now, none of these symptoms are pathognomonic, for most of them may be caused by disease of the lungs or heart. The presence even of a pulsating tumour, the least unequivocal of the symptoms not pertaining to auscultation, and which can occur only in the advanced stage of the disease, is not sufficient to establish the diagnosis in all cases; for it might be caused by some other tumour between the aorta and the thoracic parietes. It is only, therefore, by ascertaining the presence of a murmur, of a more or less soft or hoarse character, and synchronous with the contraction of the heart, that we can make the diagnosis of this disease with any degree of certainty. Dr. Hope has observed, that this disease has frequently proved fatal without the medical

attendant having even suspected its existence. I have myself seen this occur, and I may also relate the following case, in which the disease was overlooked in the early stage from neglect of auscultation. A gentleman, about fifty, consulted me, having been ill about four months. His only symptoms were debility, with some loss of flesh, a little shortness of breath on going up a stair, some cerebral congestion, and rather quick, but weak pulse. Two medical men had treated him as labouring under general debility, the effect of slight influenza, from which he had suffered at the commencement of his illness. On examining him with the stethoscope, the lungs were found healthy, and the sounds of the heart perfectly natural; but a little above the base, a very slight whiff or bellows murmur was heard during the systole, and there was dulness at the part on percussion. These were the only symptoms, and there was no œdema. The bowels were regulated, and small doses of digitalis, with hydrocyanic acid, and rest and abstinence from stimulants, were prescribed. Under this treatment, the pulse came down, and there was, for a time, a great improvement. I had not an opportunity of verifying the diagnosis in this case from post-mortem examination, but it was confirmed by the progress of the case, and by its fatal termination with dropsy several months after. It would, in this case, have been utterly impossible to have discovered the disease without auscultation and percussion; and though its removal was impracticable, a correct knowledge of its seat and nature was still of service in enabling me to guard the patient against what might be injurious, and to adopt the measures most likely to prolong life.

In making these observations as to the value of auscultation, I do not wish that you should undervalue the study of symptoms, but rather to point out to you the advantages of combining physical examination with a knowledge of symptoms. It might easily be shown that physical signs are quite insufficient for correct diagnosis, unless combined with symptoms, and that, like the latter, they may be altogether wanting, though the disease of which they are regarded as a sign be present. Thus we may have inflammation of the tissue of the lungs, without being able to detect the presence of any crepitant râle, and we may likewise have the coarser variety of this râle in many pulmonary diseases besides inflammation, in œdema, pulmonary apoplexy, capillary bronchitis, and in phthisis. If, then, we were to trust to its presence alone, we might, from its absence in some cases, overlook the disease when present, while, again, we should be unable to determine from which of these various diseases it might be caused, without referring to the vital symptoms; and yet, notwithstanding all this, the presence of crepitant râle, along with inflammatory symptoms, gives us a more certain knowledge of the existence of pneumonia than we can possibly attain by any other means.

Dr. Stokes has observed, that if we compare the three great cavities,—the thoracic, the abdominal, and the cranial,—we shall find that the diagnosis of thoracic diseases from symptoms alone would be the most difficult, but that, in reality, it is the most certain, from admitting the most perfect combination of physical signs and symptoms. This able writer, in comparing the state of our knowledge previous and subsequent to the discovery of auscultation, passes a high eulogium upon Laennec, to whose genius we are indebted for the astonishing degree of accuracy which has been attained in the diagnosis of pulmonary affections; a degree of accuracy which becomes at once apparent when we look to the trifling additions which have been made by subsequent auscultators to the diagnosis of these diseases.

Though Laennec did not carry forward our knowledge of the diseases of the heart as far as he did those of the lungs, auscultation has since been most successfully applied to the diagnosis of these diseases, and the comprehensive treatise of Dr. Hope has placed our knowledge of them on a very firm basis. I have already quoted some passages from the most recent work on diseases of the heart, that of Dr. Latham, which may have shown you the estimation in which he holds auscultation in reference to this class, and I may also state, that in his preface he tells us that "the clinical diagnosis of diseases of the heart owes all the higher degrees of certainty to which it has been carried in our times entirely to auscultatory signs."

Having now, gentlemen, endeavoured to point out to you the importance of correct diagnosis, and that, in diseases of the lungs and heart, a knowledge of auscultation is in most cases indispensable for this purpose; I have, in conclusion, to add, that these diseases form a class worthy of the most attentive study. On referring to the sixth report of the Registrar-general, I find that, in 1842, the total number of deaths

registered in England was 349,519, in a population of nearly sixteen millions; of these 92,994, or more than one fourth, were caused by diseases of the organs of respiration; 4925 were registered as diseases of the organs of circulation. It is probable, however, that the real number of deaths from disease of the heart was very considerably greater than this; for we find 12,000 from dropsy, and nearly 4000 sudden deaths, in many of which there can be no doubt that disease of the heart was the real cause of death. It would appear, then, that nearly one-third of all the deaths in this country are caused by thoracic diseases; and this can scarcely appear surprising, when we regard the delicate structure of the lungs and heart, the incessant nature of their functions, and the degree in which they are exposed to the causes of disease. Long before the fœtus has been expelled from the uterus, the heart has begun to perform its function, and this little organ does not cease to contract, as an average, at the rate of seventy times a minute, and to drive the whole weight of blood in the body twenty times through it, in the hour. Neither need the still greater frequency of pulmonary diseases surprise us, when we reflect that these organs receive into their minutest cells, at each inspiration, about twenty-five cubic inches of air, which, in the twenty-four hours, amounts to about 500,000 cubic inches. When, too, we regard the variations which the air thus inspired undergoes in its temperature, density, and the quantity of moisture it contains; when we look to all these circumstances,—to the vascularity of the lungs, and the fact that the whole blood in the body passes once through them for every time that it circulates through the rest of the body,—instead of being surprised at the frequency of these diseases, we have cause rather for astonishment that such delicate machines should continue for so long a period to perform their functions, and should so frequently escape the numerous physical causes of disease to which they are liable.

FOREIGN DEPARTMENT.

DISEASES OF CHILDREN.

In the January number of the *Clinique des Hôpitaux des Enfants*, we find various interesting articles, of which the following is the analysis:—

M. GUERSANT ON THE INFLUENCE OF RACHITIS ON FRACTURES IN CHILDREN.

From statistical researches founded on a medium of eighty cases of fracture, yearly, we have remarked, that about a third of the fractures which we observe, occur in rachitic children. The circumstances which predispose them to fractures are twofold; the anatomical structure of the rachitic bones, and the great weakness of rachitic children, which exposes them to frequent falls. The structure of rachitic bones varies according to the period of the disease. In the first period, the spongy tissue is gorged with blood, more especially in the extremities of the long bones. In the second stage, the vascular system is still more developed, the compact tissue softens, the medullary canal becomes larger, and the bones bend in various directions. In the third period, the disease remains stationary, and then improves, the cellular structure becoming less vascular, and the bones regaining a certain degree of hardness. The predominant feature in these various states is extreme fragility of the bones. This fragility, however, is fortunately compensated by the thickness of the periosteum in children generally, and more especially in rachitic children.

The symptoms of fracture in rachitic children are very different from those which are met with under other circumstances. There is no crepitation, owing to the softness of the bones; often no deformity, on account of the periosteal covering; and when deformity exists, there is no means of distinguishing it from the curvatures that are so frequent in rachitic children. These are the only symptoms which enable us to recognise the fracture:—1st. Abnormal mobility of the bones modified by the resistance of the periosteum; 2nd. Flexibility of the limb at the seat of the fracture. If the existence of a fracture is not recognised, or if a lengthened period elapses before the surgeon is called in, the periosteum may be ruptured, and then the signs of fracture become more apparent. There is then deformity, riding of the fragments, and even crepitation, when the general rachitic affection is not too advanced.

The symptoms of fracture persist a long while after the accident, even when it is treated properly. Fifteen days afterwards, the fragments are generally still found moveable, whereas, in a healthy child at that time, consolidation has

always taken place. Consolidation is thus always tardy, and the more so the more severe the general disease. In addition to the direct unfavourable influence of rickets, there are other morbid influences to which the patients are often exposed. Thus, they are frequently attacked with pneumonia, bronchial catarrh, and eruptive fevers, to which rickety children are extremely predisposed, these diseases always lengthening the treatment of the fracture.

M. Guersant reduces the treatment of these fractures to the mere application of a roller-bandage applied to the limb, and three or four small splints placed at the seat of the fracture, the whole being again kept in place by another circular bandage. The splints must not be allowed to rest on the osseous protuberances, lest excoriations should follow; this is the more important, as the extremities of the long bones are morbidly swollen. The entire apparatus must be surrounded with a piece of oil-skin, if it is one of the inferior limbs that is fractured, owing to the circumstance of very young children often wetting their bed. M. Guersant does not approve of any other forms of apparatus, all kinds of padding or cushions being soon destroyed, and the starch bandage being soon softened, by the contact of the urine.

The general treatment ought to consist principally, as in simple rachitis, in a good and tonic alimentation. Some writers have latterly asserted that a substantial diet is not beneficial in rachitis; but this is an error, which may be explained by the circumstance of substantial food being sometimes given too suddenly to children who have previously been living on very low diet. The change should be gradual, so as to allow the stomach to become accustomed to the difference in the food.

M. VALLEIX ON THE TREATMENT OF DIFFICULT DENTITION.

M. Valleix relates a case in which a young girl died after suffering during three weeks from symptoms which could only be referred to difficult dentition. Her constitution was strong, and her health had been previously very good, but the four molar teeth which complete the second dentition developed themselves simultaneously, giving rise to intense inflammation of the gum at the angle of each jaw. M. Valleix excised the gum which covered the teeth, but only when convulsions had already appeared, and without any beneficial effect. He thinks that the operation ought to have been performed sooner, and that whenever there are many teeth endeavouring to force their way through the gums, and the general re-action is severe, it ought to be resorted to at once, without waiting for the appearance of serious symptoms, such as obstinate vomiting, abundant diarrhoea, or high fever. The pain of the operation is trifling compared to that occasioned by the teeth themselves, and when performed early it will often disperse a host of alarming symptoms. In the above case, obstinate bilious vomiting existed, and the state of the stomach soon became such that the smallest quantity of fluid was rejected. This symptom, when carried to such an extent, is always serious, and is generally followed by convulsions. The appearance of convulsion was preceded, during several days, by general agitation, strabismus, swelling of the right eye, dilatation and immovability of the pupils. The convulsions lasted three days and ended in death, notwithstanding the most energetic treatment.

CLINICAL REMARKS BY M. TROUSSEAU.

Rheumatic paralysis in nurses.—Women when nursing are subject to a kind of rheumatic paralysis. They complain of stiffness and numbness, with painful tension, in the superior limbs; the muscles of the forearms presenting a kind of tonic spasm. They cannot bend the arm without difficulty, and the object which they touch merely occasions a confused sensation. This form of paralysis deserves the name of rheumatic, from its great mobility. It leaves the arms to attack the legs, and when this is the case, the patient is obliged to look where she puts her foot in walking, as she does not feel the soil. When the legs become free the head is attacked. The patient has noises in her ears, swimming of the head, and stiffness of the jaws. The affection will then again leave the head to attack the upper limbs, and so on. This malady easily gives way to bleeding from the arm, assisted by a few purgatives. What is singular is, that the blood presents the inflammatory buff without there being any appreciable febrile state.

Death from discreet variola.—A child has just died in one of our wards of discreet variola. He had recently been attacked and treated in the same ward for choleric diarrhoea. He was convalescent, but caught variola from another patient. The pustules of the face and hands contained serosity, which neither became opaque nor dried. Stimulants and cordials, opium more especially, in small doses, were given in vain, and

the patient sank gradually. Sydenham has said, and after him Van Swieten and Stoll have repeated, that when there is no tumefaction of the face and eyelids in variola, death takes place on the ninth or tenth day, if the disease is discreet, and on the thirteenth or fourteenth if it is confluent. The exactness of this rule was exemplified in the instance I have mentioned. At the autopsy no lesion was found, except pulmonary congestion.

REPORT OF A CASE OF ANEURISM OF THE CAROTID ARTERY.

By G. WHITE, Esq., F.R.C.S., Surgeon to the General Hospital, Nottingham.

Mr. H—, aged thirty-four, printer, of middle stature, rather spare habit, health generally rather delicate, habits not very temperate. Between three and four months ago observed a small lump on the right side of the neck; it gradually increased till about a month back, when, having some cough, and his voice becoming hoarse, he called on his usual medical attendant, who directed him to paint the tumour with tincture of iodine, and to go to the sea-side. He returned a few days ago, in consequence of the lump having grown very rapidly, and become tight and uneasy, and having a throbbing sound and feel, which prevents him sleeping. He thinks the lump is double the size it was a fortnight ago; his medical attendant says it has visibly increased the last two days. The tumour, at the present moment, is of considerable size, occupying the right side of the neck, from just below the ear, to within two fingers' breadth of the sternum; the larynx is pushed considerably to the opposite side, and the sterno-cleido-mastoid muscle is forced outwards and backwards. The integument is, in places, of a dark colour, and there are two small superficial ulcers, produced, probably, by the iodine. There is no heat, and but slight tenderness of the tumour, which is firm, elastic, and pulsates perceptibly, both to the eye and touch, in every part; by the aid of the stethoscope, a loud blowing sound is heard at each pulsation. The right temporal artery beats more feebly than the left, the pulsation of the right carotid, below the tumour, cannot be felt; but very firm pressure over the situation of that vessel arrests the pulsation of the tumour. The patient says the tumour commenced at the upper part of the neck, and gradually extended downwards as it grew larger. In consultation, (present, Drs. Williams, sen. and jun., Mr. Davison, Mr. T. N. Thompson, Mr. White, Mr. Sibson, Mr. Stanger,) it was agreed that the tumour was an aneurism of the carotid, and that it was possible and expedient to place a ligature upon that artery below the tumour. The patient's bowels having been freely opened the day before by a blue pill and compound rhubarb powder, the operation was immediately performed, (10 A.M., August 28th, 1845.) The patient being laid on a table, in such a position that the light fell directly on his neck, an incision, about two inches long, was made through the integuments in nearly a perpendicular direction, and terminating at the inner margin of the attachment of the sterno-mastoid muscle to the sternum, the upper part of the incision being between the tumour and the trachea. This exposed a large vein, round which two ligatures were placed, and the vein divided between them. The fascia and some loose cellular tissue were next divided, and the edge of the sterno-hyoides brought into view. Crossing the upper angle of the wound was just seen the omo-hyoides. At this stage of the operation, very moderate pressure with the point of the finger at the bottom of the wound arrested the pulsation of the tumour; but the beating of the carotid could not be felt. The sides of the wound were held asunder by blunt hooks, and the wound kept clean by small bits of sponge, put to the bottom of it by means of forceps. With the forceps and scalpel the sheath of the artery was now scratched through, a nerve (descendens noni) was seen, and pulled aside by the blunt hook, and the artery was fully exposed. An armed aneurism-needle was, with some difficulty, passed behind it from the outer side; but from the great depth and narrowness of the wound, the needle's point could not be brought forward on the inner side of the vessel. The needle was therefore withdrawn, and another, the curve of which formed a segment of a much smaller circle, was introduced with facility. The artery, as it now lay on the aneurism-needle, was compressed with the tip of the finger, and the tumour's pulsation was found to be commanded; the pulsation in the vessel itself was very feeble. The needle being withdrawn, and the ligature firmly tied, the edges of the wound were brought together by two points of suture, and some strips of Macord's plaster.

The patient was then put to bed, and the wound and tumour kept covered by pieces of linen wrung out of cold water. Scarcely an ounce of blood was lost during the operation. The ligature employed was a firm round hemp, one of moderate thickness. Before commencing the operation, the patient was desired to exhale completely, and to keep his chest as empty as possible. While in this state, the upper part of the chest was closely surrounded with a very long firm bandage, and he was instructed to respire, as much as practicable, by the diaphragm and abdominal muscles. By this means the length of the neck was materially increased, and the cervical veins were prevented from being alternately distended and emptied. This ingenious method was suggested by Mr. Sibson, our resident hospital surgeon, and I feel sure very much facilitated the operation. It is remarkable that the internal jugular was not seen, and the descendens noni the only nerve exposed. To have gruel, tea, dry toast, and toast-water.

Aug. 29th.—Makes no complaint; no pain in the head, or any uneasy sensation. Has not slept much; but has had a more comfortable night than for some time past, owing to the absence of the beating in the neck and ear. Pulse 90, and soft; no pulsation in the tumour or right temporal artery; slight oozing from the wound, just sufficient to stain the wet cloths.

30th.—Makes no complaint; not much sleep; pulse 86, and soft; bloody oozing continues.

31st.—Rather more sleep; no pain; pulse 86; complaints of hunger; bloody oozing continues, though very slight. To have some broth. To take a simple aperient mixture.

Sept. 1st.—Broth made him sick; says it generally has that effect. Bowels opened twice; pulse 90; skin cool; still some bloody oozing; have removed the two sutures; no adhesion; no inflammation; some black coagulum occupies the bottom of the wound. Lint dipped in cold water to be applied. To have a mutton chop.

2nd.—Sixth day. Slept rather better the beginning of the night. About two o'clock in the morning was rather sick; retched a little, and brought up some dark-coloured mucus; shortly afterwards felt something trickling down the neck; found it was florid blood. The bleeding was quickly arrested by making pressure on the wound, with a sponge wrung out of cold water; about two or three ounces were lost; no pulsation in tumour or temporal artery. Repeat the cathartic draught in the morning. Pulse 90, and soft.

3rd.—Bowels have acted twice; pulse 90; some good sleep; slight bloody discharge from the wound. To have milk and bread; no meat. The two ligatures which tied the vein have come away.

4th.—Discharge still slightly bloody; the tumour seems less tense, and somewhat smaller.

5th.—Makes no complaint; pulse 86.

6th.—Tenth day. The ligature that surrounds the artery was found loose in the wound; discharge still bloody, but little in quantity; wound granulating, and nearly free from coagula. Continue milk diet.—Eight p.m.: Hæmorrhage to the amount of at least a pint, within the last twenty minutes; somewhat restrained by pressure with the cold sponge; blood still wells out from under a small dark coagulum at the very bottom of the wound. The wound filled with lint, and a large graduated compress placed over it, and some pressure kept up by means of strips of adhesive plaster, and a bandage passed in the figure of 8 under the arms. Felt faint a few minutes ago, but that has gone off. Pulse 120, and very weak; great restlessness. To take half a grain of acetate of morphia.

7th.—Passed a tranquil night. Early this morning the hæmorrhage recurred, to the amount of three or four ounces, but ceased spontaneously; makes no complaint, but of weakness. To have tea, gruel, toast-water, and bread soaked in milk and water. Pulse 100. Repeat the half grain of morphia at bed-time.

8th.—Passed a good night; pulse 100, and soft; the wound is filling up with granulations; a small black spot of coagulum still remains at the bottom of the wound; discharge slightly bloody. Repeat the half grain of morphia at bed-time; tincture of digitalis, twenty minims, to be taken twice a day. Has been removed to another bed, and his clothes changed. A board was placed under the mattress so as to maintain him in a slightly oblique posture.

9th.—A good night; bowels opened twice; pulse 90; discharge less coloured.

12th.—Wound filled up with large granulations; discharge small in quantity, and free from bloody stain; no appearance of dark spot in the wound. Continue tincture of digitalis.

16th.—Feels well but rather weak; wound cicatrizing; is touched daily with nitrate of silver, and covered with dry lint; pulse 76; tumour is smaller, evidently contains fluid;

the integuments have regained their natural colour; one superficial ulceration still remains; no pulsation in tumour or temporal artery.

20th.—Continues to improve; wound healing; complains of nothing but want of solid food; has good nights; sits up during the greater part of the day in the sitting-room; has mutton or partridge daily. Omit the tincture of digitalis.

25th.—Continues to improve; is allowed to walk about quietly, and to have a short drive out daily; sleeps well; appetite good, but is restricted to one small meat-meal daily; pulse 80; wound cicatrizing; no pulsation in tumour or temporal artery.

Oct. 20th.—Feels well; goes to his employment in the printing-office; is desired to use great caution in the use of stimulants, and to avoid violent exertion of any kind; the wound is as nearly closed as possible.

Nov. 16th.—Continues well; the tumour has diminished much in size during the last fortnight, it is soft and evidently contains fluid; the integument is loose and of a natural colour; no pulsation can be detected in the tumour or temporal artery; a little pus still oozes from a minute opening near the upper extremity of the wound.

Dec. 15th.—Wounds have been quite healed for some time past; the tumour has diminished to about one-sixth of its original size, and has become much more solid; the voice is still rather hoarse; general health quite good.

The foregoing case proves the practicability of successfully placing a ligature on a large arterial trunk, very near to its origin. The facility with which a formidable hæmorrhage was arrested, occurring immediately after the separation of the ligature, is deserving of notice. Was it not from the portion of the artery connected with the tumour that the bleeding took place?

Nottingham, January, 1846.

ON ANTEVERSION OF THE UTERUS.

By CONWAY THOMAS EDWARDS, Esq., M.D., Walcot Parade, Bath.

THE recital of numerous cases of anteversion of the uterus has at length, I believe, settled the question as to its existence at all, in the minds of almost all medical practitioners; and although it must be allowed that it is an affection, in its full extent, rarely met with, and requiring most careful examination (especially in its earlier stages, when it may, indeed, be passed over by the physician, and be by the patient unheeded) for its correct diagnosis, yet, from frequent opportunities of investigation, I am convinced the displacement, in a slight degree, is of more frequent occurrence than it is usually considered, although I cannot by any means go the length of affirming, with M. Lisfranc, that anteversion is far more frequent than retroversion.

Within the last four years I have been applied to by several persons complaining of symptoms similar to those of this displacement, and upon examination per vaginam, their true character has been unequivocally discovered. In one of these the patient was unmarried, but, as it afterwards turned out, was six weeks gone in pregnancy: she attributed the mischief to having been knocked down by a horse whilst crossing a road. There was here great pain and difficulty in passing the urine, but none in defecating. The other symptoms were not well marked; she only complained of a heavy sensation in the pelvis on standing erect; vaginal examination, however, was quite confirmative. The recumbent posture was ordered to be maintained, the rectum kept well emptied, and, in the course of ten days, the uterus had righted itself.

Two of the other cases mentioned above were young females, the one seventeen, and the other nineteen, years of age. No cause could be attributed, but from the condition of the uterus, as well as from the success of the treatment adopted, I believe congestion was the chief. In the former, menstruation had been regular; in the latter, irregular.

The following case I have drawn out in full, as being that most strongly marked, and detailing well the symptoms of that peculiar displacement.

Mrs. M. A.—, a thin and lymphatic person, aged forty-two, applied to me, August 10th, 1845; she was married at the age of thirty-four; has had two children, the one being six, the other two and a half years of age. The catamenia appeared unusually late in life, not until the nineteenth year, previous to which time her health was always uncertain; subsequently, however, it has improved, and until about two months since has been good, with perfect regularity in her monthly periods. At that time (June) she commenced to

experience slight bearing-down pains, with a sense of heat behind the pubis, and a dull aching in the back. This was attended with a leucorrhœal discharge, very small in quantity, and once or twice, as she affirms, being streaked with blood. She was not "unwell" on last expecting to be so. These symptoms continued much about the same until ten days since, when, visiting a friend by the sea-side, she went out for a sail, which produced a considerable degree of sea-sickness; shortly after this, the pains before experienced increased, and were attended with new features, such as repeated attempts and difficulty in passing the urine. This led her to apply for advice.

Present condition.—Complains of a weight low down in the pelvis, especially behind the pubis, with a disagreeable sensation of irritation about the rectum, rendering her frequently inclined to try and evacuate its contents; the bowels are usually constipated, but after aperient medicine has been taken defecation is but very slightly painful or difficult; her bladder is extremely irritable, can retain the urine but a short time, and passes it with acute pain and difficulty; she has "a teasing pain" in the lower part of the back, occasionally passing down the thigh; exertion aggravates all the symptoms; standing erect likewise; her easiest posture is on the back, with the lower extremities flexed; complains now and then of sickness after taking food; the tongue is coated with a thin white fur; pulse 82, rather hard; vaginal discharge but trifling, inodorous, yellowish, and somewhat tenacious; there appears to have been symptoms of spinal irritation for some time, which, from reflection, might occasion the uterine excitement; the os uteri could not be brought into view with the speculum: the finger discovered the vagina of higher temperature than usual; anteriorly, a large hard tumour is felt towards the pubis, which is tender on pressure; the neck of the uterus is also large, and directed backwards; the "mouth" cannot be reached except when the tumour in front, formed by the body of the organ, is pushed upwards, when the neck becomes a little depressed; the bowels have not been open for two days. Fifteen leeches to the hypogastrium; the bleeding to be encouraged by warm poultices; extract of colocynth and hyoscyamus pills to be taken directly, and to be followed by an enema. The recumbent posture to be rigorously observed.

11th.—The bowels have been freely opened; the tenderness less over the hypogastric region; micturition most painful and frequent, so much so as to make the patient eagerly call out for relief by manually rectifying the position. This was acceded to. The patient was placed upon her back, with the pelvis elevated and the thighs flexed. The rectum having been thoroughly cleansed by an enema, the fore and middle fingers of the right hand were passed up to the cervix, whilst the forefinger of the left hand elevated the fundus of the organ, which, by depressing the cervix, enabled the finger to be passed round it, when, by gentle traction, assisted by the elevation of the "fundus," in the course of a short time the uterus regained its normal position. The recumbent posture was ordered particularly. The leeches to be repeated. A draught of hyoscyamus to be given at once, and to-morrow morning a gentle aperient prescribed.

12th.—Has passed a comparatively comfortable night; all the symptoms have considerably abated; there is still a little pain in micturition; bowels relieved. An injection of the compound solution of alum to be employed.

14th.—Going on well; the uterus maintains its healthy position; still a little "bearing-down" sensation felt at times; the cervix uteri still harder and larger than usual; examination by the aid of the speculum discovers a small superficial ulceration existing on the back part of the neck, extending almost to the "os." This was touched with the nitrate of silver, as recommended by Dr. Bennet, and the injection ordered to be continued. A pill of disulphate of quinine and sulphate of iron was directed to be taken twice or thrice a day.

From this period but little of interest occurred; suffice it to say, that in a month from this date (the 20th) she had all but regained her wonted strength; had menstruated, although in quantity not so great as usual, and had lost all pain and irritation about the bladder; the ulceration completely healed about ten days after, under the re-application of the caustic; the discharge has completely ceased.

Remarks.—The causes, generally, of anteversion of the uterus are obscure. It has been seen from infancy to old age, nor is pregnancy a very active cause, although of the cases recorded a great number have been connected with it. A relaxed condition of the vagina, as well as a great breadth of it, have

been considered as predisposing causes; consequently, those of a delicate and lymphatic constitution are not unfrequently the sufferers from it. Menstrual irregularity seems often to co-exist, together with congestion of the uterus. It is important in the above case to perceive that symptoms of congestion existed for some time prior to the sea sickness alluded to above, and that the latter seemed the immediate cause of the malposition, the uterus at the time being favourably circumstanced for such an event. In the cases of the two females, aged seventeen and nineteen years of age, mentioned at the commencement of this paper, congestion of the uterus appeared to me the sole cause, (if I except constipation;) and from the symptoms complained of prior to the signs of anteversion coming on, I am convinced the congestion preceded the altered position. The exciting causes of this displacement are generally some sudden and violent muscular efforts. In the above case, that of excessive vomiting, chronic anteversion has been said to be produced by hypertrophy of the anterior wall of the uterus, tumours in the pelvis, and also excessive accumulation of scybalous faeces in the rectum.

The presumptive symptoms were well marked. There was only complained of, however, a little irritation about the rectum, and no particular difficulty in defecation. Neither this nor difficulty in micturition, are constant symptoms; sometimes the one and sometimes the other are observed. The severity of the symptoms are not always in proportion to the extent of the displacement. The prognosis is usually favourable. I am not aware of any case terminating fatally, unconnected with other disease. As to the diagnosis, it is generally not very difficult. Should not the vaginal examination satisfy us, by not enabling us to reach the cervix, we may usually do so by the rectum. The tumour pressing against the bladder may also be felt by passing a sound into that viscus. The situation of the cervix behind and the fundus anteriorly will sufficiently distinguish this affection from retroversion; from antelexion, from the cervix here being most usually in its proper position.

In the treatment of the milder cases but little is required beyond the recumbent position, and the preserving of the bowels in a lax condition. Should congestion or hypertrophy of the uterus exist, the application of leeches, and the antiphlogistic treatment generally, should be enjoined. If, however, as in the case of Mrs. M. A—, the pain and difficulty in micturition be extreme, and other serious evils exist, manual interference may be required, as practised above. Should the finger not be adequate to hook down the cervix, the instrument invented by Boivin may be carefully employed, which will well answer the end. In conclusion, I may add, that pessaries have had their advocates in preventing a recurrence of this affection, but I much doubt of their possessing any efficacy. Where the condition of the patient will allow of it, the cold hip-bath, together with astringent injections, and mineral tonic remedies, I am convinced will far more effectually answer this end, of course with the recumbent position maintained as far as possible, and the avoidance of all undue efforts.

Bath, Jan., 1846.

ON THE NON-DUALITY OF MIND.

By J. CATTELL, Esq., Braunston, Northamptonshire.

THE great importance of the doctrine of mental duality to the professional, the religious, the legal, and the philosophic world, must be acknowledged; and, especially, when we observe, regardless of its final consequences, the speedy metastasis it has taken from the suggestive to the affirmative,—from the possible to the absolute,—from the paradoxical to the mathematical.

Whether we cursorily or minutely review the writings of Dr. Wigan, his attempt to establish the doctrine of cerebral and mental duality on a combination of concurrent phenomena, presumed to be facts, will not fail to be recognised; nor will the expression of his opinions, as connected therewith, be found less based on adverse grounds.

To imagine it possible to consummate an inquiry of such magnitude from any amount of factorial evidence, how much soever corroborated, is greatly to mistake the nature of such evidence; for facts abstractedly considered, and unsupported by philosophic principles, are totally unavailing. It was this impression that led Mr. Samuel Taylor Coleridge to remark, that "to attempt to argue any great question on facts only is absurd. Facts are not truths; they are not conclusions; they are not even premises, but in the nature and parts of premises."

Affirmative opinion stands exposed precisely to similar strictures, notwithstanding the various influences by which it may be excited or produced, and this "because the certainty of opinion on any point is no proof that that opinion is right."

Much more could be said on this point, strictly pertinent to the subject; but wishing to condense my remarks, I shall pass on to state, that the assumption of a dual mind, from a dual brain (even admitting the latter to exist) presupposes the materiality of mind. For if that source which produces corresponding qualities be material, as duality of mind from duality of brain, then it necessarily follows, by a parity of reason, that the cerebra must think.

If the cerebra think, thinking must be an essential property of their nature; and if thinking be an essential property of their nature, no portion of the cerebral mass can exist abstracted from the whole. Unless this be admitted, its essentiality is put aside. Now, if we admit the cerebral mass to think, thinking must be essential to it in any state of divisibility; and then either this thinking must adhere to some particular part of this divided portion, or be divided with it.

If the former, then those portions of cerebral matter which are detached from that part to which this quality adheres must exist where no thinking can possibly be, and this demonstrates that the great criterion of mentality is not essential to the cerebral mass as a whole. How much less so can it be made, by a division, to exhibit a duplex property?

But if we suppose thinking to be divided with the dual brain, it can then exist in no part of these divided portions. For to suppose a divided quality (duality of mind) to exist by inherence in two portions of divided brain, is to suppose it to exist and not to exist at the same time. As, therefore, the notion of a divided thinking (duality of mind) includes a contradiction, it will appear irresistibly evident, that, in either case, thinking (i. e., mind) cannot be essential to the cerebral mass.

On this head alone we may see the uncorroborated assumption of duality of mind to be contradictory, absurd, and self-destructory. It must, no matter how visored by sophistication, be material; that which is not material cannot be the subject of division.

However, to carry the argument to its "noon tide point, and give the rivet of demonstration," I may refer to that decisive, philosophic, axiomatic law, of "no two things that are material being able to occupy in one instant the same identity of space." The pertinency of this to the present subject cannot fail to be observed.

Further, if the faculties of the mind be material, as implied by this doctrine, they can neither exist at once in the individual or dual brain, nor can they operate inseparably from each other. Hence discrepant action of the two minds—the factotum of Dr. Wigan's philosophy—is demonstrated an impossibility. Moreover, as the mental faculties do co-exist only in one mind, it undeniably follows that they cannot co-exist when divided; the veritableness, therefore, of the asseveration that there is in man but one mind, immaterial and indivisible, will be perceived.

Having briefly shown the absurdity of Dr. Wigan's principles, we are led to consider the mental phenomena by which his theory is supported: these are—the duality of consciousness, of identity, and the other mental attributes.

If duality of consciousness be tenable, some greater evidence of its existence must be furnished than that given in his communication. For, if consciousness exist virtually in the cause, as it does formally in the effect, the notion of a dual brain must be abandoned. To admit the possibility of an effect (a dual consciousness) arising from a power which is divided (a dual brain) with those portions of the cerebral substance on which they depend for existence, is to admit the certainty of an effect to proceed from a power, or cause, which is necessarily inoperative or annihilated. This is evident if the brain be dual, for the effect (dual consciousness) which flowed from the whole brain as a cause, must, in its divided state, as a sequent, be destroyed. Such must be so, if the producing influence of the whole brain be destroyed by a duality; for how can the effect of a dual consciousness be originated by a power or cause which does not exist in a divided state? Duality of consciousness cannot therefore result from duality of the cerebral mass as its cause. Keeping in view the main principle of the argument, we may further state, that if discrepant action of the two minds constitute, alone, the evidence by which a dual consciousness is inferred, then must an union of two conscious principles be necessary to form a conscious being. But such a notion invalidates itself, inasmuch as it will appear evident, that if two principles of the same kind be necessary to constitute a chief principle, both of them,

regarded isolatedly, must be incapable of consciousness. And if neither principle be capable of consciousness, then either may be abstracted; but if either be abstracted, then consciousness, which depended on an union of the two, must be destroyed.

To make the existence of consciousness depend on an union of two substances of the same species, neither of which, in itself, can possess consciousness (unless, by the bye, in discrepant action!) when the removal of one which is unconscious annihilates the nature of consciousness, is it not to constitute an union of these two substances necessary to consciousness, and not necessary at the same time! It is, therefore, demonstrably shown, that consciousness can only result from one identical, indivisible, uncompounded substance, which absolutely excludes all notions of duality or separation.

Furthermore, Dr. Wigan has stated, that consciousness is either the consciousness of identity or individuality. Who ever heard of the consciousness of identity? Identity and consciousness have no connexion; it is to memory alone that such office belongs. This is evident when we for a moment reflect, that identity "is the unity and sameness of that which thinks and feels;" it concerns only the past, whereas consciousness regards only the present. If consciousness cannot be associated with identity, how can it then be the essence, or the test of mind? Such a notion would imply the self-subsistent character of consciousness, which is manifestly absurd. Whatever attribute the mind may exhibit, it is not the mind itself. The substance in which the mental qualities adhere must be something distinct from those qualities. Consciousness, therefore, having both a source and an object, cannot be the essence or the test of mind.

Braunston, Northamptonshire, Dec. 1846.

ON REFLEX MUSCULAR ACTION.

By WILLIAM ANDERSON, Esq. Surgeon, Oakham.

THE subject of the development of reflex muscular action in paralytic limbs has been, of late, much discussed, and upon the presumed absence of the influence of the brain in eliciting the phenomena, has been erected a theory of an independent function in the spinal marrow. I say presumed, because the various observers in this department of pathological science not only differ in the inferences they deduce from observations made, but also in the record of the observations themselves. That men should arrive at different conclusions upon the observation of the phenomena is perhaps not much to be wondered at, but it is much to be regretted that so little harmony prevails in the observations recorded. There would appear but little difficulty in ascertaining, under paralytic conditions of the extremities, whether those actions can be provoked or not, and the condition of the cerebral functions as to sensation, volition, and intellectual faculties, might be noted at the same time with equal facility. To a series of well-conducted experiments and correct observations of this kind, and to a faithful and impartial record of them only, can we look for the ultimate establishment of the truth. It is an investigation of the utmost importance to physiology and pathology, and the careful prosecution of the inquiry will, without doubt, lead to an improved knowledge of the diseases of the nervous system, and of the treatment most applicable to them; will teach us to discriminate earlier (and in time to render treatment available) those disorders, whether of function or structure, originating in the nervous centres, insidious in their invasion, concealed during their progress, and manifest only when fully and fatally developed, and beyond the reach of the remedial agents at our command.

The independent function assigned to the spinal marrow is that of generating the irritability of the muscular structure, or of generating a power which, communicated to the muscles, renders them capable of answering to stimuli; sensation and volition remaining as the acknowledged functions of the brain, to which the spinal marrow is subservient, as a conductor of these functions. Physiologists formerly considered the power to contract inherent in the muscular structure itself, requiring the application of external stimulants, or the stimulus derived from the nervous centre for its manifestation.

It is with much diffidence and with every respect for the propounder of this theory that I approach the analysis of the vital phenomena of muscular action in the human structure, in health and under disease, yet it is essential that truth should be elicited and established, and I am induced to do so from a persuasion, that even admitting, "when sensation and volition in paralyzed limbs are totally extinct, the reflex

muscular actions can be more vividly produced," there are not sufficient grounds for erecting the theory that muscular irritability is a function of the spinal marrow, independent of cerebral influence, and I propose to offer a few considerations apparently hostile to its adoption. In the highly interesting correspondence between G. Combe, Esq., Professor Reid, and Dr. Laycock, recently published in *THE LANCET*, the reflex function of the brain, manifested in the phenomena of mind, is the subject of consideration, whilst only a remote allusion is made to the independence of the excito-motor function of the spinal marrow.

In the integrity of organization of the human subject, certain impressions made upon the sentient extremities of the nerves of special sense excite involuntary actions in voluntary muscles; thus, impressions on the olfactory nerves occasion the muscular phenomena of sneezing, &c.; on the auditory nerves, involuntary startings; an extraneous body in the eye excites the orbicularis palpebrarum; impressions upon the cutaneous periphery of the nerves of general sensation, as tickling, produce those muscular actions which present to us the phenomena of laughter, and which, in some sensitive subjects, extend to the extremities and require the exercise of a powerful act of volition to control. These are instances of impressions conveyed to the sensorium, and reflected into the muscular system, producing involuntary actions; and I submit, that although sensational and emotional, they are also excited in their character, and reflex in their form, and the brain is the necessary centre between the parts impinged and the parts manifesting motion; if removed or disconnected above the phrenics, no similar actions can be elicited. In a decapitated or decerebrated animal, the application of an irritant will occasion the development of muscular actions of a dissimilar nature, varying in intensity according to the original nervous susceptibility of the subject in a state of integrity of organization, only for a definite period, after the lapse of which, such actions cannot be produced. In these phenomena of remaining vitality is to be perceived only the development of the remnant of that power which the spinal marrow had been accustomed to transmit, a habitude of susceptibility and action still capable of answering to stimuli, not an independent function, but the remnant of a function derived and dependent, and not immediately annihilated with the more prominent characteristics of vitality. The wide domain of nature furnishes us with many analogies. We are taught, by the calculations of astronomy and optics, that if the sun, the central source of light and heat to our planetary system, were suddenly and totally extinguished, the earth would not be involved in total darkness for eight minutes after the catastrophe. In the same ratio of calculation, Saturn would not be totally darkened for an hour and a quarter, nor Uranus for two hours and a half. Would it not be equally tenable to advance, that because in the interval between total extinction and total darkness at the respective planetary orbs, a remnant of the properties of light and heat could be discovered in the atmosphere, the atmosphere itself possessed the independent power of generating them? Impressions made upon the retina are often retained for some time after the removal of the object exciting them, as in the long train left behind by meteors shooting through the atmosphere—in the performance of a circle by means of a point heated to a red heat, &c. I have known the ovum to be expelled entire at the full period of utero gestation, the placenta adherent of course, and visible externally; I have opened the membranes, discharged the liquor amnii, and felt the pulsation strong in the cord five minutes after separation from the maternal system. I could adduce many other examples illustrative of the persistence or habitude of actions, but I am unwilling to be prolix.

In an encephalous infant we see instances of an arrest of growth and development in the centre of the nervous system. The cause of that arrest has, I believe, hitherto eluded research; but it is not improbable that that living structure, during intra-uterine existence, received the same amount of circulating fluid from the maternal system as would have been contributed had its organization been fully completed. Hence may be inferred the probability, that a minute examination of the spinal marrow would discover some hypertrophy of structure in these monstrosities, and that some portion of the functions proper to the brain would be exhibited, in a feeble degree, by the only structure similar to that organ, in its absence. This may also be explained by analogy. Persons who have become blind, have had the function of hearing much improved, and have even been able to discriminate accurately, by the sense of touch, things which would require the visual organ in other individuals. The obliteration of one

function seems to strengthen another dependent on a similar structure, and also to render it, in some measure, capable of performing the obliterated function. At Norwood, some years ago, I saw a boy, seventeen years of age, who had been born blind, deaf, and dumb. The olfactory, optic, and auditory nerves were equally insensible each to its appropriate stimulus; he could not utter a single articulate sound, and he possessed no voluntary power of locomotion, but possessed a most acute general sensibility on the cutaneous surface, by means of which a single touch made him aware of the presence of a stranger. His sense of taste was good.

In cases of complete division of the spinal marrow below the origin of the phrenics, occasioning a total destruction of sensation and volition in the parts below the section, it is said the reflex actions can be vividly developed, the intensity, in this case, also depending, no doubt, upon the original nervous susceptibility of the subject in a state of integrity of organization. Now when we consider how frequently the filaments from the sympathetic anastomose in the upper portion with cerebral and spinal nerves, and, in the lower portion, with the lumbar and sacral from the spinal marrow, connecting the systems of organic and animal life, and how difficult it is to disconnect them, we find that, although a complete section of the spinal marrow intercepts the direct current of sensation and volition, there is still sufficient indirect connexion with the brain to admit of the transmission of cerebral influence to the muscular system of the extremities for the maintenance of its irritability. Moreover, it is probable, that as the circulation of the blood is continued, in an extremity, by means of anastomosing branches, after the main trunk of the vessel has been tied, so after section, or other division of the spinal marrow, some cerebral influence may be communicated from the upper to the lower segment by means of anastomosis or interlacement of nervous fibrillæ, although not sufficient for the purposes of sensation and volition, which seem to require direct communication.

In the hemiplegic form of paralysis, complete as to the extinction of sensation and volition, I would explain the long-continued maintenance of the vitality and irritability of the limbs, partly by this collateral or retrograde diffusion of the nervous influence, derived from the healthy hemisphere of the cerebral organ. A low degree of vitality increases the irritability of organized structures, a fact often demonstrated by the phenomena of disease. In hemiplegia we see many varieties: it is sometimes partial, at others general; it may be complete or incomplete. Sometimes when the power of motion is completely destroyed, the sensibility is increased to a morbidly acute degree; hence, it does not appear irrational to infer, that if the extinction of the one function is attended with an augmentation of the other, when both are completely destroyed, the limbs may derive direct cerebral influence through the spinal marrow for the support of their vitality, as well as an indirect retrograde supply, by means of the anastomoses of the nervous fibrillæ on the cutaneous surface of the body. I cannot here dilate upon the numerous anastomoses of the peripheral extremities of the various nerves in the body, but I think they are sufficiently numerous to convey cerebral influence from the healthy to the diseased side. This subject is, however, one of much intricacy, owing to the varied conditions of paralysis presented to our notice, and requires the collation of multiplied experiments and observations to unravel it. It is also a subject of great interest, and the careful prosecution of it must lead to a better knowledge of the hidden sources of morbid action in the human frame, and to better and more successful modes of treatment.

Oakham, Rutland, January, 1846.

RUPTURE OF THE UTERUS.

By EDWARD C. TYTE, Esq., Harrow.

On the morning of Sunday, the 2nd of November, at six o'clock, I was called to attend Mrs. L—, in labour with her third child. The patient was in her twenty-fourth year, healthy, and well-made. I attended her three years ago, when, after a tedious labour, she was delivered of a living child. Upon my arrival, I found she had been in labour since three o'clock that morning; that the bowels and bladder had been evacuated freely, and the membranes had ruptured a few minutes before I had entered the room. Upon examining her, I found the os uteri about two-thirds dilated; the head of the child presenting, but very high up; the pelvis well formed; and the external parts dilatible. The pains were tolerably strong, coming on at intervals of five minutes, and gradually increased in intensity, under the influence of which, the os uteri became fully dilated, and the head slowly descended.

About ten o'clock the pains became very severe, recurring with very little intermission, and the head descended low in the pelvis, slightly dilating the perinæum. This state of things continued up to about twelve o'clock, when, after a very strong pain,—not more severe, however, than the preceding ones,—a complete cessation of uterine action took place, and she complained of severe pain over the lower part of the abdomen. She became desponding, exclaiming that she should die.

From the sudden cessation of the pains, and the occurrence of continued pain over the uterine region, my first impression was, that the uterus was ruptured; but finding there was no hæmorrhage,—that the head of the child had not receded,—that she had not felt anything give way internally, and had no vomiting, this idea was abandoned, and I made up my mind to wait, expecting the return of the pains.

At three o'clock p.m., finding the labour pains had not returned, that she still complained of considerable pain, and had vomited twice, I judged it necessary to have a second opinion, and, accordingly, sent for my friend, Mr. Hewlett, of Harrow, who arrived about an hour afterwards with his assistant, Mr. Curtis. We then carefully examined her. The head had receded in some degree, but was in the cavity of the pelvis; there was no impaction, and the rectum and bladder were empty, and we came to the conclusion that the pain she complained of arose from some irregular action of the uterus, excited by the violence of the pains, combined with exhaustion, and that an opiate and a few hours' rest would put a stop to it, and the labour would proceed favourably. An enema, containing forty-five drops of laudanum, was exhibited, and she was undressed and placed in bed. In about a couple of hours the opiate began to take effect; she slept between three and four hours, and awoke at ten o'clock, quite free from pain.

She now took some nourishment, and I expected, from this favourable state of things, that all would go on well. There was, however, no return of labour pains until three o'clock a.m., when slight pains came on, with the effect of advancing the head in a trifling degree; these, however, soon ceased, and her pulse began to flag, and she vomited some gruel she had taken. It now became evident her labour could not be completed without the assistance of art. Upon examining her again, the forefinger could be passed quite round the head, and Mr. Hewlett thought he felt the forehead anteriorly, which afterwards was found to be the case. It was then determined to try and deliver with the vectis, without, however, any success. The forceps were then used, and although there was a slight return of the pains, the head did not advance; finally, the head was perforated with considerable difficulty, and extracted with the craniotomy forceps; the chest and abdomen were then successively eviscerated, and the business completed. The child was of the average size, and, from its appearance, had been dead some little time. Upon applying my hand to the abdomen, I found the uterus firmly contracted, and in a few minutes the placenta was expelled, slightly putrid; there was no hæmorrhage, and the uterus continued contracted. The poor creature bore the operation, which lasted four hours, with great fortitude, appeared comfortable, and partook of some nourishment. She was, however, very much exhausted, and great fears of her well-doing were entertained. I remained with her two hours after her delivery, and shortly after my departure she began to sink, and expired at four o'clock.

Post-mortem examination, twenty-three hours after death.—

Upon opening the abdomen, there was a considerable escape of air, and there was altogether rather more than a pint of blood in the cavity of the abdomen. Upon examining the uterus, we discovered a transverse rupture, to the extent of upwards of four inches, situated in the anterior part of the cervix near its junction with the vagina; the edges of the ruptured portion were separated, and had a gangrenous appearance; the cavity of the uterus was empty; the walls of the organ were two inches and a half in thickness, and appeared free from disease. There was intense inflammation of the peritonæum throughout, with some effusion of lymph, that portion covering the small intestines being most affected. The bladder was empty. The pelvis was measured, and found to be of the natural dimensions, rather capacious than otherwise.

I think there can be no doubt that the rupture of the uterus took place at the cessation of the pains, and was caused by the violent action of the organ, and not by any previous disease of it. Had the ergot been given, this case would have no doubt furnished an illustration of its mischievous effects when improperly administered. The case is an unusual one, as none of the common symptoms of rupture of the uterus, if we except the sudden cessation of the labour pains, and the

occurrence of abdominal pain, were present. The labour had only lasted nine hours, the rupture of the membranes having taken place only six hours previously to the accident. Moreover, there was no impaction, for the head had steadily advanced, and there was no deformity of the pelvis, and there had been no interference with the labour in any way.

Harrow, January, 1846.

ON SOME ELECTRICAL EFFECTS DEVELOPED CHIEFLY BY THE GALVANIC BATTERY.

By GEORGE P. T. HILL, Esq., Filey.

On sending a current of electricity, by means of the galvanic battery, through fine metallic wires, the most refractory metals are fused with facility, and become incandescent. If thin metallic leaves be employed, they burn with great brilliancy, being dissipated into vapour. Now, on the supposition that the space between the ultimate atoms of a body, independent of the several forces that may be arranged round them, are entirely occupied by heat, I think the evolution of the latter substance, as exemplified in the above cases, may be satisfactorily accounted for. As a consequence of the law, that no two bodies can occupy the same space at the same time, we may suppose that the addition of electricity to a substance causes its heat of combination to be evolved, and thus to become sensible. Otherwise, whence arises this great increase of temperature? The caloric must obviously be supplied through the medium of one or other of the bodies employed; and if we grant this, the inquiry naturally presents itself as to what causes its evolution. Suppose M to represent a body, and B the heat of combination arranged all around it. Now, if we add to this a portion of electricity, C, on the supposition that this is material, a displacement of part of the specific heat, B, must take place, or the body be considerably enlarged. We find that heat is evolved, and must, I conceive, consider the specific heat of the body to have been lessened, for any other source from which this rise of temperature could have been derived is unknown. The form of the body remains unchanged, for, as the specific heat is replaced, atom for atom, or, rather, volume for volume, by the electricity, no condensation can possibly take place. The evolved heat now exerts its action upon the body, which, as in ordinary circumstances, assumes the liquid form, and becomes incandescent.

In these experiments we find quantity of electricity to be the sole requisite. The large battery of Children, though capable of fusing several feet of platinum wire, had an intensity so feeble as not sensibly to cause a divergence of the gold leaves of the electrometer. This is perfectly in accordance with the above theory, for it is clear that the larger the addition of electricity, the greater the diminution of specific heat, whether the tension be high or low. Did the evolved heat proceed from the electric fluid itself, we should of course expect that intensity as well as quantity would be required for the production of these effects. This we know not to be the case. I do not consider the circumstance stated by Dalton, that the specific heats of bodies are greater at high than low temperatures, to be any obstacle to the reception of the above, for, to use an expression of the late Dr. Turner, these phenomena "have been investigated only for matter when in its ordinary state, and probably do not apply in cases of electric excitement. On the other hand, increase of specific heat causes an evolution of electricity. Harris detected electricity, though in exceedingly minute quantity, in the evaporation of distilled water from platinum vessels, when the presence of any chemical action was out of the question. In this we have phenomena directly opposed to the former, but I think they may be considered no more anomalous than the fact, that watery vapour should be decomposed by metallic iron, heated to redness; and that the oxide thus generated should, in its turn, be decomposable by a stream of hydrogen gas. I apprehend, then, that there are other causes in operation, which modify the effects of these most subtle and diffusive bodies, heat and electricity. In the condensation of aqueous vapour, the objects in contact with it likewise show signs of electric excitement. For a portion of vapour contains more specific heat, and less specific electricity, than the same when liquid, and, therefore, before it can assume this form, it must receive electricity from surrounding objects, which thus exhibit signs of its emission.

No heat is evolved when a current of positive or negative electricity only is passed along a body, for in this case the repulsion of the particles confines the fluid to the surface alone, where it cannot influence the internal arrangements of the conductor.

Filey, January, 1846.

THE REPORT OF A CASE OF TETANUS SUCCESSFULLY TREATED.

By W. S. PRESHAW, Esq., M.R.C.S. Ed., St. Helier's, Jersey.

On Wednesday, 22nd Oct., 1845, I was requested to visit F. B—, aged eleven years, residing at George's Town. He complained of a slight stiffness of the neck; had pain and difficulty on moving his head, legs, &c. I inquired if he had sustained any injury. He said he had not. Ordered a smart purgative of calomel and jalap, a warm bath for twenty minutes, and an antispasmodic mixture of sulphuric ether and tincture of opium. Towards evening the rigidity of the muscles of the head and neck increased, attended with difficulty in swallowing, tightness about the chest, and inability to move the jaw; the teeth were firmly set, almost every muscle quite rigid, and the spine bent into an arch, leaving no doubt as to the nature of the case. The boy still denied having received any injury. Ordered the spine to be well rubbed with a strong liniment, and the warm bath to be repeated. Next day the boy told me that, on the previous Saturday, (18th Oct.,) while stooping at play, a person struck him with a stick over the loins. He did not seem to have felt it much at the time, but the day following said that he felt as if unable to move his legs. Examined the spine, no mark of any injury, but he complained of a slight tenderness over the lumbar region of the spine. Ordered nine ounces of blood to be removed by the cupping-glass from the spot where he seemed to feel most pain. No relief. Next day ordered a dozen leeches to the same place, and a large blister along the spine. The symptoms not relieved. The warm bath as before. Unloaded the lower bowels by a saline enema, and gave an opiate. Next day to administer two grains of calomel every three hours, with a view to affect the mouth; continued for forty-eight hours, and, although aided by the copious use of strong mercurial ointment rubbed in inside the thighs, failed in producing the desired effect. Leeches again to the spine. Acted on the bowels by a dose of croton oil, and then administered the oil of turpentine by the mouth, and as an enema. After a due trial this failed. Ordered a blister to the lumbar region of the spine, and two grains of the muriate of morphia to be sprinkled over the blistered surface, and gave the solution in large doses, and at short intervals, but without the least benefit. Several medical friends attended with me, and the above means were persevered in for three weeks. The patient was rapidly sinking from want of nourishment, &c. A physician who had seen the case, kindly sent me *THE LANCET*, of 22nd March, 1845, in which there is a case recorded by J. W. Stapleton, Esq., "On the Administration of Intoxicating Doses of Alcohol in Tetanus;" but the result not being favourable, I declined this mode of treatment. I had thought of the Indian hemp, but the conclusions of Dr. Lawrie, of Glasgow, after having tried it in twenty-six cases, gave me little confidence in it.—(*London and Edinburgh Monthly Journal of Medical Science*, Nov. 1844, p. 946.)

I was, however, inclined to try belladonna, or arnica, when the friends desired a consultation with a French physician. He advised a trial of the hydropathic treatment. Many difficulties presented. The patient was at a distance from my house: I could not receive him there, nor had I liberty to treat him at the public hospital, and the system, to be fairly tried, required more favourable circumstances than those in which the boy was placed. However, I at once enveloped him in a linen sheet, well wrung out of cold water. Over this I placed three or four good blankets, &c., so as to exclude the air, and prevent evaporation. Kept the patient in this condition for an hour, by which time the temperature of the sheet was 100° Fahr. The coverings were removed, and the patient plunged into a cold bath, rubbed quite dry, and enveloped in dry blankets for six hours, during which time he perspired very freely, and slept soundly, and said he "felt quite slack." Repeated the cold bath while in a state of profuse perspiration, and, after an interval of an hour, the wet sheet and subsequent cold bath. This was repeated every six hours, and after twenty-four hours, the jaw relaxed a little, and the spine became less bent. I now placed him under the douche for three minutes, the water falling from a height of twenty feet, and in a stream of one inch and a half diameter. Dried and enveloped in the blankets as before. Able to open the mouth a little. Ordered the sheet and cold bath as before, and ten days from the commencement of the treatment, every symptom yielded, and the boy is now quite well. It cannot be said that "cold water" is a new remedy in such cases, for Dr. Cullen, in his "First Lines of the Practice of Physic," published in 1796, p. 341, observes, "The administration of it is sometimes by bathing the person in the sea, or, more

frequently, by throwing cold water from a bason or bucket upon the patient's body, over the whole of it. When this is done, the body is carefully wiped dry, wrapped in blankets, and laid in bed, and, at the same time, an opiate is given, and, by repeating this, the patient is often quickly cured." Believing the douché to be a decided improvement on the bucket of water, and the wet sheet on the opiate, (for its effects are most soothing,) I would crave for this case a corner in your valuable journal. My medical friend, who sent me THE LANCET containing Mr. Stapleton's case, observed, that in such diseases, every contribution is valuable. With this thought, I enclose it to you.

St. Helier's, Jersey, Jan. 1846.

CASES OF MELÆNA; WITH OBSERVATIONS.

By EDWARDS CRISP, Esq., M.R.C.S., &c., Walworth.

(Read before the South-London Medical Society.)

THE subject to which I am about to direct the attention of the Society, is that of melanotic discharge from the stomach and bowels. As, however, the narration of cases is thought to be more likely to lead to useful results than the reading of studied essays, I shall content myself with a few brief observations, and then proceed to the relation of some examples of this disease which have come under my own observation.

Melæna is described to be an evacuation of grumous fluid from the stomach or bowels, varying in colour from a dark brown to a jet black, having generally the consistence of pitch or treacle; it is nearly inodorous, except when mixed with the feces.

But little, at present, appears to be known respecting the pathology of melæna, some writers believing that the discharge consists of blood in a decomposed state; others, that it is a secretion from the stomach or bowels, whilst not a few are of opinion that it is solely a product of the liver, arising from a vitiated state of the biliary secretion. It would, I think, be out of place, on the present occasion, for me to discuss the merits of the foregoing theories; these are matters I shall leave to the consideration of my hearers.

I believe that one of the most frequent causes of melæna is obstruction to the passage of the blood in the intestinal, splenic, coronary, or portal veins; this obstruction may arise from various causes, such as enlarged glands, scirrhus, fungous, melanotic and other disorganizations of the liver; in short, any impediment to the passage of blood to the vena cava is, I think, likely to produce congestion of the portal and intestinal veins, and the consequent discharge of highly carbonized blood. Another very probable cause, in some instances, is a deteriorated condition of the blood itself, in consequence of which it escapes from its containing vessels, (as in the first case.) I am induced to think, however, (contrary to the opinion of some writers,) that this evacuation has often a salutary tendency, by unloading the portal system of superfluous and vitiated blood, and that it may not unfrequently—as in the second, third, and fifth cases—indicate a favourable crisis.

Treatment.—Where this discharge is consequent upon disorganization of the liver, (as in the fourth case,) but little permanent good can probably be expected from medical treatment. In other instances, in which simple congestion, with functional derangement only appear to exist, the administration of an occasional brisk purgative, followed by mild mercurials, with attention to the state of the skin, will often effect a cure.

In the more formidable examples, where the blood itself appears to be diseased, and the exudation is probably from a large extent of surface, the mineral acids and the oil of turpentine are likely to be most serviceable. I am disposed, judging from the recorded cases, to place more reliance on the latter. I have only tried it in one instance, which (as will be seen) terminated fatally; the medicine, however, had scarcely a fair trial, as it was not administered until a late period of the disease.

CASE 1.—June 27th, 1839, I was requested to see Mr. G. W—, aged 58; he is about six feet four inches in height; his appearance is now rather pale and emaciated, and he stoops in his walk. I learn the following particulars from him:—Was in the army for thirty years, (serjeant-major in the Lancers,) and has seen a great deal of service in Walcheren, South America, and the Peninsula; at the first place he had fever. He says his habits have always been temperate for a soldier. During the last two years his health has not been so good as formerly, and for the last six months he has had

frequent pain in the left side and over the epigastric region, sometimes extending between the shoulders. He suffers much from flatulence, and now complains of pain over the region of the stomach, which is much increased on pressure; a slight disposition to vomit; bowels costive; motions dark-coloured; urine rather small in quantity, and deposits much purpuric sediment; pulse 104, and feeble. Six leeches to be applied to the epigastrium, and a blister, and to take effervescing mixture.

June 28th.—Less pain, and says he is better.

He continued in the above state till the 12th of July. The pain in the epigastric region, however, was seldom complained of, and he could bear pressure without uneasiness. The motions were always of a dark leaden hue, and very offensive; the pulse feeble, and never under 98, sometimes 120. He is more debilitated than when I first saw him. I met Mr. Baker, of Bulstrode-street, on the 29th, who saw him with me every four or five days. Mr. Baker had formerly attended him. The treatment consisted in the administration of mild mercurials at night, followed occasionally by a brisk purgative in the morning, and five or six drops of prussic acid three or four times daily.

On the 12th of July he passed several black, pitchy motions, and vomited a large quantity of fluid blood, became exceedingly weak, and Mr. Baker, who happened to be present, gave large quantities of brandy. I administered two or three doses of the diacetate of lead, and seeing Dr. Blundell pass, I called him in. He agreed to my suggestion to try twenty drops of spirit of turpentine every four hours, and tincture of opium, twelve drops, every two hours.

July 13th.—Has passed a restless night, but slept at intervals; no return of the hæmatemesis; pulse very feeble, 104; no pain on pressure over any part of the abdomen; bowels relieved three or four times; motions still melanotic, having a peculiar odour. Spirit of turpentine, ten drops; tincture of opium, ten drops, every four hours.

July 14th.—Better; no vomiting; bowels not relieved. Administered four or five purgative enemata, when a quantity of the same melanotic matter passed from the bowels. Omit the turpentine and opium, and take infusion of roses, one ounce and a half, every five hours.

July 21st.—Since the last report, there has been no bleeding from the bowels, but the motions are of a dark leaden colour, and very offensive. The pulse is sometimes not more than 98 in the morning, but towards evening it is generally 104 to 110. He has had but little pain in the abdomen, and complains less of flatulence.

July 23rd.—Much in the same state; the bowels do not act without enemata; the motions still of the same colour.

July 25th.—Appeared to be going on very well till four o'clock this morning, when he suddenly became faint, cold, and pulseless, and died at ten A.M. Could not prevail on the wife to consent to a post-mortem examination.

CASE 2.—July 31st, 1845.—I was requested to visit Mrs. M—, Camberwell, a stout, healthy-looking woman, aged seventy-five. For the last two or three days she has been affected with rigors, followed by heat of skin, &c. There is great pain and uneasiness over the abdomen, which is considerably distended with flatus; bowels relaxed. The symptoms gradually became more unfavourable, the tongue brown, muttering delirium, pulse feeble, fixed pain over the region of the liver, &c. A few days after I first saw her, and when I entertained but slight hopes of her recovery, a large quantity of dark pitchy fluid was passed from the bowels. The discharge of this fluid continued for four or five days, when the motions became solid and natural in appearance; the symptoms gradually improved, and she is now, (October 22,) considering her advanced age, in a tolerable state of health. The treatment consisted in the administration of aperients, with febrifuge medicines, and occasional doses of mercury with chalk, and opium; these followed by quinine, with sulphuric acid. Ten leeches were applied to the side, and hot fomentations frequently used.

CASE 3.—Sept. 27th, 1845.—I was called to Mr. B—, Walworth, aged sixty, whom I have attended at intervals for several years for severe pains in the region of the stomach and liver. He has been, also, subject to violent palpitations of the heart, arising, probably, from hypertrophy of the left ventricle, and diseased aortic valves. During the last four or five days, the pains over the stomach and liver have been more than usually acute, and yesterday morning he became very faint. On my arrival I was shown a solid hard motion, which he had passed: the upper part of this was of a natural

colour, but the remaining portion was of a jet black throughout. In another vessel was a large quantity of black pitchy fluid, which had been recently passed. The next day more of this fluid was evacuated; the motions then became natural in appearance. Hydrochloric acid was taken daily for a short time, with an occasional aperient.

Oct. 22nd.—Since the last report he has had very little pain in the region of the stomach and liver, and he says that he has not been so free from suffering for many months.

CASE 4.—Sept. 14th, 1845.—I had an opportunity of seeing the under-mentioned case, which was for some time under the care of my friend, Mr. Statham, of the Wandsworth Road, who has furnished me with the first part of the following notes:—

"Mr. W—, aged forty-two, a hatter by trade in the earlier part of his life; has been, in the course of his occupation, in the habit of pressing hard upon the region of the stomach; for several years past has assisted his brother, who keeps an inn; habits intemperate. He applied to Mr. Statham at the commencement of March, in the present year, when he complained of uneasiness in the epigastrium, anorexia, constipated bowels, dry cough, lassitude, and loss of flesh and strength. About a month after he came under treatment, he was suddenly seized, after having eaten more heartily than usual, with syncope, followed by extreme prostration. He was conveyed to bed, and had every appearance of approaching death, the syncope frequently recurring, attended by slight convulsions. It was then, for the first time, discovered that he was passing evacuations having the character of decomposed blood. He was seen by Dr. Silvester, who was of opinion that the liver was diseased. There was tenderness on pressure in the epigastrium, and in the right hypochondrium, with some degree of dulness in the former situation; on percussion, but no perceptible enlargement of the liver. The treatment had recourse to, consisted of small doses of Epsom salts, with tincture of hyoscyamus, in camphor mixture, and occasional doses of mercurial pill, with beef tea and milk. In the course of a few days he rallied, and the evacuations lost their melanotic character; but after this time, they varied much in appearance, generally exhibiting a deficiency of bile, and occasionally a scum on the surface, which reflected various rays of light, and was very similar in appearance to that seen in the refuse water in gas manufactories. On a few occasions the evacuations were of a bright-orange colour. He was put under a course of tonics, and sent into the country; but he continued to lose flesh and strength, was ghastly pale, and had little or no appetite. At the end of July he returned home, having had another attack of melæna, accompanied by the same prostration as before, which confined him to his bed, from which he did not again rise.

The principal symptoms are as follow:—great emaciation; bowels irregular, generally relaxed; the motions sometimes bilious, at others of a dark melanotic hue; he complains of great uneasiness in the epigastric region, with frequent inordinate pulsation of the abdominal aorta; this vessel about the celiac axis is now pulsating with great force; the pulsation is continued down to the iliacs and femorals, but appears to diminish much in power. The sounds of the heart normal, and its impulse not greater than natural; pulse at the wrist about 98, and rather feeble; the pulsation of the carotids rather more feeble than natural.

Sept. 28th.—I again saw him and examined the aorta with great care; on applying the ear no bellows sound is heard, but the impulse of the artery is very great; the femoral arteries not beating more forcibly than natural.

He died October 7th; I assisted Mr. Statham in the examination of the body twenty-four hours P.M.; great emaciation; heart normal; lungs healthy in structure, but the lower and posterior part of the right infiltrated with serum. The surface of the lungs presented a dark mottled appearance, the black spots resembling those seen in punctiform melanosis. The large arteries of the chest and abdomen did not exhibit a vestige of disease. On opening the abdomen, the liver was seen studded with numerous white tubercles, varying in size from a nut to a hen's egg; some of these were rather hard and of a brainular appearance, but the greater number were soft, the matter resembling lard;* the softening appeared to commence in the centre of the tumour. The posterior part of the right lobe of the liver much larger than natural; the

gall bladder was full of dark bile; its lining membrane very dark, softened, and rugous; the spleen normal, but between this organ and the cardiac end of the stomach was a tubercle, like those before described, as large as a pigeon's egg. The aorta, on removing the abdominal viscera, was seen diverging slightly to the right, and passing under another of these tumours, about the size of a small hen's egg, lardaceous in the centre, and harder towards the sides; it was situated about half an inch below the celiac axis; the aorta at this part was of its natural calibre, and quite healthy; the lining membrane of the stomach ecchymosed in several places; its contents had a feculent smell; the small intestines healthy; kidneys rather congested, but otherwise normal. Brain not examined.

CASE 5.—June 1st, 1845: I was requested to attend Miss A—, Charlotte-place, Walworth, aged eight; she had enjoyed a tolerable state of health until within the last few days, but now complains of violent pain in the abdomen, coming on suddenly, and at intervals; the bowels are frequently relieved; tongue furred in the centre, and red at the tip and sides; skin dry; no tenderness on pressure over the abdomen. Hot fomentations, and the following mixture: chalk and acacia powder, of each forty-five grains; wine of ipecacuanha, twenty minims; tincture of opium, twelve minims; dill water, three ounces; of which take a fourth part every five hours.

6th.—Since the last report, the pain has been less severe; the bowels not so much relaxed; there is slight tenderness on pressure over the lower part of the abdomen; tongue furred. Hot fomentations to be continued; six leeches to the abdomen; a febrifuge draught with solution of acetate of ammonia, anti-mony wine, tartrate of potass, every five hours.

7th.—The pain and tenderness relieved, and all the symptoms improved. Continue the medicine.

20th.—Since the above report the pain has been very severe at intervals; the pulse, during the paroxysms, is seldom more than 85; and pressure in the abdomen appears to afford relief. The bowels are rather relaxed, the motions light coloured, very offensive; sometimes they are mixed with a small quantity of pus and blood. The hot fomentations have been continued; mustard poultices and a blister applied to the abdomen; small doses of mercury and opium.

July 9th.—The pain, since the last report, has been more severe and frequent; the child screams during the paroxysms, and her sufferings are very acute; the pulse not accelerated at these periods, and hard pressure still affords relief. The abdomen of its natural size; there is slight sickness occasionally, (but this may arise from the opiates;) the bowels now rather confined, the motions of a more natural colour; complains of pain in passing the urine, and it is a long time in evacuating the bladder; the urine not albuminous. The appetite has been sometimes craving and ravenous, but during the last few days she has taken but little food. Opiates, hot fomentations, and small doses of sulphate of copper, have been the principal means tried.

10th.—Feeling that the case was involved in much obscurity, I was anxious to have another opinion, and I requested Dr. Barlow to see the child. I felt at a loss to discover the exact nature of the disease, but I thought ulceration of the intestine the most probable, although abscess of the liver or mesenteric glands, extraneous body in the appendix vermiformis, and fungus hæmatodes, all occurred to me. Dr. Barlow directed my attention, after a careful examination of the abdomen, to a circumscribed, soft swelling, about the size of half an orange, under the right lobe of the liver, and situated partly in the epigastric region. As the bowels had not been relieved for two days, we thought this might arise from distended colon; no tenderness is felt on pressure. Dr. Barlow believed that there was probably ulceration of the intestines, with tubercular disease of the peritonæum and mesenteric glands. He advised linseed poultices to the abdomen, and the following:—Chalk, with mercury, four grains; ipecacuanha powder, two grains. Make into a powder, to be taken immediately.—Castor oil, two drachms; tincture of opium, three minims. To be taken immediately.—Bicarbonate of potass, one scruple; syrup of white poppies, two drachms; gum water, half an ounce; aniseed water, three ounces. Mix, and take a fourth part every six hours.

11th.—This pain very severe, with but slight intermissions; not increased on pressure. This morning she became insensible for four or five minutes, apparently worn out by the pain. No sleep; pulse 90; tongue white and furred; bowels relieved twice, the motions fluid, very offensive, and of a yellow colour; she complains now of pain in the back, which extends down the thighs and legs.

12th.—9 A.M.: The pain more severe than before; she

* This probably weighed two pounds. Dr. Gull, of Guy's Hospital, was kind enough to examine these tumours microscopically; he says "they presented an aggregation of compound cells, varying in size from the 1-35000th to 1-4000th, most, however, of the former magnitude. There were but few fat cells, and no plates of cholesterine."

REVIEWS.

The Nature and Treatment of Cancer. By WALTER HAYLE WALSH, M.D. London: Taylor & Walton. 1846. pp. 590.
(SECOND NOTICE.)

IN the division of the work devoted to "Cancer of particular parts," Dr. Walshe says—

"I propose, in this division of the work, to describe cancer of the various organs, tissues, and parts, in which, with greater or less frequency, the disease presents itself in actual practice. The full consideration I have given the general history of the malady, will obviously lighten the task of describing the character it presents when infesting particular localities; and it is likewise plain that the disease will require to be most carefully described in those organs, where, from some special circumstances, it swerves more or less widely from the general type of cancerous affections. It is for this reason that the description of the disease in some organs runs to a greater length than might, perhaps, seem warranted by their comparative importance."

In the execution of this plan, descriptions of the disease are given, according to its modifications in particular organs or localities, and also the special adaptations of treatment which are necessary. The order in which the disease is traced is as follows:—The digestive organs and appendages, the respiratory organs, the organs of circulation, the lymphatic and lacteal systems, the urinary and genital organs, the breast and appendages, the nervous system, the organs of locomotion, cancer of organs of unknown function, and of the subcutaneous cellular tissue. It would, however, be impossible to enter into these multifarious topics within the limits of a review, we must therefore refer those of our readers who wish to pursue the subject to the work itself, when they will find the general principles which the former part of the work contains, skilfully applied to particular cases.

In giving a general estimate of the nature of the work as a contribution to medical science, the chief points to be noted are, that some interesting points in the formation and anatomy of cancer are advanced a step; some facts are also developed to their legitimate conclusion; the microscope has done something, but we hope not all that it is capable of effecting; organic chemistry remains for some other investigator; the small chances of success held out by ablation are more cogently dwelt upon than by other authors, and the individual cases in which it may be applied, marked, perhaps, with greater accuracy. With regard to other points of treatment, the chief reliance is placed on the iodide of arsenic and mechanical pressure as applied by Dr. Arnott. With respect to the treatment by pressure, which is the point most dwelt upon, the cases we have known submitted to it have not been so favourably affected as we could have hoped or expected from the general report of its efficiency. Altogether, as regards the treatment of cancer, the profession is in a less sanguine state than formerly. So many remedies have sunk into oblivion, after a brilliant, though short-lived reputation, that all new remedies must now pass through a terrible ordeal before they can take a place as anti-carcinomatous. The last generation placed great faith in excision; our more correct methods of observation have removed this hope, and, unfortunately, have not substituted an equally universal one in its place. The greatest advantage has been, that a surer diagnosis has relieved numbers from the dread of this disease, about whose cases there would formerly have been all the horrors of doubt. We must even give the gloomiest interpretation of which it is susceptible to the general summary of Dr. Walshe respecting undoubted carcinoma.

"Cancer is a disease of constitutional origin, anatomically characterized by the presence of encephaloid, schirrous, or colloid growths, which, while they vegetate and decay in their primary site, influence, in special modes, the surrounding structures, and tend to spread, by a progress of dissemination through the system; a disease liable to originate at all periods

screams frequently, and throws herself about; her mother has much difficulty in keeping her in bed; no sleep; she is greatly emaciated, and the countenance has a death-like appearance; the swelling felt yesterday is now very indistinctly, if at all perceptible. A medical friend, Mr. Beane, of Peckham, who saw the child with me, says he cannot discover it. A draught, with twenty-five drops of laudanum, to be taken directly, and repeated in the evening; the warm bath to be again used.

13th.—Has slept for two or three minutes, at intervals, during the night; the pain as severe as yesterday. She frequently asks to have the back and abdomen rubbed, and when a mustard poultice is applied, she says it does not "burn enough."—Twelve A.M.: I was requested to see her directly, as she was supposed to be dying: I found her insensible. The pupils much dilated; pulse small, feeble, and frequent; breathing quick; extremities cold; with a death-like appearance of the face. The abdomen, for the first time, tympanitic. I ordered wine to be given as soon as she could swallow; but I thought the case hopeless.—Four P.M.: Much in the same state; has swallowed two or three teaspoonfuls of wine.—Ten P.M.: The symptoms much as before; but she appears a little more sensible.

14th.—During the night, a large quantity of dark, pitchy-looking matter has passed from the bowels; it has a very offensive smell, and its expulsion was attended with the discharge of flatus. The bed upon which the child lay was soaked through, and Mrs. A— thinks that the quantity of thick dark matter, with fluid, amounted to three quarts. I examined it carefully, and it resembled that which I have seen pass from the bowels in cases of melæna. The fulness about the epigastric region has now disappeared, and the abdomen is flat and empty. She has continued insensible, but she talks incessantly. Pulse and breathing quick; extremities cold; has drank a little milk and water.—Three P.M.: Much the same as in the morning. Tincture of opium, ten minims; syrup of poppies, two drachms; aniseed water, two ounces. Make a mixture, of which take a fourth part every five hours.—Eleven P.M.: Talks incessantly; but her mother thinks she is a little sensible at intervals. Bowels not relieved since the morning.

15th.—Has had two hours quiet sleep, (the first for some days, although large quantities of opium have been given both by the mouth and rectum) is more sensible; no tenderness over the abdomen, which is quite flat; the bowels scantily relieved; motions fluid, rather dark, but not at all resembling the tarry matter before mentioned. Repeat the medicine.—Ten P.M.: Symptoms rather more favourable than in the morning.

16th.—Has passed a better night; answers questions rationally; but the countenance looks wild, and her manner is flighty. The bowels relieved twice; the motions solid, and of a natural colour; complains of hunger. I ordered her to take beef tea, milk, and rice. Repeat the medicine.

17th.—Rather better. Repeat the medicine.

18th.—Complains of headach, but is improved in other respects; bowels rather confined; motions solid and light-coloured. Dilute hydrochloric acid, half a drachm; syrup of red poppy, one drachm; water, three ounces. Mix, and take a third part three times a day. Powder of rhubarb, chalk with mercury, of each three grains; powder of ginger, one grain. Mix them into a powder, to be taken at bed-time.

19th.—Better. Repeat the medicine.

22nd.—Still improving. This morning a substance about two inches long, and half an inch wide, passed from the bowels. On a careful examination, I find it to be muscular fibre, with a portion of tendinous covering. The child has not eaten animal food for two or three weeks.

August 10th.—Has been staying at Gravesend for three weeks, and is now in good health.

October 16th.—Appears now to be better than before the attack.

I am especially anxious to direct the attention of the Society to the last-mentioned case, as it appears to me to present some features of more than usual interest. The non-acceleration of pulse in the paroxysms of pain, although a remarkable circumstance, has also been observed during the passage of gall-stones. I beg, in conclusion, to put the following queries to the members of the Society. What was the cause of the intense pain which the poor girl so long endured? Was the melænotic matter contained in a cyst, or was it an exudation of blood from the mucous membrane?

of existence, in both sexes,—in all social conditions,—in all climates, and in some rural districts; but becoming more and more common with advancing age; affecting females to nearly thrice as great an extent as males; as rife among highly civilized populations as it is rare among the comparatively barbarous; traceable, in some instances, to mental affliction, and, in all, in ultimate analysis, to predisposition, (hereditary or acquired;) attended by a peculiar group of symptoms, its special cachexia; habitually running a chronic course, yet occasionally assuming all the rapidity of progress appertaining to acute affections; terminating, in the great majority of cases, when left to itself, by death, but in some instances undergoing spontaneous suspension or cure; imperfectly amenable to treatment, either local or general, yet unquestionably yielding to such treatment in a certain proportion of cases; and incurable, except in the rarest instances, by the extirpation of any formation constituting the local anatomical evidence of its existence."

The "some instances," and the "certain proportion," are, we fear, few and small; may we hope that the knowledge of this will stimulate the cultivators of medical science to renewed and more successful efforts for the subjugation of cancerous disease.

With respect to the literary merits of Dr. Walshe's work we have a mixed feeling. In some instances, as our readers will see from the passages quoted, the style is elevated and forcible; but it often wants clearness, and is occasionally circumlocutory. There is a fondness for new scientific terminology not always conducing to elegance or expression. The whole work would readily admit of condensation to a considerable extent. It might almost be said of it, that it is more heavy than it is weighty.

Dr. Walshe was once unfortunate before in translating Louis on Phthisis, without making any reference to the previous translator, Dr. Cowan. The profession will again think it strange that he should have written a work on cancer without mentioning Mr. Kiernan. Though Mr. Kiernan has not published specially on the subject, it is pretty generally known that he has been collecting specimens, and investigating the anatomy of cancer for the last ten years. Some of his views respecting the presence of varicose capillaries in morbid growths were elicited in a correspondence with Dr. Hake, a few years since, and it further appeared that, at that time, Mr. Arnott, Mr. Tyrrel, Mr. North, and others, were familiar with and highly appreciated them. Surely good taste should have dictated the necessity of at least referring to such a matter, while treating of the origin and formation of carcinoma; more particularly as bibliographies are appended to each division of the present work, and as there are no lack of references as foot-notes. Indeed, authoritative names are so plentifully sprinkled over some of the pages, as to give them somewhat the appearance of a copious bibliography, with interspersed remarks; and, in the preface, the author plumes himself not a little on the generosity which gives to every man his due! "It has," he writes, "been my constant aim to render scrupulous justice to the labours of those who have been engaged in similar investigations (!) No matter how trivial the fact, or how obscure the name of him who may have noticed it, I have, as far as my information permitted, attributed its establishment to its earliest observer. I have done this even in regard of no few points and inferences which had directly flowed from my own observation. I am aware that my work must, for this reason, have less of an original aspect than I might, with but a small share of the cases and facts I have collected, and without actual unfairness to any one, have readily given it. But the sacrifice, if such it may be called, (and the habits of the day would certainly justify the use of the term,) has been to me a most pleasing one." This vaniloquence is hardly reconcilable with the suppression of Mr. Kiernan and his investigations.

Nevertheless, the work, as a whole, displays great industry and pathological knowledge, and is, without doubt, the most complete monograph on the subject which this country has

produced. Of its faults we have spoken freely, conscious that it will meet with abundant laudation from other critics; but we consider it a work of high pretensions, and as such fairly amenable to severer tests than are usually applied.

Lectures on Natural and Difficult Parturition. By EDWARD W. MURPHY, A.M., M.D. Taylor and Walton. 1845. pp. 263.

THESE lectures, by the accomplished professor of midwifery at University College, have so recently appeared in our pages, and have been so warmly approved by the profession, that a lengthy review on our parts would be almost unnecessary. Dr. Murphy may be considered as representing, in this metropolis, the justly-celebrated Dublin school of obstetrics—a school graced by the talents of Clark, Collins, Montgomery, Beattie, Churchill, and others, and as such his doctrines deserve the highest respect and attention from the English faculty. Since their periodical publication, two preliminary lectures have been added, treating of the pelvis and the foetal head. The admeasurements of each are fully dwelt on, and two careful tables of the pelvic diameters in the healthy and in the diseased state, are given.

From the first lecture we quote some excellent remarks on the mechanism of parturition, a subject on which Dr. Murphy is, without doubt, the highest authority in this country. These remarks solve, in a very satisfactory manner, an apparent impossibility in obstetrics—namely, the safe passage of the foetus in cases where, after the utmost compression of the foetal head compatible with the preservation of life, the bi-parietal admeasurement equals or exceeds the antero-posterior diameter of the pelvis, with which it is in relation during the first part of labour, when the head passes the brim of the pelvis.

"The bi-parietal admeasurement of the head is generally stated to correspond to the conjugate or antero-posterior axis of the brim; and as the former is three inches and a half, the latter four, only half an inch is allowed for the soft parts, even in the best-formed pelvis; consequently, the least diminution of the conjugate axis causes a difficulty, a greater one becomes an obstruction. Hence, among accoucheurs, it has been an anxious problem to determine the smallest conjugate diameter (as it is improperly called) through which the head can pass without destroying the child.

"Its solution has been attempted by comparing the bi-parietal measurement of the head with the conjugate of the pelvis; and it has been stated by Dr. Joseph Clark, (a high practical authority,) that if the conjugate be less than three inches and a half, a living child cannot pass the brim of the pelvis. But in all these discussions, it has been too confidently assumed that these two measurements of the head and the pelvis exactly coincide. They do not do so; on the contrary, as the head is entering the pelvic cavity, the parietal protuberance next the pubis descends lower than that next the sacrum, so that the bi-parietal axis lies obliquely downwards, and so it remains, more or less, until the occiput escapes under the pubis. The part of the head, therefore, which would be felt lowest in the pelvic cavity is this parietal bone. By this means nature avoids the difficulty which would often arise if both parietal protuberances descended in the same plane.

"Thus you perceive that the head slightly rotates on its longitudinal axis also; and in order to effect its passage through the pelvis, combines four distinct movements—two of them upon the vertebral column, one in the lateral, and one in the antero-posterior direction; two on the head itself, one on its longitudinal, and a second on its transverse axis. By the combination of these motions the passage of the head is ultimately effected."

Besides the additional lectures, new engravings, illustrative of the application of instruments in the living subject, have been added, and the points of doctrine contained in the whole series have been concentrated in an aphorismal form at the end of the volume. A number of engravings are also given, representing the various instruments which have been used, in midwifery, since their first introduction in practice: everything is given in this department, from the simple vectis of Roonhuysen to the more complicated perforator of Naegelé, and the cephalotribe of Baudeloque.

Throughout there is abundant evidence of a mind perfectly master of the subject, handling the more difficult points with the greatest ease and facility. Dr. Murphy seems to be even more familiar with the tragic difficulties of obstetric practice, and the modes in which they may be evaded, surmounted, or relieved, than with the routine detail of natural labour. This is more particularly the case in all that relates to difficulty arising through accidental departure from the natural mechanism of parturition, and from disproportion between the parturient passage and the head of the foetus. As a consulting practitioner in cases of this kind, Dr. Murphy's abilities, and his former great experience, mark him as deserving the highest eminence. The whole of these lectures, which refer to difficult and laborious labours, and to the application of instruments, will be found of the very greatest value; and the ethical question as to the propriety of destroying the child in certain cases, or inducing premature labour, and the relative value of the lives of the mother and the foetus, are treated of in a more satisfactory manner than we have elsewhere seen. The sum and substance of all being included in three principles, which are consistent alike with humanity and the highest morality. These are—

I. *To preserve the lives of the mother and child.* If this be doubtful—

II. *To preserve the life of the mother without reference to the child.* When this cannot be done—

III. *To save the child if possible.*

Bearing these principles in mind, the practitioner will be saved much conscientious doubt and anxiety in the management of cases where the lives of either mother or child are in danger.

Dr. Murphy has in one instance only alluded to the reflex-motor action of the uterus—namely, when speaking of the contractions excited by the withdrawal of the hand after its introduction to remove the placenta. Would it not have been well to have taken a more extended view of the reflex phenomena concerned in practical midwifery? The subject would have been worthy of Dr. Murphy's reputation. The original views of Dr. Tyler Smith on the reflex physiology of parturition, published in this journal, have already received the sanction of Dr. Carpenter, in the second edition of his work on physiology; and a still greater authority has pronounced that—*"The next improvement in the obstetric art will arise from the application of our knowledge of the excito-motor principle to that department of medicine."*

There is a peculiarity in the practice of Dr. Murphy, relative to the management of the placenta, which well deserves consideration. He prefers to effect its separation from the uterus, at the time of the expulsion of the body of the child. All his directions on the point tend to effect this object. When the placenta is retained after the birth of the child, he maintains the propriety of passing the hand up behind it and removing it thus in preference to traction by the cord, as generally practised. The following selection from the aphorisms will exemplify these views of the professor. After recommending that, in supporting the perineum, the pressure should be made with the right hand, the left being placed over the hip so as to command the uterus, he proceeds—

"As soon as the shoulders and thorax of the child are delivered, it can respire, and is, so far, beyond danger; no haste should, therefore, be used in extracting the body and lower limbs; it is preferable to allow the uterus gradually to expel them, and while it is doing so, the left hand should be immediately applied over the fundus, in order to maintain a moderate pressure upon the uterus while it is distending towards the pelvis.

"Pressure should then be maintained either by a temporary bandage or by the hand of an assistant, and the funis tied and divided. Apply a strong ligature of housewife thread, bobbin, or narrow tape, about two inches from the umbilicus, and a second about an inch farther. You must be careful to see the part of the funis you are dividing, lest the fingers or any part of the child should be in your way; and also to examine the cut surface of the umbilical portion. The blood should

be squeezed out of the vessels, and the surface wiped with a napkin, for the purpose of detecting any oozing hæmorrhage that might take place if the funis were not properly tied.

"The hand may be applied to the fundus, and a very moderate pressure is often sufficient to expel the placenta completely out of the vagina; but if not, it can be drawn out by the funis quite easily, directing the traction in the axis of the vagina. But if the uterus should not obey the stimulus at first, do not persevere; it is always more advisable to wait for some time than to use too much irritation; neither should you attempt to remove the placenta by the funis alone.

"If the placenta be not separated in the first instance, wait for an hour, and again, by pressure, excite the action of the fundus. This should be brought as nearly as possible towards the centre of the pelvis, and grasped firmly by both hands. As soon as the fundus becomes hard, strong pressure upon it is generally sufficient to cause the expulsion of the placenta; if it should not, do not use any violence; rather let the nurse, under your direction, maintain the fundus in the same position while you pass the fingers, and, if necessary, the hand, into the vagina, in order to stimulate the uterus to contraction.

"In order to remove the placenta, the funis should be held firmly in the left hand, and the fingers of the right hand passed along it within the vagina. Sometimes this alone excites contraction; but if not, all the fingers, in a conical form, may be introduced within it as far as the os uteri. You will often find a large portion lying at the upper part of the vagina; you may even feel the insertion of the funis, but do not attempt to withdraw it. Pass the hand still towards the os uteri, and, by irritating it, the portion of the placenta that lies within the cervix is often detached. If this be not sufficient, withdrawing the hand along the vagina for a short distance will excite contraction; but if both means fail, the finger must be introduced within the os uteri, when the upper part of the placenta may be grasped, and the whole removed. The assistant should press on the fundus while the hand is being withdrawn. The placenta should never be drawn away by the lower portion."

In conclusion, we cordially recommend this volume to the libraries of our readers, and we hope Professor Murphy will some day publish an equally effective brochure on those points of midwifery practice which have been necessarily omitted from the present volume.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE CHAIR WAS TAKEN AT THE USUAL HOUR.

CASE OF CONGENITAL CYANOSIS OF FORTY YEARS' STANDING, DEPENDING UPON PATULOUS FORAMEN OVALE, AND OBSTRUCTION IN THE PULMONARY ARTERY. By ROBERT J. SPITTA, M.B., Lond., House Surgeon to St. George's Hospital.

(Communicated by PRESCOTT HEWETT, Esq.)

The patient, in this case, was a lady, aged forty, of diminutive stature, and pigeon-breasted, but without any positive deformity. She had cyanosis from birth, indicated by blueness of the cheeks, lips, and tongue. The heart's action was said to have been regular when at rest, but sudden exertion produced palpitation and dyspnoea. She suffered very much from cold. In March, 1845, she was suddenly seized (while at rest) with dyspnoea and partial syncope, accompanied by convulsions, and afterwards, with intense pain, referred to the epigastrium, loins, and hypochondria. This condition lasted twenty-four hours, when she died. The patient had previously suffered from four serious attacks of a similar nature—in 1840, in May and September, 1844, and in February, 1845, six weeks before her death. In November, 1843, she had also anasarca of the abdomen and lower extremities, from which she completely recovered, and never afterwards became dropsical.

The author having only seen the patient casually, was unable to give any accurate information respecting the sounds of the heart. She had never suffered from rheumatism.

The following are the post-mortem appearances observed about the heart:—The organ was heavy and firm, and somewhat enlarged. The hypertrophy was chiefly on the right side, the right ventricle being as thick as the left, and the right auricle three times as thick as the left auricle. The foramen ovale was patulous—the opening about four lines in diameter. The auriculo-ventricular valves were thickened, but moveable; the aortic valves healthy. Above the semilunar valves of the pulmonary artery an adventitious membrane was stretched completely across; it was a line in thick-

ness, and perforated in its centre, not by a circular foramen, but by a mere slit, with margins of a red colour, and fringed with fibrine of the blood. The three semilunar valves were thrown up, as they are naturally during the systole of the heart, and fixed in that position by the adhesion of (what would have been) their free borders to the adventitious membrane.

The author concludes with the following deductions:—

1. From the presence of cyanosis immediately after birth, and the absence of rheumatism during life, the adventitious membrane was a congenital malformation.

2. That the hypertrophy of the right side of the heart was the consequence of the obstruction in the pulmonary artery.

3. That as either an obstructed pulmonary artery, or a patulous foramen ovale, may exist separately without the blue disease, the cyanosis in this case was the result of the two lesions combined.

4. That the circulation of imperfectly oxygenated blood impaired no function so much as the formation of animal heat.

The CHAIRMAN did not recollect having heard of a case in which cyanosis had existed for forty years, and inquired the experience of the members on that point.

Dr. MAYO related a case, which he had published some time since in the *Medical Gazette*, of a woman, fifty-six years of age, who, on being suddenly frightened on recovering from bronchitis, was immediately seized with all the symptoms of complete cyanosis. After death, the foramen ovale was found to be patulous to the extent of half-a-crown. The edges of the opening were smooth, and bore evidence of the deficiency being congenital. The sudden occurrence of the cyanosis in this case might lead to the suspicion that an increase in the aperture had suddenly occurred, but this was not the case; the phenomena were explicable, on the assumption that some compensating power existed, by which, prior to the fright, the circulation of the blood was carried on in a normal manner.

Mr. TOYNBEE had noticed three distinct sets of cases in which the septum of the auricle was partially incomplete. In the first, the opening was of a valvular kind, and was situated at the circumference of the fossa ovalis. In the second, the opening or openings were not valvular, and were situated towards the outer of the fossa ovalis, and their edges were very thin. In the third class of cases, the orifices, like the second, were not valvular, were towards the middle of the fossa ovalis, and their edges somewhat roughened and thickened. The first class of cases was the most common, was congenital, and denominated "partescence of the foramen ovale." In the second class, the deficiency occurred during life, as the result of gradual atrophy of the septum. The third occurred also during life, and appeared to be the effect of inflammation terminating in ulceration. From which of these causes did the deficiency arise in the case before them? Death might have resulted from the sudden giving way of the septum, but in all such cases he believed immediate death was the result.

Dr. SPITTA believed that in his case the opening was congenital, from the circumstance of there having been no ulceration, and from the general history of the case.

Dr. CURSHAM remarked that a patulous condition of the foramen ovale frequently existed in cases of phthisis. Mr. Abernethy had considered this condition to be the result of an effort to relieve the respiratory organs, by allowing the blood to circulate through both cavities of the heart, without passing through the lungs.

Mr. PRESCOTT HEWETT said, that in Dr. Spitta's case the opening was valvular. He mentioned a case in which there was a direct communication the size of a shilling between the two auricles; the edges of the opening were round, smooth, and thicker than the other portions of the septum. The heart was hypertrophied, and its cavities dilated; the two layers of pericardium were firmly and extensively adherent. This man had followed a laborious employment for years, but cyanosis had never developed itself.

Mr. TOYNBEE said that when a communication between the auricles took place slowly, even if by ulceration, no cyanosis took place; but if the communication were sudden and large, cyanosis resulted, and death ensued.

ON THE ADVANTAGES OF SUBMUCOUS TENOTOMY, FOR THE RELIEF OF STRABISMUS. By C. BROOKE, M.B., Cantab., F.R.C.S.E.

The author remarks that this operation does not at the present day prefer any claim to novelty, having been long since proposed and practised; but as the physiological reasons which appear to render this mode of operating preferable to any

other, as being more likely to avoid the usual sources of failure, are very conclusive, and have not, as far as he is aware, been clearly pointed out, the subject may not, perhaps, be considered unworthy the attention of the Society.

The occasional return of the strabismus as a consequence of the ordinary mode of operating by a free division of the conjunctiva may be explained on the physiological principle, that whenever a superficial wound of which the edges are capable of being approximated is allowed to heal by granulation, and to cicatrize, so strong is the tendency of nature to restore the continuity of the normal integument, that although a cicatrix of considerable width may at first appear, this will invariably be subsequently removed by interstitial absorption, and a linear cicatrix will alone remain. This principle is presumed to be applicable to the eye. When the conjunctiva is freely divided, as well as the tendon itself, both will probably be reunited to the eyeball at a point posterior to that from which they had been separated, and the intervening space will be filled up by granulation. But when the subsequent process of absorption takes place, the conjunctiva, and with it the tendon, will be more or less restored to their former position, and the strabismus will return.

In all the cases in which submucous tenotomy has been performed, the result has been successful. The paper is concluded by a description of the mode of performing the operation.

The CHAIRMAN, to elicit discussion, drew attention to the protrusion of the eye-ball after the operation for the cure of strabismus, occurring sometimes immediately, at others, not till weeks after the proceeding.

Mr. B. B. COOPER questioned whether the operation for the cure of strabismus was desirable or not. The deformity was most frequent in children, who, under constitutional treatment, usually recovered from it. He had performed the operation frequently, but usually some protrusion followed, and the symmetrical action of the eye was lost. Whether the operation was submucous or not, mattered little as to the result. He alluded to the case of a child eleven years of age, who had suffered first from strabismus at the age of four years; the deformity, under attention to the general health, was gradually lessening. Like other cases of this kind, the defect was more observable under states of mental excitement.

Mr. PRESCOTT HEWETT considered the operation should not be performed on young children. In adults it was a fair operation, and had proved a successful one in his hands. He related the dissection of a case which had been operated on some months previously, the patient dying from disease of the lungs. The muscle, which had been divided, was attached to the eyeball immediately behind its original attachment by means of a long slender tendon, formed of condensed cellular tissue three lines in length; this rendered the muscle operated on as long as the other recti.

Mr. DALRYMPLE had witnessed many operations for strabismus, and had seen no bad results follow them. He had heard of a case, however, in which the sclerotic was wounded, the vitreous humour escaped, and the eye was lost. In another case, much ecchymosis ensued, followed by suppuration and loss of sight. There was more fear of danger from ecchymosis when the submucous operation was performed, than when the common proceeding was resorted to, as there could not, in the former, be a free escape of the effused blood. Granulations were not uncommon from the point of puncture, but as the wound decreased in size, the base of the granulation became very small, and it might be easily snipped off with a pair of scissors. He attributed the occurrence of external strabismus after division of the internal rectus, to bandaging the eye operated on after the division, and he recommended tying up the sound eye instead, for two or three days. He thought the operation should not be performed before puberty, particularly in girls, as the occurrence of menstruation might remove the defect. Operation would not cure in cases where a child squinted on one day and not on another. He related a remarkable instance of this kind, in which, on alternate days, there was no squinting whatever; this continued for ten months. Quinine was given. He did not know the result. Intermittent strabismus, though not so marked as in this case, was not rare.

Mr. WADE would not operate until adult age, or as long as there was any hope of cure from constitutional treatment. He had performed this operation many times. When he commenced operating, he not only divided the tendon, but any fibres or cellular tissue which prevented the eye from becoming quite straight at the time, and tied up the eye afterwards. The eye protruded, and no benefit resulted from

the operation. He had since only made a small opening into the conjunctiva, and merely divided the tendon, tied up the sound eye, and kept the patient in a darkened room. No bad results had followed, except, in a few cases, an almost inappreciable increase of fulness in the eye, which, however, was not a balance against the good effected.

(To be continued.)

WESTMINSTER MEDICAL SOCIETY.

JANUARY 24, 1846.—DR. SAYER, PRESIDENT.

REMARKABLE CASE OF PARAPHIMOSIS.

Mr. HANCOCK was consulted on the 7th January, 1846, by a gentleman, aged sixty-five, suffering from paraphimosis. The penis was much swollen, and the prepuce, especially at the under part, much thickened, attended with great pain. He stated, that for three months previously he had experienced sensations of tightness and heat round the corona glandis, that the parts occasionally swelled, at times being better, at others worse. He described the sensation as that of a tightness, extending from the tip of the penis to the corona glandis, underneath which it had increased rapidly for the last three weeks, so much so, that he was induced to come to London, from Suffolk, for advice. For the last two years he had ridden very spirited horses, and being a fat, heavy man, had frequently struck his penis against the saddle, but without at the time experiencing any inconvenience. Has suffered much pain latterly, as if a string were tied tightly round the corona glandis; has had a double hernia, of large size, for several years, and has been in the habit of wearing trusses having very strong heavy springs. His prepuce was not tight naturally.

Mr. Hancock endeavoured to reduce the parts in the usual manner, and thought he had succeeded, but in two days the patient returned with the paraphimosis as bad as before, having suffered severely from the endeavours to remove it. Mr. Hancock having drawn back the skin, divided the thickened mucous membrane with a sharp-pointed bistoury—as was usually done in cases of paraphimosis—and desired him to go home, where he would visit him on the following day. On the 10th he again saw him, and found him as bad as before, not at all relieved; the glans and the whole of the penis were swollen, the penis being twisted, inflamed, and exceedingly painful. He examined the parts very carefully: the skin was free, as was also the mucous membrane, which had been completely divided by the cut made yesterday, but he found a band of condensed cellular tissue, about a quarter of an inch wide, encircling the corona glandis, and which he concluded was the cause of all the mischief; he consequently cut down through this to the fibrous covering of the corpus cavernosum, with immediate and decided relief to the patient, who is now nearly well, although thickening of the prepuce still exists.

Mr. Hancock related this case to the Society as presenting some points of interest; the paraphimosis was not the result of any gonorrhœal discharge, or sores on the glans, its production was neither preceded nor attended, until quite latterly, by any active inflammation, but the mischief apparently was produced by gradual thickening and induration of the cellular tissue surrounding the corona glandis, probably aggravated by the constant dragging exercised on the parts by the strong truss he was in the habit of wearing. Another point worthy of notice was, that in the common forms of paraphimosis the result of acute inflammation of the prepuce, originally too contracted, the stricture was situated in the mucous membrane lining the prepuce, and the mischief was at once removed by dividing it with a bistoury from within outwards, without cutting through the integuments, but in the case here related, the mere division of the mucous membrane, as commonly performed, was attended by no benefit whatever, as it was not until the subsequent day, when he cut down on the corona glandis to the fibrous covering of the penis, that his patient was at all relieved.

Within the last few months, he had been consulted by two other gentlemen for spontaneous thickening and induration of the prepuce, for which they could assign no cause. In one it induced phymosis, in the other paraphimosis. In the latter he cut the mucous membrane; but as he never saw the patient again, he had no means of knowing the result. However, the case here related showed that in spontaneous paraphimosis the stricture may depend upon thickened cellular tissue, and not upon any change in the mucous membrane.

A discussion ensued, but nothing of interest was elicited.

BRITISH AND AMERICAN MEDICAL JOURNALS.

A SIMPLE INTRODUCTION TO THE CLINICAL CHEMISTRY OF THE URINE.

UNDER this title, a communication from an anonymous correspondent appears in a late number of the *Medical Gazette*. The directions which it gives for this investigation are sufficient for all practical purposes. Its perusal, in an abbreviated form, will repay the reader.

"The urine should, for all purposes of examination, be collected clear from admixture of dust or other impurities. The morning's urine is generally employed, as it is difficult to obtain that passed during the whole twenty-four hours; but the quantity passed during this space of time should be noted; and, also, it should be ascertained whether this is greater or less than the quantity usually passed by the patient during that space of time. The note should also state what urine was examined, whether the morning's, or that passed in the course of the day.

"The characters of the fluid should then be observed—best in the glass in which the specific gravity is presently to be taken, its reaction on test-paper, and any sediment that it may have deposited. The latter should be examined under the microscope. The acid and alkaline reaction is shown by blue and red litmus-paper.

"If the urine is acid, turbid, with a red deposit staining the sides of the vessel, we know at once that the urates are in excess; if alkaline, or even acid, of a pale colour, slightly turbid, with a light cloud floating in it, and an iridescent pellicle on the top, we presume the phosphates to be in excess, and this the more if the urine is highly offensive to the smell, and full of mucous strings. A clear pale urine may be found in connexion with hysteria, with Bright's disease of the kidney, or with diabetes. A smoky colour is very indicative of Bright's disease; [a yellowish tint on the sides of the vessel, or communicated to linen, indicates the presence of bile;] and a greenish tint should remind us to look for crystals of oxalate of lime.

"The specific gravity is best estimated by means of a common hydrometer, made for the purpose, contained in a strong glass tube, in which it may be floated when required. It should be allowed to sink gently down to its level, as all the fluid that collects upon it higher up tends to weigh it down, and makes the urine seem of lighter specific gravity than it really is. High specific gravity, that is to say, all above 1025, may denote diabetes, or may result from the patient, at the time, employing diuretic salts. Low specific gravity, or below 1014, may be connected with granular degeneration of the kidney. The specific gravity, in connexion with what has been already noted concerning the colour and reaction of the fluid, is to guide us in the subsequent application of our tests.

"Heat and nitric acid are, for most purposes, enough; their effects are best witnessed in common test tubes, into which the urine may readily be poured, even from a large vessel, by using one tube as the guide, down the side of which the fluid may run into the other.

"Urine of a low specific gravity had better be heated, and if a precipitate forms, a few drops of nitric acid should be added. If the precipitate re-dissolves, it is to be considered indicative of the presence of the phosphates in excess; if it do not dissolve, but be rather increased by the addition of the acid, it is albumen. It is to be remembered that a precipitation of the phosphates by heat may take place as well in acid as in alkaline urine.

"To urine of a higher specific gravity nitric acid may be added at once. Every precipitate that forms may be uric acid or albumen. To determine this, the fluid should be heated, when the precipitated uric acid will be re-dissolved, the albumen will remain coagulated. A partial or entire solution of the precipitate, by long-continued heat, may denote so interesting a form of disease, that the beginner would do well to call in the aid of a more experienced chemist under such circumstances. The results thus obtained should not be lost; the tubes must be set by for a day, and then it should be noted, by the aid of a common pocket measure, how high the precipitate stands in the fluid, occupying, for example, half, a third, or an eighth part, as the case may be. The quantity of little crystals of uric acid that have dusted over the inside of the tube should also, at the same time, be looked to.

"If precipitate forms, a reference to the specific gravity must tell us whether there is anything more to be expected, or

whether we may presume that we are dealing with healthy urine. If the specific gravity be high, and the re-agents have produced only slight effects, the nature of the case may tell us whether it be worth while to look for sugar in the urine. This is most satisfactorily effected by means of fermentation; about two drachms of the urine being introduced, with a little yeast, into a phial with a perforated cork, through which the longer leg of a bent tube passes, and the whole inverted in a cup of water, where another phial, filled with water and inverted, is to receive the short leg of the tube. At a temperature above 60°, any sugar that may be present will begin to be decomposed, and carbonic acid will collect and remain for some time unabsorbed in the other phial. If no gas collects, there is no sugar in the urine; but there may have been albumen which we have failed to detect from not adding enough acid, for a little nitric acid only renders the albumen uncoagulable; forms, in fact, a soluble nitrate, which is not precipitated by heat. A few additional drops of nitric acid will prevent any error from this cause, by at once precipitating the albumen.

"It remains now to consider those cases where the urine evidently contains some soluble matter in excess, which, however, is neither albumen nor uric acid, and to notice a few appearances which are sometimes perplexing to a beginner. A free effervescence may arise either from the presence of the carbonate of an alkali, or the decomposition of urea, or that of uric acid. The first case might be solved by looking to see what the patient is taking, all neutral salts, with vegetable acids, being converted into carbonates of that base during their passage into the urine. The second is best determined by setting aside two drachms of urine in a saucer, with about a quarter of its volume of nitric acid, of course, without having applied heat, when the appearance of crystals denotes an excess of urea. The third is best solved by adding a few drops of any acid to the urine in a tube, and observing, as before recommended, the number of crystals that have formed by the ensuing day.

"The flaky precipitates, recognised to be albumen, may be seen sometimes yellow, sometimes red or pink, or covered with air bubbles. For the present, it is enough to state, that these appearances result from the decomposition of the uric acid by the nitric acid, which deepens the colour of the urine, or of the urea, or any substances, as above, which effervesce on the addition of this reagent; or, lastly, the yellow colour may arise from there being nothing present to prevent the nitric acid producing this its ordinary effect upon animal substances.

"The sum of these remarks is this. That the urine deviates from the condition of health most commonly in a few particular ways, whether by an excess or deficiency of its normal constituents, or by the presence of matters which should not exist at all in the urine."

The chemical study of the morbid conditions of the urine is thus shown not to be so difficult as many have believed it to be. Without attention to them, our therapeutics are a dead letter, and here are the means of preventing such a result: they are sufficiently simple and ready of application.

ON THE APPLICATION OF GALVANISM IN CASES OF "ACCIDENTAL HÆMORRHAGE."

In another number of the same journal we find the details of a case of accidental uterine hæmorrhage, and some practical remarks on the subject by Dr. RADFORD. A female, in the eighth month of pregnancy, received a fright, which was followed by a discharge of blood from the uterus. The writer, on being sent for, found the os uteri closed and rigid, the uterus itself flaccid. There was no pain; the usual treatment was adopted, but the hæmorrhage did not cease. Galvanism was then applied, by placing one conductor on the os uteri, the other externally over the uterine fundus. Dr. Radford observes,—

"From the moment that the circle was complete, uterine pain was excited; and a bearing-down effort was produced. These effects were observed to be more or less intense, according to the length of time the conductors were allowed to remain applied. The uterus was felt to be tonically contracted during the intervals, and this effect was observed to be increased after each temporary action induced by the application of the connexion rod.

"This plan was continued at intervals for half an hour. I now withdrew the vaginal conductor, and placed a common conductor externally on each side of the uterus, so as to pass

the galvanic current in a transverse and oblique direction. In doing so I moved them from the upper to the lower part of the organ, taking care to have each placed in such a manner that every portion of the uterine tissue (as far as possible) was subjected to the influence of this remedy.

"From the time that the uterus began to contract, the flooding abated, and soon altogether ceased. The os uteri also began to soften, and gradually yielded, so that, at the end of six hours, it was so far dilated as to allow the head of the child to pass through it. The child was born alive. The placenta was also expelled without further assistance. There was no further flooding. The uterus was found firmly contracted."

The application should not be long continued, and occasional interruptions should be made so as "to imitate, in some degree, nature's operations."

ON THE PATHOLOGY AND TREATMENT OF ALBUMINURIA AFTER SCARLATINA.

In the *Dublin Hospital Gazette*, Dr. O'FERRALL makes some rational observations on this subject. He details two cases in support of his views, and then briefly sums up the conclusions at which he has arrived.

"1st.—That the albuminuria of scarlatina may be regarded as connected with active hyperæmia of the kidney; for which some modification of antiphlogistic treatment is, in the early stage, required.

"2nd.—That the early symptoms having been subdued, a passive congestion of the kidney may remain, maintaining an albuminous or serous hæmorrhage, and finally producing the anæmic state.

"3rd.—That the former condition may be occasionally controlled by the acetate of lead, and the latter then effectually removed by the usual chalybeate treatment."

The acetate of lead he gave in two-grain doses three times a day.

DEATH RESULTING FROM THE APPLICATION OF A BLISTER.

Dr. WATSON relates the case of a child, aged four years, to the back of whose neck a female relative applied a blister. It remained on for eight hours, and slipped to the side of the neck.

"The integuments became inflamed, and there was a disposition to sloughing, especially over the edge of the sternocleidomastoid muscle. The child was seen by Dr. Watson, and then had been suffering twelve days, but was able to play about the house, complaining only when the sore was disturbed by dressing. It had been dressed with poultices, and with the ointment of hydriodate of potassa. Finding that the sore was excessively sensitive, and the child refractory, and suffering severely from the dressing, an anodyne poultice was recommended, which was afterwards changed for unctuous dressings. At the end of a week from the first visit, she was again seen, and found in a state of nervous prostration, bordering on collapse; her skin cold, lips blue, respiration short and laboured, her intellect clear, her temper irascible and fretful, her pulse about forty. She was also vomiting continually, especially after attempting to swallow, or when moved, or when her head was elevated. She made no complaint of pain in her stomach, or other internal organs. She was constantly crying for drink, which she swallowed in a ravenous manner, without assuaging her thirst. The matter ejected from the stomach was simply a deep-greenish bile, diluted with water. Stimulants were applied with some partial benefit, but she continued to sink, and died the following morning. No autopsy was made. She was exhausted, from the irritation of the exposed and ulcerated surface, and died in a state of pure nervous exhaustion. The vomiting came on before the other symptoms of collapse, and continued to the last."

Some share in this fatal result must be assigned to the irritating application—ointment of iodide of potassium—a rather unusual application to a blistered surface.

MEDULLARY TUMOUR IN A CHILD AGED SIX YEARS.

BY B. W. M'CREADY, M.D.

"This disease was preceded by emaciation, pain, and fretfulness. The abdomen became tumid, and gradually increased in size. On examination, a large medullary tumour, weighing nine pounds, was found in the abdomen, lying between the ribs and spine of the ileum of the right side, involving the aorta and vena cava."

THE LANCET.

LONDON: SATURDAY, FEBRUARY 7, 1846.

A DEPUTATION of five gentlemen, from the COMMITTEE OF SURGEONS, had an interview, on Friday se'nnight with the PRESIDENT and VICE-PRESIDENTS of the College of Surgeons, on the subject of the provisions of a Supplemental Charter. The propositions advanced by the deputation are printed at page 164. The reply of the Council will be anticipated with much anxiety. The temperate and judicious conduct of the Committee of Associated Surgeons is rapidly acquiring for that body universal respect and confidence.

THE French journals inform us that the requests of the veterinary section of the Parisian Medical Congress have been adopted by other influential public bodies, and that there is now nearly a certainty of the reforms which they demand being accepted and followed up by government, if not entirely, at least in part.

In each department in France there is a board (*conseil general*) elected by the inhabitants of the department, which sits for a certain time each year to discuss questions connected with agriculture and with the local interests of the department. These local committees are represented in Paris by a general board, which has recently given its formal adhesion to the views promulgated by the veterinary section of the Congress, views which we exhibited at length on a former occasion, (see THE LANCET, page 49.) The principal points to which the General Board of Agriculture has directed the attention of government, are the necessity of rendering veterinary studies more lengthened and more complete, and the duty of teaching veterinary students the subjects of agriculture and rural hygiene, as also everything pertaining to the breeding and training of stock.

Although the Minister of Agriculture, to whom the above communications have been addressed, has not as yet made any official answer, he has caused it to be understood that the wishes of the Congress, and of the Central Board of Agriculture, have been, and will be, seriously taken into consideration. He has even stated that the establishment of a large agricultural school has already been decided upon by government for the improvement of veterinary students. This school is to be located in a central department, and to be carried on in such a manner that agriculture and veterinary science will progress together *pari passu*.

The attempt which is now making in France to connect agriculture with veterinary science, is, evidently, one of the most important "movements" that has taken place in modern times. It may, indeed, be said to be the dawn of a new era for the veterinary art. If success follow the praiseworthy efforts which are now being made in France—and success appears certain—veterinary science and its professors will very soon attain the high social position to which they are justly entitled. To the interests of society at large, the advantages that must accrue from having a numerous body of scientific agriculturists disseminated throughout the country, would be incalculable. They who cultivate the land are proverbially slow in the adoption of improvements.

Wedded to the habits and customs of their forefathers, it is difficult, often impossible, to induce them to make any change, however conducive to their own advantage. No one would be more likely to have influence with this numerous and important class than the veterinary surgeon, to whom they are continually obliged to intrust their fortunes—that is, the lives of their flocks. Nothing, on the other hand, will so much tend to increase the personal respect and consideration of the veterinary practitioner, as the acknowledgment on the part of his clients that he is really an authority in those pursuits which constitute their chief occupation.

From the knowledge thus acquired by veterinary practitioners we may, again, anticipate great benefit to accrue to agricultural science generally. The attention of a large body of well educated men cannot be constantly directed to any branch of knowledge without improving it. We might, therefore, legitimately expect that great progress would be made through the instrumentality of thoroughly educated veterinary practitioners in everything connected with the breeding and rearing of cattle. A mass of most important information would thus be gradually accumulated respecting the physiology, the nutrition, the diseases, and the therapeutics of each of the varieties of domestic animals which constitute a great part of the national riches.

Were those who exercise the veterinary profession to be thus qualified, and to take the social position which we should wish to see them occupy, the good sense of both rural and town populations would soon learn to discriminate between the uneducated and the educated practitioners. At the same time, the interests of society demand that the latter should be protected by the laws, as well as the ordinary medical practitioner, and it is to be hoped that, eventually, such protection will be liberally afforded.

THERE was one part of the Prime Minister's great scheme interesting to the profession, particularly those members of it who hold offices in Unions under the New Poor-law Commissioners. The Right Honourable Baronet is at length aware of the disgraceful manner in which the medical relief question has been treated by the Poor-law Commissioners and their agents, and has consequently proposed that the payment of medical officers shall in part be transferred from the poor-rates to the consolidated fund. In the course of his speech Sir ROBERT PEEL said—

"There is another charge which is borne by the land in this country, of which again, for social purposes, we propose that a share shall be borne by the Government. I allude to medical relief. There is no part of the New Poor-law which has given greater dissatisfaction than the administration of medical relief. (Hear, hear.) There has been great unwillingness manifested in many cases to grant this relief, the guardians perhaps, not unnaturally, thinking that their more immediate duty was to relieve the poor from the danger of starvation. I am sorry to say that there have been frequently just grounds of complaint on the subject of medical relief. It will be remembered that the subject of medical relief in Scotland occupied the attention of the house last session, and we propose to extend the same measure to that country, for the purpose of giving Government a greater degree of control, and for the purpose of gradually introducing an amendment in the amount of relief. We propose to take one-half of the charge of paying medical officers, both in England and Scotland, upon the Government. We estimate the amount for England at 100,000*l.*, and for Scotland at 15,000*l.*; Ireland is under a separate law in reference to medical relief; but the whole subject is likely to occupy the attention of Parliament in the course of the ensuing session."

Though the Government has social improvement chiefly in view, this proposal confessedly forms part of the plan of compensation proffered to the agricultural interest for the proposed repeal of the Corn-laws. Still there can be no doubt that, properly administered, it would prove a great boon to a large number of the profession, who have for years been working for the poor upon pay scarcely sufficient to discharge the necessary expenses. The great burden, in fact, of medical relief, has been borne for many years by the medical profession. The remuneration has been little more than nominal when the services required are taken into account.

At a later part of the evening, Sir ROBERT PEEL said, in answer to a question from Mr. WODEHOUSE—

"That a vote would be proposed to the house upon the subject, in which the interests of the rate-payers would be consulted, but a liberal allowance would be proposed for the encouragement of medical men."

In the discussions which will probably attend this question, when formally placed before the House of Commons, the opinions of members would be very much influenced if the Union medical officers were to address notes upon the subject to the representatives of the constituencies to which they may happen to belong. Such civil little remembrancers, at this eventful period, might prove to be of essential service in a really good cause.

MILITIA BALLOT.

It has been officially announced in the House of Commons, by the Secretary at War, that no ballot for the militia will take place under the existing laws. It was also announced by the same authority, and at the same time, that a new Bill will be introduced into Parliament relative to the militia arrangements. When that measure is before Parliament, it is to be hoped that the public interests will be consulted, by protecting LEGALLY-QUALIFIED PRACTITIONERS from the operation of any militia ballot, and under any circumstance.

COMMITTEE OF ASSOCIATED SURGEONS, FREEMASONS' TAVERN.

At a meeting of the Committee, held Dec. 18th, at Freemasons' Tavern,—T. ABRAHAM, Esq., in the chair,—one of the honorary secretaries read an abstract of the replies which had been received to the questions submitted to the members in the Address circulated by the Committee.

The requisition for calling a meeting of members of the College of Surgeons, resident in London and Middlesex, to which fifty signatures had been obtained, was laid on the table, when some conversation ensued respecting the time at which it would be desirable to hold the meeting, and the following resolution was passed unanimously:—

"That in the opinion of this Committee, it is desirable that, before calling a meeting of the Fellows and Members of the College, resident in London and Middlesex, application should be made to the Council to receive a deputation from the Association of Surgeons, who should explain generally the wishes of the members on the subject of reform in the College, and should beg to be informed how far they would be likely to meet with the concurrence or opposition of the Council.

"That the following gentlemen be requested to act as a deputation for the above purpose:—G. Bottomley, Esq., Croydon; P. Cartwright, Esq., Shropshire; R. A. Frogley, Esq., Hounslow; J. Lawrence, Esq., Brighton; Erasmus Wilson, Esq., London; Edgar Barker, Esq., London; J. R. Lynch, Esq., London; C. H. R. Harrison, Esq., London; and Drewry Ottley, Esq., London; and that the deputation be requested to take the replies of the members to the Committee's Address as their guide in their communication to the Council."

Application was accordingly made by one of the honorary secretaries, to the President of the College, S. Cooper, Esq., for an interview with the Council. The request was

acceded to, and the President and the two Vice-Presidents of the College were appointed by the Council to receive a deputation of five members of the Association, on Friday, the 30th ult.; and it was requested that the suggestions which the Association might wish to bring under the notice of the Council should be in writing. The deputation consisted of—Mr. Bottomley, Mr. Cartwright, Mr. E. Wilson, Mr. J. R. Lynch, and Mr. D. Ottley, who presented the following propositions as those which, if acceded to by the Council, would, they believed, be likely to prove acceptable to the members of the College generally.

To the Council of the Royal College of Surgeons of England.

GENTLEMEN,—In compliance with your request, we proceed to lay before you the following propositions, which we believe to represent the wishes of the majority of the members of our profession, and we beg to assure you, that in performing this important duty we are actuated by no other motive than that of a sincere desire to promote the harmony so necessary to the honour and dignity of the profession. We earnestly hope that you will give these propositions your attentive and mature consideration, and that you will endeavour, by a just and liberal scheme for a supplemental Charter, to concentrate the interests of the profession within that College of which you are the head. Indeed, we feel that our objects will not be wholly attained until every member shall have reason to regard his College with filial respect, to consider his own honour bound up with that of your institution, and to be assured that his professional interests are zealously watched over and protected by its Councillors.

We beg to premise that we have adopted the following form of putting our propositions, with a view to conciseness and perspicuity, and also that we might economize as much as possible the time of the Council.

FELLOWSHIP.

1. That the names of the fellows, present as well as future, be arranged in alphabetical order, in one list, and that they be eligible to the Council, without reference to seniority in the College or standing in the Fellowship.

2. That all members of the College whose diplomas bear date antecedently to the Charter of 1843, be entitled to admission to the Fellowship, at and after the expiration of ten years from such date, on producing satisfactory testimonials of integrity of character and professional respectability.

3. That all members of the College, whose diplomas bear date subsequently to the date of the Charter of 1843, be entitled to admission to the Fellowship at the expiration of fifteen years from the date of their diplomas, on producing testimonials as above.

(This third proposition is not intended to interfere with the admission of Fellows, by examination, at an earlier period than fifteen years.)

COUNCIL.

4. That those provisions of the new Charter, by which Fellows resident more than five miles from the Post Office, or who practise midwifery, are rendered ineligible to the Council, be repealed.

5. That the number of the Council be increased to thirty-six or forty, with a view to the admission of surgeons resident in the country.

6. That the meetings of the Council be open to a convenient number of the Fellows and Members.

EDUCATION AND ADMISSION OF FELLOWS AND MEMBERS BY EXAMINATION.

7. That the examinations in all branches of medical knowledge, required by the members, be conducted within the College, and by examiners appointed by the Council.

8. That candidates for the diploma be required to undergo at least three examinations; the first of these being a preliminary one on subjects of general education, and that the diploma of a member be not granted until the age of twenty-two.

9. That the examinations of candidates for the diploma be open to a convenient number of the Fellows and Members.

10. That the necessary powers be obtained to enable the Council to erase from the lists of the College the names of Fellows or Members who may violate the rules and regulations which they are sworn to observe.

11. That the Council be requested steadfastly to resist the appointment of any supreme Council in the profession, consisting of nominees of the Crown, and to use their best endeavours to preserve the government of the profession in the hands of the Medical Colleges and their Councils.

The President then stated that he and his colleagues were

not authorized to give any immediate reply to the communication of the Deputation; nor could he undertake to state the intentions of the Council respecting a Supplemental Charter, as nothing had been definitively settled with regard to it by the Council;—that he would communicate the observations of the deputation to the Council at their first meeting, which would take place in February, and that the Council would doubtless give an early answer to the Association on the subjects to be submitted to their consideration.

HOSPITAL REPORTS.

UNIVERSITY COLLEGE HOSPITAL.

ON PERICARDITIS.—By JOHN TAYLOR, M.D., Professor of Clinical Medicine in University College, and Physician to University College Hospital, London.

CASE 23.—A young man subject to rheumatism, after exposure to cold, had a third attack of the disease. On admission, there were, also, hypertrophy of the heart, with mitral valve disease, and tubercles in the lungs. Pericarditis soon supervened, followed by double pleurisy, and by erysipelas of the face. Cure.—Remarks. Premonitory symptom of pericarditis. Differences between friction sound and bellows murmur. Cause of the vibratory tremor, and of the bulging and undulatory movement in the cardiac region. Complications. Explanation of physical signs. Diminution of signs of tubercles during the advance of the disease. Co-existence of friction sound, and of respiratory sounds, with effusion of serum in pleura.—Causes. No metastasis. Pleurisy also rheumatic. Connection of erysipelas with rheumatism. Treatment. Appreciation of the effects of mercury. Spontaneous cure of pleurisy. Duration.

WILLIAM M.—, aged sixteen, admitted Tuesday, Jan. 10th, 1843; a cabinet-maker; of slender conformation and pale complexion; habits regular; father, mother, and sister, died of consumption. Six or seven years ago he had rheumatic fever, which continued for six weeks, since which time he has been subject to pains in the head and limbs after exposure to cold. He was admitted into this hospital, under the care of Dr. Williams, on the 9th of last August, for acute rheumatism and endocarditis, and was discharged Sept. 20th. At that time he had pain, more or less, in all the joints, and in the head; great pain in the region of the heart, increased on inspiration; slight cough, with a thin watery expectoration; the heart's impulse was very sharp and abrupt, and felt over a large surface; there was, also, a loud murmur, with the first sound heard best at the apex. He had previously had gonorrhœa, and there was a papular eruption over the epigastric and right hypochondriac regions. The following physical signs were subsequently observed during the time the patient remained under Dr. Williams. The right side of chest moved less than the left; the sound, on percussion, was too dull on both sides, about an inch below the clavicles; supra-spinous fossæ of the left scapula duller than that of the right; respiration loud, and blowing on the left side, and bronchial on the right side, below the clavicles.

The present attack commenced on the evening of Thursday, January 5th. The patient took a walk in the evening, the weather being damp and foggy. He had previously been wearing Wellington boots, but now had on shorter ones, and felt his legs cold from the change. He stood talking in the street for a quarter of an hour, during which time he felt a cold shivering. Had felt warm, but did not perspire during his walk. He returned home, and went to bed almost immediately, and got into a profuse perspiration, and was restless. He did not feel worse until Friday evening, when he had pain in the head and thighs, and, at intervals, in the region of the heart. His breathing was short, but he had no cough. On the Saturday he went to work, notwithstanding the pain in the legs. In the evening the pains increased, and on Sunday morning, he was unable to stand. He then obtained medical aid, and took some opening medicines; but gradually got worse, until his admission on the following Tuesday. On admission, there were pains in the thighs and knees, extending to the ankles, increased on motion, and during the night, but relieved by the heat of the fire; ankles and feet swollen; occasional pain in the left shoulder; much heat of skin; slight headach; great thirst; appetite diminished; tongue moist; covered with a thick pale-yellowish fur; no cough; dyspnoea; occasional pain in the region of the heart; palpitations constantly, but more violent during the paroxysms of pain; no rubbing sound in the cardiac region, but a bellows murmur at the apex; urine high-coloured, scanty, covered with a pellicle,

and letting fall an abundant sediment. Ordered, venesection to twelve ounces; and two grains of calomel, with one grain of opium immediately after. Also, a pill every eight hours, containing one grain each of opium, calomel, and tartarized antimony. Low diet.

11th.—Some relief; but not much.

12th.—The pains in the limbs are better. To have the house physic.

13th.—No increase of the pain nor of the palpitations. Dr. R. Quain observed a rubbing sound in the cardiac region. To be cupped over the heart to ten ounces.

14th.—Considerably relieved since the cupping; pulse 120; tongue dry; bowels open; no perspiration; heart's impulse strong, accompanied by a friction sound and bellows murmur; gums tender. The pill to be taken once a day only. To take a draught every four hours, containing fifteen minims of wine of colchicum, twelve minims of tincture of opium, fifteen grains of carbonate of magnesia, and water an ounce and a half.

17th.—I saw the patient for the first time; perspires much at night; countenance rather anxious; can lie only on the left side or on the back; in health he lies upon the right side; has never had any particular difficulty of breathing; suffers habitually from palpitations; has had no jactitation or syncope; no lividity of the lips; has headach and vertigo, and is troubled with dreams; no cough; no pain in the cardiac region, but has tenderness on pressure. The chest is slightly more prominent over the heart than on the corresponding part of the right side; impulse of the heart visible; a vibratory tremor is felt by the hand, both with the systole and the diastole; the impulse too strong and too extended; dulness on percussion reaches upwards to the body of the left third rib, and is too extended transversely; there is a prolonged, softish, double friction sound over the greater part of the cardiac region, and in a less degree at the top of the sternum; the sound seems superficial and resembles somewhat that produced by the crumpling of moderately soft paper; a very slight murmur is heard above the clavicle, and with the first sound only; below the left nipple there is a loud, prolonged, soft bellows murmur with the systole, very readily distinguishable from the rubbing sound heard a little higher; pulse ninety-six, moderately full, jerking slightly irregular, no thrill. To be cupped below the left scapula to ten ounces.

18th.—Considerably relieved since the cupping; can lie on either side; no palpitations; physical signs the same as yesterday; vibratory tremor felt only as low as the left nipple; below this point the friction sound is scarcely heard, but only the bellows murmur.

22nd.—Cardiac signs as before; a friction sound is now heard in the region of the right nipple, and over the whole of both lungs, behind.—Left lung: Percussion under the clavicle as clear as in health, but less clear than under the right; behind, the resonance is very clear and somewhat tympanic over the upper half, but duller over the lower half, apparently duller than in health, and is mixed with a tympanic resonance from the stomach.—Respiration: Under the clavicle there is a muco-crepitant rhonchus, and a loud, rough, inspiratory murmur; behind there is a large muco-crepitant rhonchus, or gurgling, of a somewhat metallic tone over the lower part, and at the junction of the clear with the dull portion; no amphoric respiration, nor distinct metallic tinkling; over the upper half, behind, the respiratory murmur is loud and rough, and perhaps bronchial in parts.—Right Lung: Between the clavicle and the upper border of the third rib the resonance is very clear, but from this point to the bottom of the chest it is dull; behind, the resonance is clear above, but duller over the lower half.—Respiration: Below the clavicle the murmurs accompanying both inspiration and expiration are too loud and rough; no rhonchi; behind, respiratory sounds loud and rough above, less so below; no rhonchi. The skin is covered with perspiration, and always is during sleep, by night or day; rheumatism nearly gone; lips slightly livid; no cough.

February 2nd.—The double friction sound continues over the heart, but is much fainter; the vibratory sensation still exists; the murmur at the apex and impulse as before.

9th.—Friction sound over the heart quite gone; heart's action rapid; impulse strong; a loud murmur at the apex as before, which is audible but less loud over the base, still less at the top of the sternum, and not at all in the neck; second sound healthy at the base; pulse smaller, rather jerking, soft.

14th.—Erysipelas of the face appeared yesterday. Apply a solution of nitrate of silver to the face. To take three grains of calomel.

18th.—Erysipelas gone.

23rd.—Discharged.

SUMMARY OF THE CASE, WITH REMARKS.

Symptoms and diagnosis.—On the patient's admission, there existed enlargement of the left ventricle of the heart; shown by the strong impulse, and also regurgitant disease of the mitral valve; proved by the systolic bellows murmur, audible chiefly over the apex of the organ. The history of the case showed that these affections had their origin at a date considerably anterior to that of the present illness.

There is some doubt about the exact time when the pericarditis made its appearance. The first unequivocal sign of it—viz., the friction sound—was noticed Jan. 13th, but pain in the cardiac region had been complained of once or twice before this date. On the patient's admission there was some pain, which is mentioned again on the 10th, but is not further noticed until the 13th, when, although there was undoubted pericarditis, it had not increased. This pain may have had its seat in the integuments, or it may have been a premonitory symptom of an inflammation not yet developed—or it may have been a symptom of pericarditis then existing, but not sought for and not discovered. As a means of diagnosis, the pain was, as usual, of little value; it is not once mentioned after the friction sound was observed, except on the 17th, when there was a little pain on pressure only. There were other general symptoms, but none of them characteristic—viz., some anxiety of the countenance; pain in the head, and vertigo; inability to lie upon the right side, and a little irregularity, with a jerking character of the pulse. All these symptoms continued but a short time.

The friction sound was of that kind which has been compared to the noise made by the crumpling of soft paper in the hand. It was double, but whether the systolic or diastolic portion was the louder, is not stated. The rubbing sound was most readily distinguishable from the bellows murmur, which was present at the same time, by—1. Its character, already noticed. 2. Its equable diffusion over nearly the whole of the cardiac region, whilst the valvular murmur was limited to the region of the apex. 3. Its temporary duration: it continued about twenty-one days.

There could not have been much serous effusion, for the dulness on percussion did not extend upwards higher than the third rib.

The vibratory tremor appears to have depended upon the pericarditis, and not upon the valvular disease, for—1. It accompanied both movements of the heart. 2. It was co-extensive with the friction sound, for on the 18th both phenomena are stated to be perceptible as low as the left nipple, but not lower, whereas the bellows murmur existed in its greatest intensity at a point below this. 3. Its duration was apparently temporary, no mention having been made of it after the friction sound had ceased.

Bulging of the cardiac region, and a visible (undulatory?) movement with each systole are mentioned only after the pericarditis had supervened; it is probable, however, that both existed before, and that they were due to the hypertrophy. They were independent of adhesions of the pericardium, and probably, also, of any serous effusion.

Complications.—1. *Phthisis*: The existence of tubercular disease in the apex of both lungs appears to be clearly proved by the history of the case, and especially by the physical signs noticed at different periods.—2. *Pleuritis, &c.*: On Jan. 22nd, and during the progress of the pericarditis, an extensively diffused pleurisy supervened. This was shown by a friction sound on the right side in front, and over the whole of both sides behind. It is a somewhat intricate problem to trace to their respective causes all the physical signs referable to the lungs and pleuræ now, and at a former period, observed. (a.) During the six months which had elapsed since the patient's first discharge from the hospital, some emphysema might have been developed in the upper lobes of the lungs, as frequently happens in the neighbourhood of tubercles; hence the greater clearness on percussion, and less amount of bronchial respiration now than formerly, notwithstanding the advance of the tuberculous disease. (b.) Some effusion of serum probably accompanied the plastic exudation into both pleuræ, and so pressed the lungs upwards against the summit of the thoracic cavity. Hence, the dulness on percussion inferiorly on both sides, and the compression of the lung, would be an additional cause of the unusual resonance over the upper portions of the chest, for this is now ascertained to be an occasional effect of pleuritic effusion. The existence of rhonchi on the left side, of respiratory sound on the right, and of friction sound on both, is no objection to this view, the fact being well established, that a certain amount of serum in the pleura does not prevent the production and transmission of such sounds. (c.) The supposition that perforation of the left

pleura had occurred with the formation of hydro-pneumo-thorax, would explain some of the signs observed, but appears to be less consistent, upon the whole, with other signs, and with the subsequent progress of the case. It is to be regretted that there is no record of the condition of the lungs and pleuræ later than the date of the signs just considered.—3. Erysipelas of the face made its appearance at an advanced period in the progress of the case.

Causes.—1. *Of the phthisis*: There was a strong hereditary predisposition to this disease. Both parents and a sister died of it.—2. *Of the rheumatism*: The immediate cause was exposure to cold, and, as usual, the effect followed quickly; rigors were experienced at once, and the articular pains within twenty-four hours.—3. *Of the pericarditis*: There appears to have been no metastasis of the rheumatism. There is no proof that the pericarditis did not exist from the first, and the rheumatism continued long after the heart became affected. The rheumatism was of the sub-acute, as distinguished from the acute variety, and the present was the third attack. On a former occasion it seems to have attacked the endocardium alone, and now the pericardium only suffered.—4. *Of the pleuritis*: The pleuritis and pericarditis were probably two independent effects of the same cause. There is nothing to show that the inflammation extended from the pericardium to the pleuræ, and the fact that both pleuræ were affected is opposed to such a supposition.—5. *Of the erysipelas*: Erysipelas and some other cutaneous affections are sometimes associated with rheumatism. In many, and, perhaps, in all such cases, both diseases depend upon a morbid condition of the blood. This state of the blood may be conceived (for it has yet to be proved) to consist in the presence or in the excess of a single or of several morbid or healthy elements. In the present case, a papular eruption seems to have accompanied the former attack of rheumatism.

Treatment.—For the rheumatism the patient was at once bled to twelve ounces, and took calomel, opium, and tartar emetic in grain doses. On the 14th, the gums became affected. The pericarditis had been detected only the day before, and appears, therefore, to have supervened when salivation was approaching. The course of the pericarditis appears to have been altogether uninfluenced by the mercury, for the friction sound continued after the gums became sore, during a period of time greater than its average total duration in cases of pericarditis in general. This fact, together with the occurrence of pleurisy eight days after the affection of the gums, is opposed to the general opinion respecting the power of calomel to subdue or to shorten the duration of inflammation of serous membranes. The tartarized antimony produced no sickness, but neither this remedy nor the calomel and opium joined with it appeared to stop the rheumatism. Colchicum was subsequently given, and after having been continued for eight days, the rheumatism ceased. It is not stated whether purging was produced or not. The patient was twice cupped—once over the region of the heart, and once below the left scapula, and on both occasions with benefit. The pain ceased after the first cupping, and after the second the patient could lie in any position. The pleuritis does not appear to have been treated at all, yet it seems to have run but a brief course; and, judging by the patient's condition when discharged, it had probably altogether ceased. The erysipelas was treated by a lotion of nitrate of silver. The attack does not appear to have been severe.

Duration: 1. Of the rheumatism, about seventeen days.—2. Of the pericarditis, not less than twenty-one days.—3. Of the valvular disease and hypertrophy, either six or seven years or five months, according as it occurred in the first or second attack of rheumatism, there being no proof to which of the two it should be referred.—4. Of the phthisis and pleuritis, uncertain.—5. Of the erysipelas, about six days.

OBITUARY.

JOSEPH CONSTANTINE CARPUE, F.R.S.

WITH sincere regret we record the decease of that excellent man and distinguished lecturer and surgeon, Mr. CARPUE.

The lamented subject of this memoir was born in London, on the 4th of May, 1764. He was descended from a Spanish family, members of the Roman-catholic Church; and his father, a gentleman of small fortune, resided at Brook Green, in the county of Middlesex. He was intended for the church, and received the elements of his education in the Jesuits' College at Douay. At the age of eighteen he was impressed with a strong desire to travel, and being limited in his re-

sources, resolved to make the tour of the Continent of Europe on foot. In after years, he was wont frequently to recur to the recollections of this period as belonging to the happiest of his life; and he took pleasure in relating to his friends the incidents of his peregrination to Rome. His erratic disposition gave him the opportunity of observing the state of society in France both before and after the Revolution. We have heard him tell of his having seen Louis the Eighteenth and Marie Antoinette at the dinner-table, waited on by the Duke of Orleans (Egalité). And, at a subsequent visit to Paris, of his having listened to the declamations of Danton, Marat, and Robespierre. On his return to Britain, he made the tour of Wales on foot, and subsequently that of the Highlands of Scotland. In the latter trip he was accompanied by a valued friend of his early days, Sharon Turner, the eminent historian. To the end of life his delight in travelling continued unabated; he paid several visits with his family to France, Holland, Germany, and Italy, the last being so recently as 1843, when he travelled through Germany and the Tyrol.

Whenever, during his travels, he entered a town of any magnitude, his practice was to make enquiry concerning the hospitals and other medical establishments, and the names of the professors of medicine and surgery; and to go at once and introduce himself to the latter. On these occasions he was invariably received with respect and courtesy, and put in possession of whatever information he desired, whether provided with letters of introduction or otherwise; and in many cases he made valuable friendships, as in the instance of Professor Graef of Berlin.

Having completed his classical education, Mr. Carpue was long undecided in the selection of a profession. At first he entertained serious thoughts of engaging in the business of a bookseller, in order that he might be enabled to succeed his uncle, Mr. Lewis, a bookseller in Great Russell Street, Covent Garden, who was a schoolfellow and friend of Pope. From books his thoughts wandered to the law, and from the latter to the stage. His desire to become a player originated in his enthusiastic admiration of Shakspeare. In his speeches and conversations with friends he frequently quoted this favourite author; and up to the period of his death his mind was engrossed with a project of conferring a mark of national gratitude on the memory of the bard by the erection of a colossal statue in iron, near the mouth of the Thames.

Having resolved on becoming a surgeon, he commenced his medical studies under the direction of the late Mr. Keate and Dr. George Pearson, at St. George's Hospital, to which institution he was, for some time, house surgeon. He was then appointed staff surgeon to the York Hospital, at Chelsea, where he remained for twelve years, and he resigned this appointment in consequence of his objection to foreign service. His connexion with Mr. Pearson awakened in his mind a lively interest in the diffusion of vaccination: while staff surgeon at the York Hospital, he made great exertions to extend, as much as possible, the practice of Jenner, and, with this object, visited the military dépôts in many parts of England. After his resignation of a military life, he received the appointment, in conjunction with Mr. Pearson, of surgeon to the National Vaccine Institution, a post which he retained up to the time of his death.

His career as a lecturer on anatomy commenced in the year 1800, in the following manner. While at the York Hospital, he omitted no opportunity of perfecting his acquaintance with anatomy, and a gentleman, who was then studying medicine, one day said to him, "I wish I knew anatomy as well as you, Carpue;" to which Mr. Carpue replied, "If you desire it, I will teach you." They then set to work diligently, and the result was so satisfactory to the pupil, Mr. Norman, that he insisted on the acceptance of twenty guineas by his teacher. This circumstance suggested to Mr. Carpue the first idea of becoming an anatomical lecturer, and the sum presented to him by Mr. Norman fixed the amount of his fee, which he never after altered. He then said, that if he could obtain six pupils he should feel satisfied; but his success far exceeded his most sanguine expectations. His class was for many years full to overflowing. He delivered three courses of daily lectures during the year, and, with the exception of a few days in the summer season, without intermission. Twice in the week, in the evening; he also gave lectures on surgery. The original mind of our lecturer soon perceived the inutility of formal lectures, and the necessity of making each student, in his turn, take a share in the demonstration. He stood before his table, surrounded by his pupils, and illustrated the points of study by means of an extemporaneous diagram, and, as often happened, when subjects were scarce, he trusted to

his practical descriptions and piece of chalk alone. From the latter circumstance, the gayer spirits of his day called him the "chalk lecturer," a title which, in after life, became one of affection in the hearts of his numerous disciples. He regarded his pupils with the feelings of a parent, and no exertions for them did he ever omit to make where the advancement of their interests was concerned. He concluded his career as a lecturer about fourteen years since.

An occurrence which took place at about the time of the commencement of Mr. Carpue's career as an anatomical lecturer, is worthy of notice, and we record it from an unpublished MS. in his own handwriting.

"Some time in the year 1800, three of the greatest men of their time, namely, Mr. West, President of the Royal Academy, Mr. Banks, and Mr. Cosway, (though last mentioned, not the least active in forwarding inquiry in regard to subjects of painting, sculpture, &c.), having agreed amongst themselves that the representation of the crucifixion did not appear natural, though it had been painted by the greatest artist of his age, wished to put this to a test. They, therefore, requested me to nail a subject on a cross, saying, that the tale told of Michael Angelo and others was not true of their having stabbed a man tied to a cross, and then making a drawing of the effect. Shortly after this application, a circumstance occurred at the college at Chelsea, which enabled me to comply with their request. A man of the name of Legg, one of the captains of the hospital, having had a dispute with a man named Lamb, a fellow pensioner, entered his bed-room with two loaded pistols, presented one to Lamb, and requested him to give him that satisfaction that one soldier had a right to demand from a fellow soldier. Lamb indignantly threw the pistol on the ground, when Legg fired the other pistol, and shot Lamb through the thorax. He immediately expired. I was at this time surgeon of the York Hospital, Chelsea. Mr. Keate, surgeon of Chelsea Hospital, not being in the way, I was sent for to examine the dead man. I found that the ball had divided the upper cava, which occasioned his immediate death. A jury sat on the body; the verdict was wilful murder. Legg declared that if the man were living, he would do what he had done, namely, shoot him. As Legg was in his perfect senses, there could be no doubt but that he would be found guilty of murder, and executed. Mr. Keate, surgeon general and surgeon of the hospital, was master of the College of Surgeons; to him I applied for the body when executed. Mr. Keate, who, as well as being one of the first surgeons of the age, was a most liberal man, and a great admirer of the arts, said I had come in a lucky moment, as he had received an order from government not to allow murderers to be exposed to public view. He promised 'to give the sheriff an order that the subject might be given for the purposes required. A building was erected near the place of execution; a cross provided; the subject was nailed on the cross; the cross suspended; when the body, being warm, fell into the position that a dead body must fall into, let the cause of death be what it may. When cool, a cast was made, under the direction of Mr. Banks, and when the mob had dispersed, it was removed to my theatre."

The cast is still in existence, and is preserved in the studio of Mr. Behnes.

The active practical pursuits in which he was engaged, left Mr. CARPUE but little time for literary occupation; hence, his writings are few in number. In 1801, he published a "Description of the Muscles of the Human Body;" in 1803, an "Introduction to Electricity and Galvanism, with cases showing their Effects in the Cure of Disease;" in 1816, "An Account of two Successful Operations for restoring a Lost Nose, &c.," and, in 1819, "The History of the High Operation for the Stone." Medical electricity was a favourite remedy with him. He kept a fine plate machine in his dining-room, and, on the occasion of a recent visit, we found him engaged in passing a current of electric fluid through his loins, with a view to relieve the torments of a lumbago. He did not, however, neglect the scientific applications of this powerful fluid: he examined every new discovery or improvement that presented itself, and passed many happy hours in the society of Mr. Cuthbertson, in prosecuting experimental researches.

Mr. Carpue had the good fortune to be introduced to the Prince Regent, on the occasion of the illness of the Princess Amelia, at Worthing. The Prince took much interest in conversing with him on the subject of medical and physiological science; and, on several occasions after the Prince's accession to the throne, Mr. Carpue received a private audience from his Majesty on these topics.

For some years past, Mr. Carpue held the appointment of Consulting Surgeon to the St. Pancras Infirmary, and, in this

capacity, his eagerness in the pursuit of every improvement in his profession was strikingly shown. On visiting Greenwich Hospital, he was struck with the practice of making small punctures in local inflammations, particularly in those of an erysipelatous kind, and he lost no time in giving the plan a trial in the parish infirmary. The results of this trial were very satisfactory.

In approaching the conclusion of his life, we cannot refer, but with regret, to the deplorable railway accident by which he was so seriously injured. Soon after the opening of the South-Western Railway, he was proceeding with his family to Brighton. His daughters were in the *coupé* of a first class carriage, while he himself, in order to indulge his ever-active mind with occupation, had taken a place in an open carriage; his two servants were in the same carriage. When the collision took place, all three were thrown out, the two servants upon the rails, and himself between the rails. The former were immediately killed, and Mr. Carpue providentially escaped, but not without serious contusions, which confined him to a bed of sickness for several weeks. The high principle of justice which led him to occupy a foremost place in the ranks of reform, induced him, on this occasion, to bring an action against the company for indemnification for the injuries he had received, and, after a tedious process, a verdict was given in his favour for 250*l.* damages, the greater part of which sum being appropriated to the payment of his extra costs.

In private life, Mr. Carpue was a warm and faithful friend, and was beloved by all who knew him. He was endeared to his family by the strongest ties of affection and respect. He was abstemious and regular in his habits; and an admirer of simplicity of manners and appearance. His disposition, in the latter respect, is evinced in the instructions which he has left for his funeral; that that ceremony shall be as private as possible, and as plain and simple as decency permits; and that everything in the shape of pomp or display shall be studiously avoided. The richest pall of the mortal remains of an honest man is that which is furnished in the hearts of his bereft companions and friends—their love and respect.

The last illness of Mr. Carpue dates from the period of the disastrous accident above referred to; ever since that time, he complained of pains throughout the whole of the body and limbs, and gradual diminution of strength. About ten weeks since, he experienced an attack of bronchitis, which confined him to his chamber. The bronchitis subsided, but his general debility and prostration of power increased, and he became incapable of the slightest voluntary movement. His mind, however, remained calm and clear up to the morning of the 30th of January, when he sank into a state of complete insensibility, and remained in that state for about twelve hours. At a quarter past four in the afternoon, without recovering his sensibility, he quietly breathed his last. He died in his eighty-second year.

We cannot conclude this sketch of a most worthy and excellent man, and one distinguished in medical science, without having occasion to point out the accursed stain, the plague-spot of an honourable profession. Mr. Carpue was passed over by the Council of the College of Surgeons, when his turn to sit in that body arrived; he was cast aside by the self-elected, to make way, neither for an abler nor a better man. But this is not all; to the disgrace of all who possess the wretched privilege of appending the letters F.R.C.S. to their names, Mr. Carpue was not elected by the *Fellows* when they had an opportunity of placing him on the Council. He was never a Councillor of a miserably governed College. He was, however, a Fellow of the Royal Society, at the invitation of his friend, Sir Joseph Banks. He was not of the Council of the College of Surgeons, but he was the companion of his prince and of his king. He was a surgeon, "commanded by his Royal Highness the Prince of Wales, to attend at Carlton House, to give him every information on the progress of anatomy and surgery;" but he was passed over by the Council of the College of 1843, in their election of Fellows, and by the Fellows themselves in their election of Councillors, in 1844-5. Alas! Peace to his *manes*.

We have also to announce the death of EDWIN HARRISON, M.D., Physician to the Marylebone Infirmary. He expired on the 11th of January.

THE BRISTOL MEDICAL SCHOOL.

To the Editor of THE LANCET.

SIR,—Having had occasion to prefer a charge against the Bristol Medical School, and finding that no benefit has resulted therefrom, and also that my complaint is treated with insu-

lence, I consider it due to the medical public to lay the case before them, that they may judge whether or not it is right to impute blame to me for preferring the charge. Complaint having frequently been made to me by my pupil, that the lectures were omitted to be given, and that without any previous notice, the same having been repeated on Dec. 1st and 2nd, as to the quarter-to-four lectures, I went to the school, and found from the registrar that these two lectures had not been given; the same day I made a general complaint, upon the authority of my pupil, and then specified the omission of these two lectures, addressing my letter to the committee. Dec. 8th I received, in reply, an "expression of surprise that I should have made such complaints, upon no other grounds than the mere assertion of my pupil." There was neither an admission nor denial of my charge. To this I replied, that my charge, being a matter of fact, was either true or false, and quite capable (if false) of being contradicted by evidence within their own power to prove. I then further charged that another lecture was omitted Dec. 4th, and three Dec. 6th. To this I received, Dec. 23rd, a resolution of the committee—"That, in reply, the secretary be requested to inform Mr. Lansdowne, that the faculty deny his charge, and refer him to the register kept at the school, by which he will see that the lectures have been given with as much regularity as possible." I then went to the school, and in the presence of their registrar, examined the register; the result was, that all the lectures I had charged them with being omitted were found to be so, and in addition, others, making a total of thirty-two omissions from Oct. 13th to Dec. 16th, according to their register; and another, which I proved to them was not given, was entered as having been delivered, and all the pupils were marked absent except mine. The fact was, the same lecturer had omitted the two preceding lectures, Dec. 2nd and 4th, without previous notice. Dec. 6th, a notice was given that there would be no lecture at a quarter before three, and this one occurring at a quarter to four, the pupils did not think it worth the trouble to walk to the school, with the chance, as at the two previous lectures, of finding no lecturer there; the lecturer, however, came, and finding only my pupil present, told him it was not worth lecturing to one only, ordered his mark to be entered as of attendance, and the rest as absent, and then took his leave. Again, on the same day, I repeated my charge, supported by their own register; to-day, Jan. 5th, I received for reply, "that the faculty of the Bristol Medical School considering your calculation of the lectures missed, and comparing the numbers with the entire number that has been delivered; considering that in most instances when a lecture was not delivered due notice was given, and that the full number of lectures required by the authorities is always given in the course of the Winter Session, still deny that you had any just or reasonable grounds for your charge of irregularity." With respect to the six lectures specified by me during the first week of December, five of them had no previous notice given that there would be no lecture. To-day, to the first morning lecture, quarter past eight, the pupils assembled, but neither lecturer nor notice met their view; but a notice was then posted, that the next lecture, quarter past nine, would not be given, as also the one, quarter past nine to-morrow; but the pupils were assembled before they could see the notice, and of course many had to walk there from a distance: subsequently notice was given that there would be no quarter-past-eight lecture on Tuesday, Wednesday, and Saturday next, making, thus far, six omissions this week. I doubt not, you and the public generally will consider that *thirty-three lectures* omitted to be given in that short space of time cannot be comprehended to be "with as much regularity as possible," which their register was to prove to me had been the case. In their last reply you will at once see that they do not, as in their former, "deny the charge," but fall back upon a denial of any just grounds for making the complaint. Such being the case, I will, with your permission, place it in the hands of the medical public, who are generally the more disinterested judges in such matters.

I remain, Sir, your obedient servant.

J. G. LANSDOWNE.

St. James's-square, Bristol, Jan. 1846.

QUACKERY.—THE "NEW BLACK DRAUGHT."

To the Editor of THE LANCET.

SIR,—I have just finished reading a couple of communications in your LANCET of this day, and must beg to be allowed to make a few remarks thereon. After reading, with much pleasure, in the Preface to the present volume, a declaration of unsparing

hostility against the numerous forms of quackery by which the profession is infested, I acknowledge to have felt surprised and indignant at the appearance, in a late number of your journal, of a paper by an L.S.A. (vide "Lond. Med. Direct.") strongly commendatory of an article manufactured by a protégé, and under the immediate patronage of the writer. Both surprise and indignation were, however, speedily dissipated on seeing your note at the conclusion. Finding no more of the affair in the two next succeeding numbers of your journal, I began to think that the gentleman had taken the hint thus neatly conveyed, and finding their "dodge" seen through, intended, as was best, to let the matter drop. But the snake was only scotched, not killed, and after a fortnight's stupor, and the expenditure of "much time, and trouble, and labour, and art, and knowledge," about it, has been aroused stronger than ever, "for the good of humanity," as its fosterers say.

I hope sincerely that none of your readers may be so far blinded by the high-sounding claims of "high and deserved praise," "credit and emolument," and laurel "wreaths" for a "discovery," perfected after "time, and expense, and trouble, and labour, and art, and knowledge," with apparatus and manipulation, "troublesome, complicated, and tedious," as to forget that the using or prescribing medicines, of the composition of which they are ignorant, is in itself most egregious quackery. Should you think such an article as that mentioned by your correspondents wanted by the medical public, I enclose a formula equal to anything that has been, or can, in the present state of our pharmaceutical knowledge, possibly be made, and containing all that these gentlemen claim for their bantling, in quality and taste, while the cost is little, and the process easy.

I hope, for the sake of those whose lives are spent in the endeavour to advance the science, and improve the standing of the profession, that there are few who after years' use of (to say nothing of writing an essay on) a compound article, could be found content to confess that they were yet in ignorance of its components.

Nor is there the analogy attempted to be drawn between the two preparations. The term æthereal tincture of lobelia closely expresses its composition, while in liq. sennæ co. who can say how many active partners the Co. conceals?

Hoping that you will in some manner notice this renewed attempt to establish quackery under your very nose, I am, Sir, your obedient servant, and constant reader and admirer, W.

* * * We entirely concur in the views of our correspondent. Utterly repudiating all "secret preparations and remedies" in the practice of medicine, we consider that the "compound infusion of senna," as manufactured by Mr. COLCHESTER, must be regarded as neither more nor less than a quack medicine, and that the use of it ought to be generally and firmly discouraged by the profession. Under existing circumstances, notwithstanding the elucidatory letters of Mr. BOWER and Mr. COLCHESTER, in the last LANCET, the "new black draught" is obviously a very "dark" affair.—ED. L.

MR. ISAAC B. BROWN'S "SUCCESSFUL" CASE OF OVARIAN DROPSY.

To the Editor of THE LANCET.

SIR,—Some men's minds are so peculiarly constituted, that they seem to be in a continual fret, striving and panting after notoriety. Now if their exertions are of that character which aim at public benefit and advantage to all, their labours ought to be duly appreciated, and the just meed of praise which they deserve should be awarded to them. On the other hand, if the object of their desires is that of self-aggrandizement, position before the eyes of the public, having no well-founded status, either on account of education or superior mental endowments, but only the inward hankering that drives them on under the self-supposition that they really are smart fellows, and possess an uncommon share of the vis scientiæ boiling within their bosoms,—inheriting only this negative virtue, they become in time so troublesome and pestiferous, that, in safety to ourselves, an embargo ought to be placed on their pretensions. I have been led into this train of thought from reading, in THE LANCET of last week, the pompous announcement of "Another Case of Ovarian Dropsy, successfully treated by Pressure, Mercurials, and Diuretics, by Isaac Baker Brown, Esq., Consulting Surgeon to the Paddington Lying-in Charity." Sensible I am that nothing is so contemptible as to attack another man's pretensions to any great and import-

ant discovery, from mere invidious and captious feeling, but when I behold publicly thrust before the eyes of the medical profession such a production as that of Mr. Brown, the public ought to know that the profession do not calmly gulp down and sanction such absurdities as those promulgated by Mr. Brown. I could barely conceive that any medical man in the present enlightened age could so far deceive himself as to suppose that the treatment he pursued in this case was the judicious one. I ask any unprejudiced surgeon, who may have read the details,—and sad ones they are,—if, in the whole course of his experience, he ever saw such a bungling mess? What does the heading of his production state? Why, that it was a cure by pressure, diuretics, &c. Well, he applied pressure, and once he gave diuretics, and this last produced violent sickness, so we must not laud their beneficial effects. Now as to the pressure. Did it not strike him that his patient would get thinner and smaller in the girth from these appliances. Ay, but she passed more water than she drank. What an extraordinary development of inductive reasoning. Could he not account for this by the natural supposition, that the solid fibre was wasting, nothing being laid up in store, but all passing away? That the fluid was *not* from the ovary is certain; for we find that she afterwards underwent the process of tapping! Then we have the bandages, and immediately ensues great pain and restlessness. Never mind; continue the bandages, towels, and a book: opium given to relieve pain. This treatment goes on for some days, till at last his esteemed friend, Dr. Bright, pronounced her in great danger. Still, in opposition to the unfavourable prognostic of his esteemed friend, the same bandaging is persisted in, and, on the very next day, she is stated to be going on favourably. Days proceed, and the tale proceeds from bad to worse, till at last it is discovered that inflammation has been going on all this time. Oh, mercy! what this woman must have suffered. Another friend (not an esteemed one this time) pronounces that suppuration has been going on in the cyst; fever and delirium ensues; an "old and esteemed friend" declares she is past hope; and yet, *mirabile dictu!* she holds out. What are we to infer from this, but that her stamina was of such good stuff that she rallied as soon as the torturing book and bandages were removed. Now at last appears the climax, the abscessed ovary points to the surface. Let us mark the wonderful stretch of acumen to which the mind of Mr. Brown suddenly started—viz., that there was pus in the cyst; that it arose from suppurative inflammation; that it supervened the tapping, (why he was told so a month previously by Mr. Lane;) and that there would be increased hope, if the pus were to be evacuated by tapping; but still there was danger in the operation. Simple soul! Why, if he had left it alone, Nature would have done it for him, and that safely too. I shall not delineate the paraphernalia of the proceeding; but he made as much fuss as if he had been going to perform an operation for removing the cyst itself, instead of opening a simple abscess. Let us only ask Mr. Brown this question—What does he mean by saying that he passed the trochar in at the most projecting part, which was at the junction of one-third of a line from the superior spinous process of the ileum, with two-thirds from the umbilicus? Does he know what a line means? Or does he mean that he drew a line from the ileum to the umbilicus? I should say he does, but his description is rather cloudy. Viewing the whole narrative, it is one of the most extraordinary that ever was the lot of medical men to read. Where is the boasted virtue of his treatment by diuretics, bandages, and mercurials? Why, they were positively dangerous; and had it not been for a kind Providence, his patient must have perished, and we should not have had an account of this "cure" I warrant you. That kind Nature acted a good part to the poor sufferer, and as an excellent step-mother to Mr. ISAAC B. BROWN, no one will dare deny.—I am, Sir, yours, &c.,

JOHN GRAY.

Upper George-st., Bryanstone-sq., Jan. 1846.

ON TREATMENT OF FRACTURES OF THE THIGH-BONE.

To the Editor of THE LANCET.

SIR,—The perusal of an article in your last week's number, entitled, "Remarks on Fractures of the Thigh-bone, and the Apparatus used for their Treatment," causes me to trouble you with the following observations:—

Mr. Maclise, a gentleman evidently possessed of much professional knowledge, and one who has enjoyed the advantage

of extended observation, in the article alluded to calls the attention of your readers to the modes of treatment he has seen adopted at several of the Parisian hospitals, as well as at many of the London ones, in cases of fracture of the femur, and he particularizes an example where the apparatus employed does not fully answer all the purposes required of it. The example he selects, by way of enforcing his views, is that of fracture of the thigh, at its upper third, below the site of the small trochanter. He discusses, at some length, the nature of this injury, and points out, in all correctness, the impropriety of treating it with the long splint, showing how inefficient this must be.

I had hoped, Sir, that the time for such discussion had passed away, and that amid the skill and judgment of modern surgery, such information was uncalled for. I had thought that fractures, ulcers, and joint-diseases, for instance, were not now indiscriminately huddled together, and treated all on a fixed principle, merely because fractures, ulcers, or joint-diseases; but that cases were now carefully distinguished, elaborately dissected out, as it were, so as to show their points of resemblance and dissimilarity, and thus to indicate the means that may be scientifically had recourse to for their alleviation. To treat a case of acute synovitis and one of ulceration of the cartilage of old standing on the same plan, because both joint-affections, appears to me to be scarcely characteristic of modern research and ingenuity; yet, certainly, to treat all cases of fracture of the thigh with one and the same apparatus is but a very short step in advance of such a procedure. I have not hitherto visited Paris; it is my intention, however, to do so shortly; and I unhesitatingly affirm, that should I there find surgeons treating fracture of the femur at the junction of its upper with its middle third with the long splint, I shall feel myself compelled to declare them (what they will in no wise allow) to be out of sight behind the modern British practitioners in the management of fractured bones; and shall not be surprised to see them, upon equally sound principles, strongly flexing the leg upon the thigh, in the case of a transversely-broken patella, and similarly adjusting the forearm and arm, in the case of fracture of the olecranon.

Mr. MacLise proposes a mode of treatment for the form of fracture of the thigh in question, upon principles combining those of the long splint and double-inclined plane, and this, doubtless, with great propriety and judgment; he, however, omits what to me appears a most important item in this mode of treatment; I mean, the flexion of the trunk upon the thighs, which, by the effect it has in relaxing the psoas and iliacus muscles, tends much to the undoing of that tilting upwards of the upper fragment of the bone which is so characteristic, and, at the same time, so inimical to apposition.

I am, Sir, your obedient servant,

Gorleston, Suffolk, Jan. 1846.

S. D. T.

APOTHECARIES' HALL, LONDON.

Names of gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, 29th January, 1846:—Francis Ezekiel Barton, Norfolk; George Aytton, Kenilworth; Charles Pantin Slaytor, Woolpit, Suffolk; Arthur Hewgill, Repton, Derby.

CORRESPONDENTS.

THE whole of the correspondents who have written to us on the subject of THE MILITIA BALLOT (and the letters we have received amount to some hundreds in number) are referred to an announcement, made on the authority of the government, at page 164 of this week's LANCET. It is now certain that there is to be no ballot for the militia under the existing Act of Parliament.

Medicus, (York.) The Secret Committee are still without by-laws for their government. The members of the Association, therefore, are incapable of enforcing a demand for a general meeting of the Association. The conduct of this committee for baseness is unparalleled in the black history of the old corrupt corporations. With the latter there was no pretence of liberality, no affectation of governing on the principle of representation. In the robberies which they committed, there was some spice of manly boldness. It is evident that they were not influenced in their conduct by any fraternity of SNIPES and SNEAKS. The cause of medical reform will yet triumph over the sordid efforts of a small knot of despicable intriguers.

We should feel obliged if the medical gentlemen who are

engaged in practice in the manufacturing districts would favour us with an account of the results of their experience of the effects of THE FACTORY SYSTEM on young persons of both sexes. The subject is likely to be again warmly debated in Parliament, in consequence of the reintroduction into the House of Commons of Lord Ashley's Bill, the object of the measure being to prevent persons under eighteen years of age from working in factories during more than ten hours a day. The evidence of medical practitioners on such a question must carry with it the greatest weight in the minds of statesmen of judgment and authority.

Chirurgicus, (Birmingham).—There is no ground for fear. The apothecaries are defeated and openly rumped by the Minister. If a new College be now established, it will be co-equal in power with the most influential of the existing institutions. The cause is now getting fairly into the hands of the surgeons in general practice. The apothecaries who never were in general practice, and never did practise as surgeons, have found their level. After much blustering and vapouring, they have discovered (too late) that they constitute the residuum of the profession.

The Rev. W. C.—m.—There is no popular treatise of the kind that we could recommend. The results prove, that it is not a humane act for persons unlearned in physic to undertake the treatment of the sick. The clergy cannot better employ their influence than by endeavouring to procure for the destitute sick poor, the advice, skill, and attention of qualification medical practice. Most of the "popular" Treatises on Medicine are "popular" nuisances.

A New Member.—Without doubt the Royal Medical and Chirurgical Society could have been more profitably occupied than by the reading of so silly and twaddling a production as the paper of Mr. CHARLES BROOKE on Strabismus, the only "advantage" of what is called sub-cutaneous tenotomy being, as Mr. Dalrymple justly observed, "a greater liability to ecchymosis, and a greater difficulty in the blood being absorbed." The only eye, as Mr. Dalrymple said, that he had ever known to be destroyed by the operation for squinting, being lost from this very difficulty! Could not Mr. BROOKE devote his important professional attention to the cutting of corns?

A Country Surgeon should address his request to Dr. G. B. The publication of the note of our correspondent would be regarded by the Doctor as a puff, and therefore offensive to his good taste.

A Country Subscriber.—The right of practising all branches of the profession in Scotland and Ireland, but not in England and Wales.

The note of H. S. S., being marked "private," we cannot notice its contents in this place. His proposal should be addressed to the minister whose name is attached to any Bill on the subject that may be introduced into the House of Commons.

A Student does not say to what "matriculation examination" he alludes. If he means that of the University of London, a letter addressed to the Registrar, Mr. Rothman, would obtain for him a satisfactory reply to his question.

An Enquirer.—We believe, that in point of time, Dr. J. must be regarded as "the inventor." Whether Dr. E. designed his instrument, or borrowed the suggestion, we have no means of knowing. No person can patent what has been "given to the public." The question of priority we have no room to discuss.

A Student.—Few authors are regular in furnishing copy to printers. The labours of scientific men, when writing on scientific subjects, often tax the powers of the mind, and occasionally tasks are undertaken without a due estimate being made of their importance, or of the responsibility which they entail on their authors.

A General Practitioner is advised not to trouble himself to obtain any such worthless document. By obtaining the M.D. diploma in the manner proposed, our correspondent would not in the slightest degree improve his present position in any new medical law that may be enacted by Parliament.

With testimonials showing less than a six years' devotion to medical studies, *A Pupil* would not be admitted to examination.

The letter of Mr. Lunadowns had been in type these three weeks. It will be found in THE LANCET.

Mr. Hunt, (Herne Bay.)—The subject is highly interesting: the paper would be inserted.

Communications have been received from—A Surgeon, (Bedfordshire,) Mr. J. L. Levison, Mr. John Christophers, Dr. Farnival, M.R.C.S.E., (Liverpool,) Mr. G. Harvey, Mr. Hill, Mr. Eager, (Guildford,) M.D., (Strand,) E. M.

CLINICAL LECTURES ON THE PRINCIPAL FORMS OF INSANITY,

DELIVERED IN THE MIDDLESEX LUNATIC-ASYLUM
AT HANWELL.

BY JOHN CONOLLY, M.D.,
PHYSICIAN TO THE ASYLUM.

LECTURE X.

Insanity complicated with epilepsy.

THERE are two very important complications of insanity to which I wish to direct your attention. Numerous illustrations of each are to be found in this asylum. These complications are—

1. Insanity with epilepsy.
2. Insanity with general paralysis.

In each of these complications the insanity is usually preceded by the bodily malady which is associated with it: this is almost always reported to have been the order of events in the epileptic cases, and it is very generally the order in the paralytic complication. Both complications are so little hopeful, as to be excluded from Bethlem and St. Luke's.

To-day we have been occupied with the observation of some of our numerous epileptics, and you have found their mental condition exhibiting every variety, from maniacal excitement to dementia. In the greater number of these cases, the epilepsy began in early life, being in some the result of accidents; but in most of the cases arising from very obscure causes. From other opportunities of observing such cases in childhood and youth, I am disposed to think that most of these patients manifested a peculiarity of character very early in life, that epilepsy supervened, the brain became further modified, and then the insanity became declared. Sometimes, but rarely, epilepsy suddenly occurs later in life; but then generally from evident causes, physical or mental, which have simultaneously affected the mind. You will often be asked respecting the probability of unsoundness of mind being induced by epileptic fits; and it must be remembered, that the instances are not rare in which epilepsy has lasted during a great part of a long life, in persons whose brain has never shown any disposition to further disorder, and in whom the intellectual faculties have been preserved, and powerful, and active, to the close of their existence. It is in vain to attempt to say what that morbid or imperfect condition of the brain is which, in other cases of epilepsy, causes the intellect so soon, and so repeatedly, or so permanently, or so deeply, to suffer impairment. I have presumed some congenital imperfection in the constitution of the brain to exist in many cases of insanity; and it may be that, in cerebral epilepsy, Dr. Cheyne's opinion that the character of the brain is strumous, is correct; but even this does not much advance us towards an explanation of it.

The combination of epilepsy with insanity, or epileptic attacks having preceded insanity, being very unfavourable circumstances, the existence of the two maladies in such connexion is to be inquired into with care. Sleep-walking and short attacks of a cataleptic kind occurring in young persons are, I fear, often the precursors of complete epilepsy, which supervenes after the age of puberty. In the cataleptic seizures to which I allude, the consciousness of the little patient is lost for a few seconds, or for nearly a minute; the eyes become fixed, and the head is moved gently up and down, but the patient does not struggle or fall. Reading, or any other occupation, is of course interrupted, but soon, after a little appearance of confusion, resumed. The conjunction of such affections with marked mental peculiarity in young persons is, consequently, alarming, foreboding epilepsy, uncertain life, or derangement of mind. In very young epileptics, the fit of epilepsy is extremely slight and transient, and its real nature is sometimes unsuspected. A cry is heard, and when the child is seen, a slight agitation of the muscles of the face and of the eyelids, and some appearance of alarm or confusion, alone indicate what has taken place. An indented or wounded tongue, and a little saliva or blood on the pillow, confirm suspicion in other cases. In other instances, a child falls down when playing and excited, seems flushed and frightened, but soon recovers. Such attacks are probably only witnessed by servants, or the parents, and cause alarm without being understood. In the children of very nervous persons,

No. 1172.

sons, and yet more of parents who have at any time been insane, these symptoms are of most unfavourable omen, although the children probably manifest, for a few years, a quick and precocious intellect.

In families of which some of the members were subject to epilepsy, I have noticed paroxysms of excitement, or even of mania, in others of the family, coming on with all the suddenness of an epileptic attack, characterized by vehement impulses, of temporary duration; and in others, fits of nervous agitation, with a disposition to rapid movement of the lower jaw, and a general tremor. In the epileptic patients whom you have seen in our wards, the fits of epilepsy present every gradation of severity, and every variety of frequency. In J. O'D—, in male ward No. 2, very slight attacks of hurry and agitation often occur: he staggers a little, and recovers; he is ordinarily very quiet, and yet sometimes he is excited for several days, like a man intoxicated. This young man was in the Spanish legion, under General Evans, and the fatigues, exposure, and starvation, of that ill-fated army seem to have shattered his nervous system beyond repair. Generally speaking, I have thought the paroxysms of epileptic convulsion less violent in lunatics than in others; but we have patients of whom the appearance, during each fit, seems to betoken death, and some who are convulsed in the most intense degree, and who remain long, even for days afterwards, in a state of stupor. W. B—, a young man, also in ward No. 2, and apparently disposed to apoplexy, has fits of the most alarming character; but he recovers pretty well, and goes to work again. Another young man, of the same physical conformation, J. B—, in ward No. 1, and who invariably complains of not being allowed sufficient tobacco, repeating the same request in the same words at every visit for years, remains comatose for days after his fits, and will most probably die in this state at last. The history of most of these cases is very incomplete, only amounting to this, that the patients have been long subject to epilepsy; that they became eccentric, or mischievous, and were proved to be insane. In many of the patients the attack comes on without the slightest warning: they fall down at once, and with great violence, and generally in the same manner, some on the face, and some on the back of the head; thus sustaining repeated injury, exactly in the same place. Others cry out before the fit, and some walk or run about, or fall on their knees twenty times in an hour, with sudden devotional impulse, or go about singing for some time before the convulsion comes on. Some describe the fit as coming on with a feeling as if violent and repeated blows were struck on their head; some complain of dimness of sight, and some of sharp precursory pains in the chest.

A. B—, in female ward No. 6, spoken of in the preceding lecture as having been so much cheered by the presence of one of her children, is epileptic, and frequently excited or depressed, and suicidal. After a few tranquil weeks, during which she is generally occupied in needlework, her face is observed to become redder than usual; and then, discontinuing her sewing, she may be seen walking rapidly round the airing-court or the front field, for hours at a time, seemingly quite abstracted from external objects, and as if driven on by some internal impulse. On some occasions I have seen her suddenly stop, crouch down, fall very gently, recover before I could get near her, and resume her rapid walking. Great excitement commonly ensues on this state, and for some days she is dangerous to herself and others, would leap down a precipice, beat or injure those about her, strangle herself, or destroy herself in any way; she always then complains of being insulted and ill-treated by the other patients or the nurses, but never at other times. She has been insane many years, and epileptic, I believe, from childhood. As in her excited states she sometimes springs suddenly at the other patients, and would hurt them severely, seclusion becomes necessary to her, and its effect, in her case, illustrates some of its advantages; for when she is placed in her own room, she will generally go quietly to bed, or sit down quietly: at other times, becoming immediately composed when in seclusion, she stands for a length of time in one position, quite immovable, as if in a reverie.

In female ward No. 5, E. B— usually presents the appearance of an imbecile person; but on the approach of a fit she becomes singularly animated, dances with inconceivable activity, and not without grace. For a time she is very affectionate, and shakes hands with everybody; then she becomes quarrelsome and combative; and after her fits she is comatose, and slowly recovers, generally complaining much of her prayer-book and other property having been stolen from her—a frequent imaginary grievance with the epileptic.

She has been insane eleven years, and epileptic from childhood.

It is unnecessary to multiply instances of this kind, which are numerous. You will have opportunities of seeing several of the epileptics in very different moods of mind at your successive visits. On the male side, you will find the ward No. 2 entirely allotted to the epileptic, chiefly to the most intelligent of them. The more imbecile are in male ward No. 1. The female epileptics are scattered through the wards 3, 5, and 6; and few of them are intelligent compared with the number of the male epileptics, who may be pronounced almost perfectly rational in the intervals of their paroxysms.

You will find in your practice among epileptic patients who are not insane, that excitement of mind is a frequent precursor of the epileptic paroxysm: warning of the fits is given by their being in particularly high spirits. This excitement passes on to a much more extreme degree in the insane, and many of our patients are violent only at such times, or for a day or two after the fits. J. W—, whose garden, attached to the epileptic ward No. 2, and wholly cultivated by his own hands, you must have noticed with admiration, is at present apparently quite well, and able to explain everything relating to the plants which he trains with so much care, wherever they will grow. He has, indeed, appeared so well for such long periods, that he has twice been discharged from the asylum; but the excitements of the outside world have always been too much for him, and he now remains voluntarily in this retreat from them. There are times when he becomes very discontented and irritable, and, before a return of his epileptic fits, his restless actions and loud voice would extremely alarm those unacquainted with him. For several days, at such times, he remains in seclusion, by which means, all additional causes of irritation being shut out from him, he gradually recovers his usual tranquillity. In the management of such patients, much depends on the invariable avoidance, if possible, of any cause of disturbance. After a year's freedom from an attack of his epilepsy, he became lately much discomposed by being removed from one ward to another. This was done without my knowledge, and severe fits ensued, and, for a time, all seemed to be undone. The removal of patients from one part of the house to another is either a means of improvement, or of great disturbance and vexation, and there is no part of the treatment over which the physician should have more complete control.

T. M—, in the same ward, is an old seaman, and particularly quiet and well-behaved: he often works in the gardens, is never absent from chapel, and may frequently be seen reading the Bible in an afternoon to some of his epileptic companions in the day-room. But now and then he comes up with an air of somewhat solemn importance, and says that he has seen the Holy Ghost; and this fancy is always followed by an epileptic fit; after which for a day or two he is rather excited and confused. He always says that he saw the Holy Ghost on board of the ship in which he served, just before he had his first fit of epilepsy. Another old seaman, in the next ward, T. W—, served on board the Victory with Lord Nelson; and falling into the hold one day, injured his head with a handspike, on which unfortunate accident epilepsy seems to have supervened. This patient, who is fifty-two years of age, still presents a fine specimen of an English sailor. He came to us in March, 1840, having been more than thirty years insane, — and was for a long time perfectly intelligent in the intervals of his epileptic malady; but more frequent attacks are evidently weakening his faculties very much. He is usually good-tempered, grateful for kindness, constant in his feelings, warm in his resentments, and not quite safe when the fits are coming on. He never forgets the anniversary of Trafalgar. In his fits he falls down very violently; and on one occasion his shoulder was dislocated by falling. (He died suddenly in 1843.) It may be observed that in this case, and in all the cases of epilepsy in which much intelligence is preserved in the intervals between the attacks, there is either a brain generally large and well formed, or a good development of the anterior portion of the head. I have already observed that such is also the character of the head in maniacal patients, who, although they have been insane many years, and liable to recurrent attacks of great excitement, have yet not become either imbecile or incoherent.

Epilepsy, when combined with mental disorder, is most frequently associated with occasional mania. We have very few cases in the asylum in which it is associated with melancholia: but in a few examples there is complete melancholia, and also a temporary disposition to suicide after the epileptic paroxysm. Epilepsy is also to be seen in our wards connected with incoherence, with imbecility, with dementia, and with

idiocy; and to these combinations, excepting the last, that of general paralysis is sometimes added, mania having been usually the primary form of mental disorder. The cases of epilepsy at present in the house are—

Associated with mania	26
" with melancholia	3
" with incoherence	12
" with imbecility	62
" with dementia	18
" with idiocy	4

Total 125

Of these patients, seventy-two are men and fifty-three women; the whole number of patients in the asylum being, 418 men, and 567 women: so that the combination of epilepsy with insanity appears to be more frequent in men than in women.

An habitual dulness is soon observed in the greater number of epileptics, and when they are long under observation their faculties are perceived to undergo a gradual and complete obliteration. J. M—, in ward No. 2, was a few years ago generally at work in the carpenters' shop; he worked steadily, but spoke very slowly, as if he found it difficult to construct sentences, and his countenance was gloomy: his fits usually came on suddenly, and I have seen him fall, when carrying a plank, as if he had been shot dead. After the fits he always remained for some days quite stupid, recovering his consciousness gradually. He became insane when twenty-six years of age, and in ten years his mental state has become nearly that of complete dementia. The memory, in many patients, becomes impaired for a time after each epileptic fit, and they often imagine that they have been robbed or beaten. Of the fit itself they have frequently no recollection, and apparently no consciousness; the external and internal senses appear to be entirely oppressed at the time, and all the phenomena of spasm, almost going on to suffocation, and of muscular movements, sometimes violent enough to cause fracture of the bones, are unattended with pain or any kind of suffering. Sometimes, after a fit, they will relate the particulars of a severe illness, which they suppose themselves to have had, or detail some imaginary course of ill-treatment, in a circumstantial manner. They are among the most constant applicants for aperient medicines, never believing that such medicines are not requisite. Tobacco and snuff are much in request with them. Female epileptics have a singular love of extremely tight dressing, squeezing themselves up in stays and boots with even more than usual female endurance: this may probably be resorted to for the relief of some uneasy sensations, but the effects are very inconvenient when the fits attack them. Many of the insane, who are not epileptic, fasten strings very tightly round their fingers, or force their fingers into very small rings, and sometimes, I believe, they tie strings round the throat, in consequence of the same instinctive tendency, and without any suicidal intention.

Another peculiarity is not unusual among our epileptic patients. It is often exemplified in R. S—, a young man in ward No. 6. A few days ago this patient was suffering from all the violent symptoms of the malady, and to-day you saw him come to me with an air of great satisfaction, to say, "Sir, I am very happy to inform you that my fits have entirely left me, and that I feel myself quite well, and in a state to be discharged from the asylum." He makes this communication to me several times in a month. E. C—, also in the same ward, a tall, powerful, active young man, whose strange violence after his fits occasions dismay in the bystanders, always recovers his tranquillity in a day or two; and then, approaching us with an engaging smile, says he begs pardon, but he is of opinion that he must have been accidentally forgotten on the last committee-day, as he is perfectly recovered, thank God, from his complaint, and feels quite fit to go to work.

In some of the cases of old date, the excessive violence or proneness to mischief which the patient exhibits, either before or after the fits, requires every precaution to be taken. W. S—, in male ward No. 6, who is, in the intervals of his malady, perfectly quiet, and apparently in a state of dementia, becomes dangerous at the epileptic periods, rushes out of his room, and attacks any one whom he meets. M. S—, in female ward No. 6, long epileptic, and subject to violent attacks of the malady, is generally good-natured and gentle in her manners, but as the fits approach she becomes irritable, and will strike, kick, or bite those about her very severely; and these actions seem so entirely to depend on more impulse, without volition, that she sometimes bites herself, as if for relief; having, when she recovers, no recollection

of it. T. G—, in male ward No. 7, is an old soldier: his first fit of epilepsy occurred, he says, when he was a youth, on a march in Ireland. He is now thirty-six years of age, and reduced to a state of habitual incoherence; but when his fits are approaching he is one of the most violent and dangerous of our patients, and makes fierce attacks on all who happen to be near him. His whole frame is sometimes so violently tremulous, that his involuntary muscular actions seem to shake the solid floor and walls of his room; and at such times he sings in a peculiar manner, his deep voice vibrating deeply, and his countenance expressing the utmost fierceness. Although very dangerous at such times, in the gallery or day-room, he is generally tranquil when placed in his own room, in that seclusion which is so necessary to an irritated man, as it excludes all external causes of irritation, and to which the opponents of the non-restraint treatment have applied the opprobrious and unjust term of solitary imprisonment. In male ward No. 6 is to be seen another epileptic patient, J. E—, a Welshman, whose tranquillity, when free from epilepsy, would not prepare you for the dangerous violence he manifests when the fit is approaching. The manner in which these two patients are managed in their worst state will profitably repay your observation. The former has never been in restraints; and the latter, to whom they were frequently applied, has become comparatively harmless since their use was discontinued.

We have occasionally, among the female patients, cases in which it is difficult to determine whether the violent paroxysms to which they are subject are truly epileptic or merely hysterical: they seem indeed to be mixed cases, in which some of the phenomena of each disorder are blended. From our experience of some of these troublesome cases, at Hanwell, I am disposed to think that at first they were cases of simple hysteria, but have been aggravated by injudicious treatment. There is a young woman in the infirmary at present, whose case seems to illustrate all these circumstances. When she came to us, a year ago, her wrists and ankles were marked and ulcerated with the hand-cuffs and leg-locks which she had worn for many weeks before. She was calm in her manner, and gave a rational account of herself; and this is frequently her state at present; but she is liable to much excitement, on the coming on of which she walks about, singing and laughing, and is disposed to quarrel with those who interfere with her. Fits ensue, closely simulating epilepsy; and then she becomes wildly maniacal; seems no longer to recognise any of us; fancies herself in the asylum where she suffered so much from restraints being put on; mistakes the kind nurse of her ward for one whose name she mentions with anger and dislike; throws herself on her knees and passionately entreats that "the men" may not come to put "the irons" on her:—for it seems, in some of these barbarous places, men are employed to force the female patients into restraints, or to hold them down, or to throw them into a bath. Where mercy is so little shown, it would perhaps be in vain to expect delicacy: but the asylums in which such practices seem to exist are, unfortunately, the only ones which have yet been favourably mentioned by the commissioners who are appointed to protect the insane; and to whom, of course, these abuses are unknown. During the paroxysms to which M. N— is subject, she certainly requires every possible precaution; she throws herself violently down; rushes with great force on those near her; strikes like an automaton, and sometimes bites and kicks; but being treated kindly, even in this excited state, she recovers after a little time, and expresses sorrow for what she has done, and gratitude for the kindness shown to her. She cannot always be left, even in a padded room, for sudden impulses to suicide come on, and she would strangle herself if not prevented. There is nothing premeditated in these attempts, and she appears to retain no recollection of them. Even when first admitted this poor girl was often very sensible, and affectingly lamented her hopeless affliction: her fits are now less frequent, and her excitement much less; and there is even a prospect of her recovery. We have other cases of this kind, but they seem to belong more to hysteric mania than to mania with epilepsy. The temper of these patients is very variable, and requires delicate management. Mortification does them no good, and severity exasperates them. By great indulgence and occasional kind remonstrance, their general conduct improves, and their violence is in time moderated.

In all our cases of mania complicated with epilepsy, the epileptic fits become, in the progress of years, more frequent and usually more severe, and the subsequent stupor is deeper, and longer continued; the intellectual faculties become weaker by degrees, until the malady passes into imbecility, or the

more extreme state of prostrated intellect which we term dementia. At length the patient dies, after the stupor succeeding a fit has continued for a day or two. Some will, however, recover in a few hours from a state precisely resembling stertorous apoplexy; they appear actually moribund, and the next day this state is recovered from, and the patient is actively maniacal. This has been strikingly exemplified in E. B—, a patient in female ward No. 6, long maniacal; and also in D. G—, in male ward No. 10, who is now actively employed on the farm. In E. G—, a young woman in the infirmary, the apoplectic state, which seemed hopeless, but which was recovered from after the application of a blister, has been succeeded by perfect imbecility; and both states supervened on an attack of mania of about six months' duration; her age being only thirty.

I believe that death takes place in most of the epileptic cases by simple apoplexy, and it often occurs suddenly, either from this cause, or perhaps from prolonged spasm of the glottis. Patients are found lying in bed, on the back, or one side, as if asleep, as if there had been no convulsion, and sometimes they appear to have moved or turned; but in no case in which I have seen the body before the position was changed have I found any reason to suppose that the patient died from suffocation by pressure of the face on the pillow, and I doubt its possibility. In one case, in 1841, J. R—, an epileptic and maniacal patient, aged twenty-eight, and twelve years epileptic, fell violently down in the day-room, in the presence of the other patients and the attendants, and died instantly, without a cry or a struggle of any kind.

In some of our epileptic cases, symptoms of fever have followed immediately on an attack, and been fatal. After the usual epileptic paroxysms, a hot skin, a furred or dark tongue, very offensive breath, low delirium or stupor, and all the symptoms of typhus, have been observed in these cases, which have attracted particular observation in consequence of our never having cases of pure fever in the asylum, and only meeting with these symptoms in these epileptic cases, and in some cases of acute mania.

After death, in nearly every case of epilepsy complicated with mania, perhaps in every case except where these symptoms of fever have preceded death, all the vessels of the brain are found full of blood, as if blood had been forced into them until they could hold no more. The patients seem to die of this simple apoplectic state. In a few instances, blood has been found effused between the dura mater and arachnoid, (or in the great sac of the arachnoid,) and in one case there was an immense effusion of blood into the left lateral ventricle, breaking up the substance of the brain. We have rarely found distinct disease of any part of the brain. The ordinary serous effusions, seen in almost every case of mania without epilepsy, in the sac of the arachnoid, or beneath that membrane, are not commonly present, but not always absent. Occasionally we have noticed a preternatural hardness of the base of the brain, or at the commencement of the medulla, but nothing constant. The absence of this hardness has been particularly verified in other cases.

The ordinary medical treatment of epilepsy in maniacal cases does not differ much from that of epilepsy without the mental complication. We know that during the epileptic paroxysm, the chief circumstance requiring attention is to prevent the patient from receiving or inflicting injury; and our caution must be doubled when the patient's disturbed intellect has further impaired his faculty of self-preservation. Some patients invariably fall on the back, some as constantly on the face, and severe blows, bruises, and even wounds, are sometimes received on the forehead, face, or occiput, particularly in our galleries and day-rooms, which have stone floors. Wooden floors would be preferable for all the galleries, but particularly for those of the epileptic wards. In the bed-rooms, wooden floors are open to the objection of retaining bad smells; but for perfectly clean patients, are better than stone, brick, Suffolk tiles, mastic, or any other hard material. Covering the stone floors with matting, rushes, or bark, is attended with peculiar difficulties, both as regards the preservation of cleanliness, and the safe stepping of the feeble and inactive of the epileptics. The great objection to wooden floors is the danger of fire; and if an asylum is not fire-proof, which every asylum ought to be, the danger would be formidable. It would generally be well if the airing courts and exercising grounds for the epileptic were sown with grass. The protection of the patient's head has been the object of many attempts, all of which have failed, and will fail. A soft cap might act as an effectual preventive, but the patients will not wear it; and if fastened on, it would irritate them, or make the head too hot. Cushioned caps are much too heat-

ing; caps with a round double border, capable of inflation, have been sometimes worn for a short time by some of our epileptic patients, and with advantage, but they soon all disappeared. A simple woollen cap, made like an ordinary night-cap, and worn low on the forehead, would diffuse the force of many a blow.

If possible, epileptic lunatics should not be exposed to the necessity of going up or down stairs; and, at least, the stairs ought to be easy, and with proper square landings, and no sharp or circular turns. The best plan is to have the epileptics in wards on the ground floor. There should be no sharp corners or edges in the furniture, or in the railings, or steps, or stone-work; the door-posts should be rounded, the fire-places guarded, and nothing should be left in any part of the ward or courts, against, or over, or into which a patient could fall. One of our epileptics lost his life by falling in a fit with his head into a pail. Some years ago another life was lost by the patient falling in a fit on the bed, when standing by it, and falling with the face downward, when in restraint, and unable to save herself in any way, showing not only the inefficiency, but the danger of restraints in such cases as a substitute for proper watching. When epileptic and insane persons are not in asylums, they should not be allowed to walk out alone, and the windows and fire-places must not be left unprotected.

It is usual for the attendants to place a pillow under the head of a patient seized with a fit in the day-room or gallery, and to loosen the cravat, or any tight part of the dress: but they are directed not to take up and remove the patient during the first convulsive struggle; but, as soon afterward as practicable, to place the patient on the nearest bed. Several of the rooms in the female epileptic wards, and some in the wards for the male epileptics, are fitted up with an especial view to their safety, the whole floor being made into a bed, and in some cases the walls being also padded. The common precaution of putting a napkin between the teeth is not to be forgotten when the patient is known to bite his tongue in the fit.

Your general medical studies and observation in the hospitals have probably made you aware how little mere medicine can do towards curing or mitigating epilepsy. There are sometimes cerebral symptoms attending it which clearly indicate the employment of leeches or a blister; and, from the intense injection of the brain, one would think general bleeding might prove occasionally useful; but its utility is very limited, and its repetition even less admissible in the insane than in those simply epileptic. I have sometimes seen the dangerous stupor relieved, and have thought the interval between the attacks somewhat lengthened, by making a free incision in the scalp, in the course of the sagittal suture. This is generally attended with copious hemorrhage, and cannot be repeated often. Setons have appeared to me to exercise very little control over the complaint. I must, indeed, avow, that I am always surprised when I find practitioners of experience sanguine in their expectations of curing epilepsy. Reviewing my own experience for more than twenty years, I should say that I have seen a few instances in young persons between ten and fourteen years of age, in which there had been one or two attacks of epilepsy, and the disease was entirely removed, or at least suspended as long as my observation lasted, by a course of purgative medicine, (calomel, and the compound powder of jalap, taken every second night for some time,) aided by the frequent use of the shower-bath, the occasional application of leeches to the head, the careful regulation of diet, and care to prevent strong mental emotions or exertions. I once thought I had known several such instances; but a physician's life may be long enough, even before old age, to correct his early conclusions, and I have learned that one or two young epileptics, whom I supposed to be cured twenty years ago, have subsequently become either subject to epilepsy again, or insane. One or two examples I have met with in which fits which had all the characters of epilepsy, in patients rather older than the age I have mentioned, disappeared after the voiding of a large lumbricus; and, in one or two cases, in young persons in whom epileptic fits had ensued, on a sudden change from spare to full living, I have seen the fits apparently removed by a return to low diet. There are also epileptic seizures incidental to persons of intemperate habits, especially in warm climates, which temperance and a temperate climate will suspend. With some exceptions of these kinds, I cannot recollect a single case of epilepsy cured; and I have tried most of the specifics in vain. The disorder is capricious, and sometimes disappears for a long period, or entirely, and the medicine last employed gets the credit of the cure; but among those disfigured for life by

the excessive use of the nitrate of silver, I have scarcely met with one who was relieved of the malady for which they had been so incautiously treated. It is but right to state, however, that I have found several practitioners confident of the good effects of this medicine in lessening the violence of the epilepsy and the attendant excitement. Van Swieten records that he succeeded in curing one case by musk; but the patient was a girl, eight years of age. Ten grains of musk were given for a dose, and this was several times repeated, so that all the secretions smelt of musk. The greater probability of cure at this early age was remarked by the ancients, (Cels., lib. ii. c. 8.) Copper was used for the cure of epilepsy by Aretæus. Zinc, either alone, or in combination with valerian, has also had some repute; but none of these medicines has long enjoyed any general confidence. Of late years, a secret medicine sold at the Hague has been much spoken of; but I now hear that it has been found only to fail. I conclude that it is just as inefficacious as were the sacred remedies sold formerly at Leyden by the chemists, vaunted as of power to "prevent the commotions of the raging Archæus;" or as the numerous specifics, the mere enumeration of which occupies twelve pages of small print in M. Portal's work on epilepsy. I believe it is best to keep the mind free from all credulity in these things. Many of them may now and then have appeared successful—mental impressions may now and then do so—and it is probable that in this manner mesmerism may sometimes have succeeded.

M. Esquirol's experience in the treatment of epilepsy, associated with insanity, does not seem to be more encouraging. On taking the charge of the insane and epileptic at the Bicêtre, in 1821, in M. Pariset's absence, he found twenty epileptics under treatment by means of moxas, which had been applied in each case, to the number of two or even three, to the top of the head, until the combustion had extended to the outer table of the skull. The wounds thus made were carefully kept open. Counter-irritation could scarcely be carried further: but not one case of cure was the consequence.

More rational indications of cure appear to arise from the view of the dependence of epilepsy, in different cases, on hepatic, intestinal, uterine, or other local affections, as pointed out in a very practical manner by Dr. Prichard. But I fear that the cases of epilepsy combined with insanity, in which even acting on these indications when apparently the clearest would be successful, are few in number: the peculiar irritability of the brain probably lying beyond the reach of purgatives, alteratives, and emmenagogues. But attention both to the state of the bodily and mental functions may doubtless do something towards lessening the tendency to repetition of the epilepsy, and the violence of the attack, and the excess of mental disturbance connected with it.

As in many cases of insanity combined with epilepsy, the tranquil state of the mind in the intervals between the fits makes it probable that if the fits were not to recur the insanity would subside, the practitioner cannot but anxiously continue his inquiries into the real efficacy of all medicines and plans recommended on good authority: and the plan of Dr. Cheyne merits further trials—namely, that of giving James's powder every night; first in doses of two or three grains, gradually increasing the dose by half a grain every night, up to eighteen or twenty grains; always diminishing the dose if the skin or stomach is much affected by the medicine; the trial being continued for four or six weeks. There is at least no danger in such a plan; which cannot be said of some of the rest.

I greatly doubt the advantage of any exclusive system of diet in cases of epilepsy in general. When it is associated with evident plethora, a moderate diet and very little animal food, and abstinence from malt liquor, are plainly indicated: but many cases of epilepsy would be rendered worse by low diet. Wine, spirits, and other stimulants, can seldom be proper for an epileptic: their use is sometimes of itself a cause of epilepsy. Even harmless fluids should be drunk in moderation. Baths of all kinds are of questionable advantage in epilepsy; the warm bath may affect the head unfavourably; and the reaction produced by the shower-bath may be positively injurious. Tight clothing, for which many epileptics have such a partiality, seems to be extremely unfit for them. Exercise should be taken frequently in the day; not to fatigue. The feet should generally be kept warm, and the head cool. The patient should lie upon a high pillow: a sloping pillow of horse-hair, shaped like a writing-desk, is the best, as long ago recommended by Dr. Gregory in apoplectic cases; and upon this a thin soft pillow may be placed. Sleep should not be indulged in to excess. The mind should,

possible, be kept quiet: public meetings and all very much heated rooms should be avoided, and all causes of sudden discomposure or agitation.

Maniacal attacks, associated with epilepsy, require the adoption of all the resources detailed when speaking of the treatment of acute mania; but, with a few special modifications, arising from the modified nature of the attack, dependent on its complicated character. They require to be applied with especial promptness, and discontinued earlier than in the uncomplicated form of mania. In some patients, the excitement only lasts a few hours; in others, it is extended to a few days; but, at the same time, the attendants in an epileptic ward must be quite as watchful as in a ward for the refractory, the maniacal attacks being both sudden and attended with danger to the patients in the same ward. When everything was trusted to restraint, the epileptic ward, like all other wards, was negligently watched by the attendants, and often left without one, and very serious accidents were the consequence. After such outbreaks, the strait-waistcoat or the muff was put on, and when the same patients were becoming excited again, these restraints were put on again; and, consequently, several were in restraint at all times, and some passed the largest part of their time so confined, and became perfectly dangerous to approach. No wards were so disturbed or so disagreeable to walk through as the male epileptic ward; but now, this same ward on the male side (No. 2) is one of the quietest wards in the house. You scarcely ever find a patient in bed, very rarely one in seclusion, and the men are tranquil and comfortable; several of them engaged in reading or in amusements, if not occupied in work. As the precursory symptoms of the epileptic paroxysm, including the cerebral excitement, are soon manifest to persons of ordinary observation who live among the insane, the attendants learn to take certain precautions, and they often find it practicable, and even easy, to induce a patient, in whom this excitement is approaching, to leave the day-room or the gallery, and to seek the quiet of his own bed-room, where, however, he must not be neglected. His state may readily be ascertained, from time to time, through the inspection-plate, and if he has a fit, the attendants should be with him. If the subsequent stupor is considerable, or long continued, the medical officers should invariably be informed of it. The passing away of the maniacal excitement is marked by signs as intelligible as those which declare its approach; and the time required in each case for the subsidence of the attack, to that point at which the patient may be trusted, is generally soon understood.

Although restraints were especially and excessively abused in cases of epileptic mania, there are no cases in which they were really less protective, or more annoying, or more hurtful to the patient. His days and nights were equally deprived of comfort by them. Many were bound hand and foot to the bedsteads during the whole epileptic period; the more imbecile and helpless were fixed in the coercion-chairs every day and all day long; and every epileptic patient, without distinction or exception, male or female, old or young, tranquil or restless, rational or irrational, was fastened to the bedstead at night by one hand, so as to be prevented from the possibility of lying comfortably either on one side or the other. The professed object of this was to prevent the patient from turning on the face and being suffocated—an imaginary danger, from which such confinement was in reality no protection. As it was alleged on the female side of the house, that some of the epileptic patients fell out of bed in the fits, we have, as you have seen, fitted up several rooms for them with beds on the floor. On the male side of the house this is not required. The old deep crib bedstead is, however, well suited to epileptics. I scarcely know which class of the epileptics, at that time, presented the most pitiable spectacle. There were poor, dirty, miserable creatures, passing their lives in restraint-chairs, their clothing and their persons neglected, and their dinner taken to them without knife, or fork, or spoon; there were others securely fastened down in bed, furious and full of curses; and there were mild and inoffensive creatures led to their beds at night, and fastened up by one hand like creatures devoid of reason and sensibility. How unnecessary, and how detrimental to the patients all this was, no one can doubt, who will now take the trouble to walk through our male ward No. 2, any day in the week, and at any hour of the day: he will see these very men, formerly so irritable, and often so dangerous, all peaceful and cheerful,—he will hear them respond to a grace read by one of themselves, before they sit down to dinner,—he will often find one of them reading to a group in the afternoon,—he will not hear a voice to interrupt the quiet of the night. The windows of the

ward are full of beautiful plants, cultivated by one of the patients of the ward, and the once damp and gloomy gravel-court has been converted into a pleasant garden.

If then, as I much fear, the malady is in every case in this ward absolutely incurable by human means, I do not doubt that the phenomena of the malady are modified, and that the life of the incurable is rendered tolerable even in this hopeless form of affliction.

FOREIGN DEPARTMENT.

SUB-CONJUNCTIVAL CYSTICERCUS.

M. SICHEL has lately operated in a case of this rare disease. The tumour was situated at the superior and internal region of the conjunctiva, a little above the transversal diameter of the globe of the eye, and three millimetres from the cornea. When the patient looked horizontally, the tumour remained concealed beneath the upper eyelid. It was globular, although slightly lengthened in a transversal direction, and transparent, with an opaque greyish-yellow spot in the centre. The external covering formed by the conjunctiva was intersected by very small concentric vessels. No pain was experienced, and the sight was not in the least affected. The diagnosis was easy, as it is now universally admitted that a small opaline, indolent, transparent, sub-conjunctival tumour, with a greyish-yellow speck in a centre, can only be constituted by the presence of a cysticercus.

The patient, a boy seven years of age, pale, and of a lymphatic constitution, had had enlarged cervical glands, and had experienced several severe attacks of disease. Two years previously, he had been troubled with lumbrici. Three months previously, the internal angle of the eye became red, and remained so for a fortnight. A fortnight later, the conjunctivitis returned; and then it was that the presence of the tumour was remarked. M. Sichel determined on extirpating the cyst.

The operation was long and difficult, and it was found necessary to tie the patient to a table. The eyelids were fixed by an elevator and a depressor, and the eye itself retained in situ by a tentaculum implanted in the sclerotic coat. M. Sichel first divided a fold of the conjunctiva covering the cyst, and then dissected it. The operation was difficult, owing to the screams, the efforts, and the tears of the child. It was not followed by any serious results, although it became necessary to apply six leeches, owing to incipient chemosis. A purgative was also administered. A fortnight after the operation, scarcely any trace of the disease remained.

On the day that followed the operation, the cysticercus, which had been previously separated from the cyst, was examined under the microscope, between two layers of glass. The body presented about two millimetres in length and one in breadth. The head offered, around the mouth, a crown or circle of twenty-six hooks; and around it were four suckers. The neck was covered with small vesicular elevations at some distance one from the other, which gave it a pearly aspect. The body presented a much greater number of these vesicles, which, together with fragments of cellular tissue which adhered, made it appear semi-opaque.

The editor of the *Gazette des Hôpitaux*, from which we extract the above interesting case, thinks excision of the anterior portion of the cyst containing the cysticercus much preferable to that of the entire cyst. The partial excision is much more rapid and much less painful: and although the animal might be divided, the remains of it would in all probability suffice to enable the surgeon to recognise its structure. The bottom of the cyst, which would alone remain were this plan adopted, would heal with ease, and mucous transformation would subsequently take place.

SUB-CUTANEOUS DIVISION OF THE SPHINCTER IN ANAL FISSURE.

M. BLANDIN has latterly operated in fissure of the anus by the sub-cutaneous section of the sphincter. In two cases in which he recently adopted this treatment, the operation was followed by a prompt cure.

M. MARCHAL (de Calvi) has lately performed the same operation on a man labouring under cancer of the rectum. His patient suffered intense agony at the time of defecation, which M. Marchal attributed as much to spasmodic structure of the anus as to the presence of the cancerous mass. The operation was followed by great relief. — *Gazette des Hôpitaux*.

M. RICORD'S TREATMENT OF INDURATED LYMPHATIC GANGLIONS.

All surgeons know how difficult it is, generally speaking, to bring about the resolution of lymphatic ganglions in the

treatment of syphilitic diseases; the measures usually adopted—leeches, blisters, and resolution ointments, often failing. M. Ricord employs at the hospital a much more energetic treatment, destroying progressively the ganglionic mass by the Vienna paste, (potassa fusa and quick lime.)

A layer of the caustic paste is first applied to the tumour. When the eschar falls another layer is applied, and so on until the basis of the tumour is approximated. The thickness of the layer must then be diminished, in order that it may not attack the subjacent parts; at the groin, for instance, a careless operator might open the crural artery. There are always patients in M. Ricord's wards undergoing this treatment. The caustic appears to act in two ways; it destroys a part of the ganglionic mass, and promotes the resolution of the rest by elevating its vitality.*

M. Marchal (de Calvi) has adopted this mode of treatment at the Val de Grâce, in a considerable number of cases, and with great success. When it does not appear to him applicable, he combines with the ordinary treatment by leeches, blisters, and resolute frictions, the daily administration of from twelve to twenty-five drops of the tincture of iodine. He does not find that the iodide of potassium produces any perceptible influence on these ganglionic indurations.—*Idem*.

M. BAUDENS' OPERATION FOR ONYCHIA MALIGNA.

M. Baudens, the head surgeon to the Val de Grâce, has for some years been in the habit of resorting to the following simple operation, in onychia maligna, when all milder plans have failed.

The toe or finger of the patient having been seized with the left hand, like a pen which we are about to mend, the diseased edge of the nail uppermost, the bistouri is also taken hold of by the handle, like a pen-knife; the edge is applied a short distance above the matrix of the nail, carried perpendicularly to the bone, and then turned and carried forward, so as to shave the first phalanx, and to separate a flap containing the matrix of the nail, the diseased part of the nail, and all the fungous ulcerated tissues beneath it. The toe or finger is thus cleared of the diseased tissues.

The operation only lasts a few seconds, and the pain is therefore but momentary. When the blood has ceased to flow, the wound is dressed with a small dossil of lint, covered with cerate, and, to prevent violent inflammatory reaction, a piece of ice is kept on the part for some days. In the course of a few days the dressing is raised, and the wound is found covered with granulations, the growth of which has to be moderated by the nitrate of silver. A solid, horny cicatrix subsequently forms, which the friction of the shoe cannot ulcerate or injure. In a recent case, in which M. Baudens thus operated, the patient, a soldier, was able to return to his duty five and twenty days after the operation.

CONTRIBUTIONS TO THE PRACTICE OF MIDWIFERY.

By J. HALL DAVIS, M.D., Lecturer on Midwifery and Physician to the Royal Maternity Charity.

Brow presentation converted by the natural efforts into one of the vertex, and child born living; funis folded round the neck; its pulsations feeble and eighty in the minute. The best practice in these cases.

Mrs. O—, aged thirty-three, was taken in labour of her fourth child, at five P.M., commencing with the rupture of the membranes, in February of the last year. I was sent for immediately upon the discharge of the waters, and found, on my arrival, that the genital passage was soft, of natural temperature, well dilated, the orifice of the uterus wanting only about one-third of full dilatation, the pains efficiently bearing. I could reach the brow, the left eye, and left side of the bridge of the nose, situated behind the upper part of the left ramus of the pubis. As the pains progressed, the head gradually descended, the brow and eye receded from reach, and the child was expelled living by a vertex presentation, with the face directed to the perineum, at half-past seven P.M.

The funis was folded round the child's neck once; its pulsations were feeble, and eighty in the minute, this diminution from the normal frequency of 120 to 140 being attributable

to pressure. As the child was expelled, I passed (agreeably to my uniform practice) the loop over the shoulders, allowing the child gradually to be born through it. This method of disposing of the loop is infinitely preferable, for obvious reasons, to that of drawing it over the child's head, and away from its attachment to the uterus, thus putting it upon the stretch. At the end of forty minutes, the placenta not having been thrown off, although the uterus was perfectly and globularly contracted, I removed it, encompassing its mass with my fingers, with perfect facility. It appeared to have been separated from its attachments, but to have been retained by a certain degree of contraction of the cervix uteri.

A difficult breech case, requiring a departure from the usually proper and the safest practice of non-interference in the first part of its progress; the child born in a state of asphyxia; the cord not tied and divided until the child was fully resuscitated.

April 12th, 1842, half-past ten A.M., I was sent for by a midwife to the Royal Maternity Charity, to visit a patient of that institution, in labour of her eleventh child, her age being forty-two. Her first child, I was informed, presented by the breech; and upon the last occasion, her tenth labour, the child came footling. In this instance the left nates presented.

The labour pains had commenced at three A.M. of the day before, and continued in moderate strength till one this morning, (April 12,) when the liquor amnii was discharged, the orifice of the uterus being then fully dilated. The pains now flagged, and have continued feeble up to the present time, half-past ten A.M.

I found the neck and orifice of the uterus contracted around the presentation, which seemed, moreover, to be considerably impacted, but there were no bearing-pains. Thinking, if I could manage to liberate and bring down the left leg, so as to diminish or remove the impaction, that the uterus, its parietes being then less extended, would resume its proper action, and that the spasm in the cervix would then disappear, I accomplished this object very slowly, resting at intervals. In the course of a few minutes the parturient throes set in again with renewed vigour, the spasm of the cervix ceased, and the child was born in about half an hour from the commencement of interference, some traction being required in aid of the natural efforts. The head being arrested at the brim, the usual manipulation of depressing the chin and raising the occiput was required; with the aid of a purchase and traction by the trunk, the child was expelled in a state of asphyxia: from this condition, however, it was fully restored at the end of ten minutes, by immersion in a hot bath, before severing its connexion with its mother's circulation, and by inflation of the lungs. It was of larger size than any of her previous children, weighing ten pounds.

Remarks.—The spasm affecting the lower section of the uterus might have been resolved by the administration of opium, previous to bringing down the foot, and most probably would, under ordinary circumstances, have superseded the necessity for that measure; but in this instance, the child proving, as I suspected, above the normal dimensions, manual assistance became indispensable. As the cord was pulsating, I applied no ligature upon it until the child had fairly entered upon breathing life: this I deem an important precaution, and one, I think, not sufficiently insisted upon.

A first labour; child large; a male; delivery by the crotchets; liquor amnii discharged twelve hours from the commencement of labour; delivery effected after twenty-eight hours from the first labour pains, by the scissors, perforator, osteotomist, and guarded crotchets; head symptoms during the labour removed by general depletion.

March 3rd, 1842, six P.M., I was called, by the late Mr. Stratford Eyre, to the case of Jane W—, aged twenty-five, of good conformation and health; married ten months; in labour, having arrived at the full period of gestation; labour pains had commenced at half-past eleven of the previous evening, and the liquor amnii had been discharged at three P.M. this day—i. e., fifteen hours and a half from the commencement of the process. I found the orifice of the uterus yet about one-third short of its full dilatation; no heat nor dryness of parts; the head high up, and moveable; the pelvis of average dimensions. The pains had been active from the escape of the waters at three P.M. I left, hoping, ere many hours had elapsed,—the pelvis being sufficiently capacious for the passage of an average-sized child,—that the case would be satisfactorily terminated by the natural efforts, even without interference by constitutional treatment.

Returning from a friend's house at midnight, and having

* The Vienna paste is evidently employed by M. Ricord with the same view as it has been recently recommended in this journal by Dr. Henry Bennet, in the treatment of obstinate inflammatory induration of the cervix uteri—viz., partly as an escharotic, but principally for the sake of the resolute inflammation which is set up on the elimination of the eschar. This is a very important therapeutical point, to which attention has not been sufficiently directed in this country.—*Ed., 4.*

occasion to pass by the patient's residence, I visited her again. The orifice of the uterus was now fully obliterated; the head still remained at the brim of the pelvis; the pains yet very frequent and strong; pulse 120, firm and full; no heat, however, nor dryness of parts; headach and pain of the eyes complained of. I left again, advising my young friend to open a vein, in the event of the head symptoms continuing with little or no progress.

At six A.M. I was requested to repeat my visit. Mr. Eyre had bled his patient to sixteen ounces, to her great relief. The pain of the head had been entirely removed; the presenting head had fairly engaged in the pelvic brim; it was now immovable. I called again at one P.M.; considerable protrusion of scalp had taken place; but the head itself, its bony part, had not descended any lower than at my previous visit. The former symptoms having returned, with hardness, and fullness of pulse, Mr. Eyre had shortly before repeated the abstraction of blood, to the extent of eighteen ounces. No urine having been passed for some hours, the catheter was introduced, and fourteen ounces of urine removed. The parts had now become tender; the patient was become restless; she was thirsty; tongue dry and furred; the head had become firmly impacted; had effected no further descent, still being engaged in the brim of the pelvis. The fetal heart's pulsation, which had been clearly distinguished some hours before over the right iliac side of the uterine tumour, was now not perceptible, and the movements of the child the mother had ceased to perceive an hour previously. I therefore (about half-past two P.M.) proceeded to deliver by craniotomy, in the progress of which operation I found it necessary to remove a considerable portion of the skull by the osteotomist.

Our patient was left comfortable at a quarter-past three, the uterus having contracted firmly, and thrown off the placenta without hæmorrhage. A saline mixture, containing one-sixth of a grain of tartar emetic in each dose, with a quarter of a grain of acetate of morphia, was prescribed, to be taken every four hours.

4th, ten A.M.—Has had a good night's rest; some headach; tongue moist, but furred; the lochia of good character, but scanty; sense of stiffness about the hips; tenderness of hypogastrium; pulse ninety, and firm; the bladder has not yet responded; skin hot and dry; thirst. Twenty-four ounces of urine were removed by the catheter. As a measure of precaution, it was judged advisable to open a vein in the arm; eighteen ounces of blood flowed, when the pain at the hypogastrium vanished, the skin became moist, and the patient expressed relief. Visit at seven P.M.: No return of pain at the hypogastrium; passed water since the morning visit; an attack of pyrosis, with gastrodynia, at four P.M., was removed by a mustard poultice to the præcordia, and a tablespoonful of peppermint-water given in hot water.

5th.—Free from pain; tongue still furred; pulse 96; has not rested well, but this she attributed to an accident which had befallen the bed. A calomel pill with morphia taken last night, to be followed by a black draught this morning.

6th.—Has had a good night's rest; lochia scanty and fetid; no pain; passed a small clot of blood this morning; pulse 120, but soft; bowels have acted freely.

8th.—Sleeps well; some headach; tongue foul; lochia more free and healthy; bowels open; no abdominal pain; pulse 102.

9th.—Tongue cleaning; lochia lessening in quantity again, but healthy; pulse 102.

From this period the convalescence was steady and rapid, aided by light tonics and nourishing diet.

A protracted labour completed by craniotomy; child weighed eleven pounds; pelvis below the standard dimensions; a third labour, of twenty-eight hours' duration before recourse was had to artificial assistance; liquor amnii discharged with the first pains; the orifice of the uterus fully obliterated in eight hours after, excepting that a portion of the anterior lip of the organ remained to be felt between the head and pubis; delivery effected after the lapse of twenty hours from that event; favourable progress of the patient afterwards.

June 14th, 1842, half-past ten A.M.—I was called to E. C—, aged thirty; a firm-fibred subject, of middle stature; previously in good health; in labour of her third child since mid-day yesterday, when, also, the waters were discharged; there had been good action; but latterly the pains had abated in their strength; the orifice of the uterus was fully dilated, with the exception of the anterior lip being still to be felt between the head and the pubis, (as at present,) at about eight P.M.

At my visit, (half-past ten A.M.,) the patient was the subject

of considerable pyrexia and restlessness; she had a full, bounding, firm pulse; the head was at the pelvic brim, with some protrusion of scalp, and was not moveable. The bladder having been ascertained to be empty, I took twenty ounces of blood away, and left her expressing herself as feeling cooler, and much more comfortable; a breathing moisture appeared upon the skin. Directions were given for the exhibition of a gruel enema. I hoped that the case might yet be terminated prosperously. At four P.M. I repeated my visit, not having heard from the midwife in the interim. The pains for about two hours had been more active after the bleeding, and had again flagged. I found more protrusion of scalp; the anterior lip of the uterus had become considerably swollen; the parts were hot; pulse 130. The forceps carefully essayed could not be passed by any legitimate means over the head, on account of the impaction.

Having first introduced the catheter, and drawn off a few ounces of urine, I delivered the child by the perforator and guarded crotchets. The head was brought through the outlet at the end of a quarter of an hour, and after the lapse of three or four minutes,—that time being allowed that the uterus might afterwards contract more efficiently and uniformly,—the shoulders were assisted through. During the progress of the birth, a bandage, previously applied slack, was tightened gradually. The child weighed eleven pounds. On careful admeasurement, after the child's birth, of the sacro-pubic diameter of the pelvic brim, it was found not to exceed three and a half inches; the placenta was thrown off in the course of a few minutes, and no hæmorrhage followed; the uterus was ascertained to be firmly contracted; pulse 110. The patient was ordered, in a pill, muriate of morphia, one grain; calomel, four grains. To be taken immediately.

15th.—Good night's rest; pulse 90; rather firm; skin moist and hot; no thirst; has passed urine without trouble; no pain; tongue moist, slightly coated with a white fur; too much bed clothing; the room too warm—these to be rectified; lochia good. A dose of castor oil.

16th.—Has slept well; pulse 110, but soft; tongue clean; lochia sufficient in quantity, and healthy; no pain anywhere. Castor-oil operated three times yesterday.

From this time forward there was nothing in the case worthy of comment, beyond a quick pulse of 130, which, on inquiry, I found to be natural to her, as well as to her brother and sister. Her recovery was uninterrupted, and completed in the period usual after a natural labour.

A protracted labour terminated by craniotomy.—Liquor amnii discharged forty hours previously.—Head wedged in the pelvic brim, with rigid os tincæ, during the previous eight hours.—A first labour at the age of thirty-seven.

December 7th, 1844.—At midnight my assistance was requested by a surgeon residing in the neighbourhood of Camden Town, in the case of Mrs. —, aged thirty-seven, in labour at the full period of gestation of her first child.

The pains of labour had commenced about six A.M. of the previous day with the discharge of the waters, and had continued of strongly-bearing character until the last eight hours, during which they had abated much of their force. The boundary tissue of the uterine orifice had been thick and rigid. There was considerable protrusion of the scalp, and impaction of the head, which was wedged completely and immovably in the pelvic brim. There had been no interruption to the function of the bladder. There had been deficiency of parturient mucus during the last six or eight hours. The pulse was quick; but there was no state of system, nor had there been, that I could understand, to justify the abstraction of blood. She had become exhausted and restless, and the discharge from the vagina was brown and offensive. The operation of craniotomy was proceeded with, (the catheter, as a precaution, having been first passed,) during which, the child (a male) proving above the average dimensions, as well as the pelvis below the normal admeasurements, a considerable reduction of the bulk of the presenting head by the osteotomist became indispensable. The perineum was rigid, and required time and patience in bringing the child safely through. The head being born, I allowed the unassisted efforts of the uterus, which now returned at intervals, to expel the shoulders and the rest of the child's body, which occupied a period of between five and ten minutes.

By this non-interference, the uterus was less likely to be left relaxed after the child's birth. It contracted efficiently afterwards, and the placenta was thrown off spontaneously within ten minutes subsequently to the extraction of the child, without hæmorrhage. The contraction of the organ

was further secured by a broad bandage, which, indeed, had been applied loosely before the entire birth of the child, and gradually tightened, as the parts of the child in succession were expelled.

This patient was closely watched by her attendant during the first week, but recovered satisfactorily, without any treatment being required further than that pursued after a natural labour.

A protracted labour in a lady, aged 35, pregnant for the first time, completed by craniotomy early in the morning of the fourth day from the commencement of parturient pains, which set in with the discharge of the liquor amnii; retention of urine during the labour from the pressure of the head, as well as during four days subsequently to delivery as a result of that pressure, relieved at the requisite intervals by the elastic catheter; the pelvis of normal dimensions; the child large; tartar emetic exhibited with good effect upon the condition of the os tincae, vagina, and vulva, and probably was advantageous also in delaying the appearance of vascular disturbance; that setting in on the third day of the labour, was successfully met by the use of the lancet, after which, the patient had a refreshing sleep of four or five hours; a brown offensive discharge, the cessation of the foetal pulsation, distinct on the previous evening, the return of a dry heat of the genital surfaces, with tenderness in addition, rendered further delay no longer justifiable; favourable recovery of the patient.

Saturday, eleven P.M., October 4th, 1845, I visited, at the request of her medical attendant, a lady in Upper Gower-street, aged thirty-five, in labour of her first child. The liquor amnii had been discharged the night before. The os externum I found so contracted as only readily to admit one finger; the mouth of the womb two-thirds dilated, dry, but not hot nor swollen; the mucus of parturition deficient in quantity. The head presents at the pelvic brim with a puffy swelling upon it; the child can be felt to move its head; the pelvis presents the average dimensions; the urine has been passed without difficulty; the pains occur at intervals of ten and fifteen minutes; there is no febrile disturbance; the tongue is clean. I left, suggesting for the present nothing but time and patience.

October 5th, half-past three P.M., I was again sent for; the pains were continuing, but not so strong; the head had engaged in the brim of the pelvis; no urine had been passed for several hours. The passage of the silver catheter had been attempted without success. The tumour of the distended bladder was distinctly to be felt above the pubis. I introduced an elastic catheter without difficulty, and withdrew thirty ounces of urine, much to the relief of the patient; no pyrexia; the os tincae in the same condition as at last visit. I ordered an enema, and a draught containing a quarter grain of tartar emetic, with twenty-five minims of tincture of hyoscyamus every two hours.—Half-past eleven P.M.: I found no fever, considerable moisture of the vagina, and soft outlet, which is now so dilated that two fingers can be readily introduced; the pains continue in tolerable strength; pulse soft, and 90. The tartar emetic to be proceeded with.

6th.—The case not having terminated as I had hoped, and as I was justified in hoping, quoad the absolute size of the pelvis, I was again summoned to the case of this lady, and met my friend at ten A.M., and drew off sixteen ounces of urine. The head has descended no lower; face flushed; tongue dry and brown in centre; thirst; parts hot and dry; pulse hard, 100; the pains continue in good strength; the presenting scalp more tumid. Blood was now taken by venesection, to the extent of twenty-two ounces, without any faintishness occurring, but the skin became moist and cool, and the patient said she felt cooler and more comfortable. After the bleeding she felt sleepy, the pains abated, and she was left with the room darkened and quiet, that she might, if possible, obtain some rest.—Half-past eight P.M.: Our patient had had some sleep; the pains had subsided, and had not returned since the bleeding until within the last two hours, since which, they have been of good strength again. The parts moist and cool. The head appears to have descended a little. The catheter was again passed, and sixteen ounces of urine drawn off. The case thus proceeded, there being yet no indication for instrumental aid, with constant pains until five A.M. on the 7th. An offensive brown discharge then presented itself; the foetal pulsation, which I had the day previously been able to distinguish, was no longer to be heard; the parts, moreover, had again become heated and dry, and tender. I determined to proceed at once to delivery by cephalotomy. The contents of the bladder were first removed by the catheter. The soft outlet being con-

tracted by the rigidity of the perinaeum and labia, the child proving large, and its head much ossified, considerable time was spent upon the delivery to effect it safely. A firm and uniform pressure was kept upon the abdomen during the birth of the child, and subsequently to the removal of the placenta, which was effected artificially, it not having been detached at the end of three quarters of an hour. Our patient was left with the security of a bandage and pad, and the uterus perfectly contracted, with injunctions that she should not be removed until the lapse of two hours. A draught containing one drachm of laudanum was exhibited, and she was ordered draughts of camphor julep containing tartar emetic, one-eighth of a grain every three hours.—Visit same day at twelve: Proceeding favourably without pain; skin moist; pulse soft, 104. Has not passed water, but does not feel any distress from that circumstance. Has had a little sleep, and feels perfectly free from restlessness; lochia good. Continue with the diaphoretic mixture. Visit, eight P.M.: Our fair patient has passed a comfortable day. Skin moist, and free from heat; pulse 90, but soft. Twenty ounces of high-coloured urine were drawn off, after which operation the pulse sank to 84. Continue the diaphoretic mixture; no opiate; a draught of compound infusion of senna in the morning.

8th, ten A.M.—A tolerably quiet night's rest without pain; a sense of stiffness about the arms, hips, and legs, from the action of the muscles of those parts during her labour; no heat nor swelling of the genitals; lochial discharge free, and of good quality; bowels have been opened sufficiently once; twenty-four ounces of urine, not so high-coloured, were drawn off by the catheter. Pulse 100, with some firmness about its beat; tongue nearly clean; no tenderness of abdomen; no headache. Continue diaphoretic mixture. The urine to be drawn off in the middle of the day, if the patient should feel at all distressed.—Eight P.M.: Catheter passed; about the same quantity of urine withdrawn; lochia healthy; pulse soft, 100; skin moist, and free from heat.

9th, ten A.M.—Has slept well during the night. Pulse 100, but fell to 90 after the use of the catheter; lochial discharge good; no heat of vagina; the genital surfaces a little tender; the passage of the catheter over the mucous membrane of the urethra gave slight pain. Half-past eight P.M.—Urine drawn off; bowels opened during the day by the compound infusion of senna; pulse 85; the diaphoretic mixture containing tartar emetic to be continued.

10th, ten A.M.—The bladder does not yet respond to its function; the catheter now to be used thrice daily; pulse 90, and rather firm; lochial discharge good; skin inclined to dryness; tongue furred, but moist; to take at bed-time four grains of calomel, and a draught of compound infusion of senna in the morning.—12 A.M.: free action of the bowels; catheter again used.

The bladder recovered its power in two days subsequently, and from that time forward the improvement of our patient was steady and progressive. The breasts becoming painful and filled with their natural secretion on the eighth day, were judiciously treated by my friend, and without any unpleasant events; and on the tenth day from delivery, my daily attendance having been desired by my friend, as well as by the husband of the lady, I took my leave, our patient being in fact quite convalescent, and past all risk of pelvic or peritoneal inflammation, the event which we had some reason to apprehend, after so protracted a labour. I have since more than once heard that her recovery was complete.

Remarks.—A part of the difficulty in this lady's case was to be attributed to her advanced age for a first parturition. Had this been the only unfavourable circumstance in the labour, I feel confident, from the useful action of the tartarized antimony in relaxing the soft tissues, not only in this but in other instances which have come under my management, as well as generally in warding off fever, that the delivery would have been accomplished without instrumental aid, probably without recourse to the lancet, but especially in conjunction with the abstraction of blood, which, it has been seen, effected a very favourable change in the local as well as in the general features of the case. The child, however, proved of large size, and its head more than ordinarily ossified. The constitutional treatment had recourse to in the above case, although it was of no avail in promoting the delivery, nor in enabling me to assist nature by the application of the forceps, yet it must be admitted to have done an essential good in averting pelvic or peritoneal inflammation subsequently to delivery, likely to supervene upon so protracted a pressure upon the parts interested in the process.

Russell-place, Fitzroy-square, Dec. 1845.

CONTRIBUTIONS
TO THE
PATHOLOGY, DIAGNOSIS, AND TREATMENT,
OF
VENEREAL DISEASES.

By W. ACTON, Esq., Surgeon to the Islington Dispensary, and formerly Externe to the Venereal Hospitals of Paris.

ON THE MODERN DOCTRINES AND TREATMENT OF SYPHILIS
WITH MERCURY.

Author's opinions on the cases proper for mercury; extracts to prove that the late anti-mercurial school now find it necessary to give the mineral; must phthisis, scrofula, pregnancy, or infancy, be considered as counter-indicative to its use? Sir B. Brodie's opinion; author's views on giving mercury to pregnant women, nurses, or infants; the various preparations recommended by authors at the present day; necessity for confinement of patient considered; Lawrence, Carmichael, and Brodie's opinions; on the relative advantages of mercury administered internally, or employed in frictions; means of obviating the inconvenience of frictions; observations on ointment, state of mineral in; remarks on manner of employing frictions; quantity necessary; effects on system and disease; spurious salivation considered: opinions of modern practitioners on the proper effect to be produced on the gums; errors of producing salivation too rapidly, and leaving off mercury too soon, considered.

WHEN a person, presenting any of the syphilitic eruptions on the head mentioned in the commencement of these papers, consults me, and I find he has not taken mercury for the primary symptoms, I think it only waste of time to employ iodide of potash. Without absolutely affirming that sarsaparilla or other remedies will not cure the affection, I may state they have so often disappointed me, that I now never recommend them, but at once have recourse to mercury, as being the remedy most simple and certainly efficacious.* In simple uncomplicated cases, I am not aware of any necessity for a preparatory course of purgatives, alteratives, or diaphoretics, vaunted by some surgeons. The judicious practitioner in the present day had better turn his attention to the indications for employing the well-known remedy, than seeking out new ones. In cases presenting any complications, our attention should be directed to them before commencing mercury: if scrofula or phthisis be imminent, mercury may hasten their development; still the surgeon should consider if the effects of mercury or of syphilis be most to be dreaded, and treat the one or the other according to circumstances; happily, in the present day, iodine comes to our assistance, and may be employed freely.†

I may be asked—Would you recommend mercury to be given to pregnant women or young children, labouring under secondary symptoms? It has been a very prevalent notion in our profession, that syphilis requires different treatment in pregnant women from what it does in others; yet I am at a loss to know in what this difference consists, or what treatment is fit for the one, which is not equally good for the other. Among the numerous cases of syphilis I have seen in preg-

* Henner, who treated so many cases without mercury, says, in his *Military Surgery*, page 526, "The cutaneous eruptions I would treat at first on the same general principles, but I should not very long postpone the employment of the mildest mercurial alteratives, aided by warm bathing and sudorifics." At page 524, "I entertain no doubt of the utility of mercury, when properly employed as an auxiliary in the treatment of venereal complaints when they become chronic."

Carmichael, who was one of the first to treat syphilis without mercury, gives the following reasons for administering it:—"That form of disease which is characterized by the scaly eruptions psoriasis and lepra, yields with certainty and rapidity to the exhibition—a proposition which cannot be advanced respecting the other forms of venereal disease."—*Carmichael's Clinical Lectures*, p. 14.

† Brodie has the following pertinent observations on this subject:—

"First of all there are persons of a certain delicate constitution, of a scrofulous disposition, and who are disposed to phthisis. You would not give mercury to a man of this kind until you were quite sure that it was absolutely essential; nevertheless, there are persons of a scrofulous tendency who are best treated by this means. If mercury be an evil, syphilis is a still greater one. In scrofulous persons, local diseases are especially developed after the system has been affected by a morbid poison. If they are disposed to phthisis, they will have tubercles in the lungs after scarlatina, measles, and small-pox, and it is just the same after syphilis. You find enlargement of the glands of the neck take place, whenever the system is disturbed by syphilitic virus, and here mercury is not to be exhibited unless you are sure that it is wanted. But if there be syphilis, it is better to give it than let the disease take its course; it must, however, be administered with great caution, in moderate doses, and the patient carefully watched all the time."—*Brodie's Clinical Lectures*, in *THE LANCET*, vol. i. 1844, p. 674.

nant women, the symptoms have been exactly similar: abortions, it is true, occasionally take place; the child is sometimes born dead; at other times sickens a few weeks after birth; and this happens in cases where no medicine has been given. If this, then, is the usual course of syphilis in pregnant women, the surgeon must be prepared to treat the disease as if pregnancy did not exist. Given in appropriate doses, mercury is borne quite as well as it is by other women, when the same care is taken to avoid any of the ill-consequences the mineral may produce. In my own practice I am very particular about seeing the husband, in order that I may judge if he be capable of re-infecting his wife; if so, I divorce them for a time, as it is perfectly impossible to cure the one without the other submitting to treatment, and a few minutes' conversation with him often assists the diagnosis and treatment.

If pregnant women, however, bear mercury well, nurses and those suckling should not take the mineral, if it be possible to avoid it. I find it diminishes the quantity, and alters the quality, of the milk; induces diarrhoea in the child, and aphthae in its mouth: these last act as irritants on the nipple of the nurse. The peevishness of the child causes bad nights to the mother, whose health suffers, and thus mercury acts injuriously on the child, the child on the nurse, and the disease on both; so that the mortality is greater than at any other period. In my own practice I do not find mercury (administered to the youngest infant) has any but a judicious effect, provided the mother or nurse be healthy, and is not taking mercury at the same time. I should recommend all practitioners who may be consulted by pregnant women, to cure them of the secondary symptoms previous to their confinement, provided time allows of it. If the child is born with syphilitic symptoms, or they occur soon after birth, let the infant be treated with small doses of mercury; should the mother become affected,* let her leave off suckling; and should the means of the patient allow of it, let her procure a healthy nurse; should she be poor, avoid, if possible, giving her mercury; rather treat the child, and let the mother suckle it, though affected with secondary symptoms. Of all things, avoid bringing it up by hand; rather run the chance of the child suckling an infected mother than disordering its bowels. A child brought up by hand will seldom bear mercury, pap and mercury are too much for its mucous membrane, and, nine cases in ten, you will lose your little patient.

Much has been written by the older writers, on the subject of these infants infecting the nurse; without denying the possibility, I must say, I disbelieve the statement; for when we come to consider the errors that may arise in diagnosis, and the class of persons from which wet nurses are often taken, it is not surprising if mistakes occur. M. Ricord has never observed these cases, nor have I, in my more limited experience, but have frequently pointed out the fallacies of these supposed martyrs to wet nursing, and shown their statements unworthy of credit.

When the diagnosis has been satisfactorily made out, and the remedy decided upon, the next point to be considered is, the form of mercury the surgeon should employ. In a late lecture,† M. Ricord considers that the pure mineral is more soluble than all the preparations of mercury; and he says that the lactic acid of the stomach, coming in contact with the metal, forms a bilactate of mercury, a preparation easily soluble. In my own practice,‡ I employ the mildest preparations, and among others, mercury with chalk. It has the following advantages over other preparations: it is seldom impure; the mercury is in the best state of subdivision, is not liable to produce colic, has no tendency to purge, does not hastily induce ptialism, and being of sufficient bulk, a little

* I say, "should the mother become affected," for although the child be born with secondary symptoms, it does not follow, as a necessary consequence, that the mother should labour under the disease, which may have been communicated to the infant by the father, and yet the mother not necessarily have been infected, as I stated in a paper last year, read before the Medico-Chirurgical Society, a summary of which was given in *THE LANCET* at the time, and to which I must refer my readers.

† *Gazette des Hôpitaux*, August 30th, 1845.

‡ There is great difference of opinion among surgeons upon the preparations. Thus Brodie recommends frictions with mercurial ointment. His language, in speaking, page 676 of *THE LANCET*, vol. i. 1843-44, is very energetic. "Nay, I will go so far as to say, that except in the very slightest cases, you really cannot depend upon any mercurial treatment effecting a certain cure, or even giving a good chance of it, by any other means than inunction."

Lawrence prefers blue pill; Ricord employs the proto-ioduret of mercury; Carmichael does the same;—all proving that the preparation employed is not so important as regulating the dose, and attending to the indications. In my treatise on Venereal Diseases, I recommended the proto-ioduret of mercury, but I have found it so frequently produce colic, that I have nearly excluded it from my private practice, although I obtained a supply from M. Ricord.

more or a little less taken at a time is of no great importance, as it is when we employ a preparation to be divided into a sixteenth or twelfth of a grain: the only precautions to be taken previous to a course of mercury, consist in removing diarrhoea or costiveness. I do not find it necessary to alter the diet, unless it be to prohibit acids, fruits, or anything liable to disagree with the bowels. It is not necessary for your patient to keep the house: mercury undoubtedly acts better when the patient is confined in an equal temperature, but private patients will not bear confinement, nor absent themselves generally from business.* The dose of mercury with chalk is four or five grains; it had better be taken at night, four hours after meals, as the stomach is then empty, and the remedy more easily absorbed. In four or five days' time the dose should be repeated every other morning, and subsequently every night and morning. In spite of all our precautions, diarrhoea sometimes sets in, and the mineral will not be tolerated. This arises from the difficulty some patients have in regulating their food, or avoiding such articles as are incompatible with mercury taken internally. In practice we can often trace this disorder of the bowels to such slight causes as a waxy potato, or a glass of porter, which in warm weather is a little hard, and arising from a trifling cause like this, we find astringents or opium in many cases inefficacious, and the complaint only ceases when we leave off giving the mineral internally. In private practice I generally, now, abstain altogether from prescribing mercury internally, if my patient tells me his bowels are easily disturbed; for if this happens when no medicine is taken, you may probably infer that he cannot take the requisite quantity without diarrhoea supervening, even if he avoid indigestible food, or substances containing acids. This is more especially found necessary in London, among our patients, so many of whom labour under the hundred-and-one forms of indigestion. Mercury, in these cases, frequently further disorders the digestive functions, and these once impaired, mercury will cease to act efficiently. In all such cases I at once have recourse to frictions; and a pretty large experience has convinced me that no plan is equally safe, simple, or efficacious, when a patient will submit to rubbing in. The only objection that can be urged against it in the present day, is its dirt, and this may be almost altogether obviated by the precautions in using it which I am about to state.

In the first place, care should be taken that the mercurial ointment be not rancid, otherwise eczema will be a necessary consequence: I prefer using the strong mercury ointment of the *Pharmacopœia* in its pure state. This must be procured at some undoubted source, as I believe it is not unfrequently adulterated with the most inert substances. Considerable difference of opinion exists on the state of the mineral in this preparation. I must refer those curious on the subject to several articles in the *Pharmaceutical Journal*, by Jacob Bell, who has collected all the various opinions on this subject in several interesting communications; but the practical surgeon will be satisfied in obtaining the unadulterated article, and be more anxious to learn the indications for its use, and the precautions to be employed, than curious to hear if the theorist considers the mercury to be in a state of suspension or oxydation. The most experienced surgeons of the present day admit that mercury becomes more efficacious in proportion as it is presented in the simplest state to be absorbed into the

system, than to undergo changes; but no two are agreed upon its *modus operandi* in removing the disease. I shall therefore now describe the manner of employing it.

I desire the patient to smear a quantity of ointment, equal to the size of a horse-bean, on the inside of each calf of the leg, or knee, every night, on going to bed; not rubbing it in, as some have recommended, but merely passing the hand from above downwards; by this means avoiding rubbing the hair in the wrong direction, and producing irritation of the bulbs and subsequent tenderness. If this is pursued for a few minutes, the ointment will not be easily detached from the skin when the clothes come in contact with it, and absorption will take place quite readily enough. To prevent the sheets becoming black, it will be only necessary to sleep in old drawers, if the patient usually wears them, or a pair of linen trousers, which may be destroyed when saturated with ointment. Every third or fourth evening the patient should take a warm bath, to remove the stale ointment that may be on the surface of the skin, and absorption of fresh ointment will thus be expedited, and the occurrence of eruptions prevented. I recommend the application of the ointment on the inside of the leg and knee as being preferable to the inside of the thigh, for several reasons: in this latter situation some of it is certain to be applied by the friction of the trousers to the fold between the thigh and scrotum; the heat and friction, together with the natural secretion of these parts, will soon cause the ointment to become rancid, and eczema, of a most severe form, is constantly occurring, which only declines as we leave off the ointment. It is difficult in these situations, likewise, to keep the linen from becoming smeared with the ointment, which, in private, is of the greatest importance, as washerwomen are very curious people, and, proverbially, gossips. If, on the contrary, the ointment be applied to the calves, neither the linen nor the bedclothes will be the least soiled, and it often happens that patients rub in without any of their family being aware of their using this usually dirty remedy.

Generally a fortnight elapses before the surgeon can perceive any perceptible taint of the breath, or soreness of the gums.—I say, the surgeon, for long before this, a patient will complain of all the symptoms he has been told attend salivation; he feels convinced that he has the coppery taste; from moving about his tongue, and sucking his gums, he declares they bleed, and the surgeon even may be misled by the foetid breath, if he has not previously examined the mouth, to detect decayed teeth, or spongy gums, depending upon a collection of tartar. I have seen mercury left off much too soon, because slight salivation is supposed to have been produced, and as only slight salivation is recommended by modern surgeons, the object is supposed to have been attained, when in truth no specific effect has been produced. The real effects of mercury are the following:—During the first few days, a patient is unaware of taking medicine, unless the weather be bad, when he may complain of lowness of spirits. We not unfrequently find the flow of urine considerably increased, and perspiration abundant, the bowels often confined. The gums and cheeks first show the influence of the mineral by whitish patches; the gums, in contact with the teeth, become red and swollen; a patient complains of feeling his teeth, and the interstices between them, and they bleed when he uses his tooth-brush. There is now slight foetor of the breath, and a slightly increased flow of saliva, and the weight of the body diminishes from the loss of flesh which the patient rapidly sustains. The mineral should be continued until one or more of these effects are produced.* I believe, in the present day, practitioners commit a great fault in suspending the use of mercury too quickly: so much has been written on the dangers of salivation, that we do not now even obtain the judicious effects of the preparation. We stop short of these; hence the number of relapses, and the surgeon lives in the fond hope that enough mercury has been given, until disappointed by the return of the complaint.

Queen Ann-street, Cavendish-square.

* Nearly all authors are unanimous upon the effect we must produce on the gums, however much they may differ upon other points. Brodie says, "With reference to the effect of mercury on the system generally, I believe it is always better that the gums should be made a little sore, and that there should be some degree of salivation. You cannot depend upon it when employed in syphilis, unless these effects are produced."—*Clinical Lectures in THE LANCET*, vol. i. 1843-4, p. 677.

Lawrence states it as his opinion, "that the effect which is thus produced upon the mouth is considered a criterion of the general influence upon the system of the remedy on which we place our reliance for arresting and curing syphilis, and I believe it may be safely regarded in that light. Often so long as no alteration is produced on the state of the mouth, we do not find the curative effect take place, and we generally find the curative influence proceed in proportion to the local effect observed in the mouth; we cannot, however, say, that this is absolutely true in all cases."—*Lawrence's Lectures in THE LANCET*, vol. i. 1829-30, p. 728.

* Surgeons are far from unanimous on the necessity for keeping the house during a course of mercury. Brodie says, page 676, *loc. cit.*, "I should say, that if a patient be confined to the house, or only allowed to go out a little once or twice a day, and if he be made to rub in mercury, and continues it for some time after the symptoms have subsided, the case being carefully watched, you will, in most instances, make a real and permanent cure."

Carmichael recommends confinement in the following words, page 187 of his *Clinical Lectures*:—"Another point to which I beg to call your attention is, the necessity of confining your patient to the house during a mercurial course, (except the weather happens to be particularly mild,) and so strongly am I convinced of the propriety of this advice, that where this injunction cannot be complied with, I deem it better, even though mercury be strongly indicated, to dispense with it altogether, and have recourse to other measures, than to exhibit it while the patient is exposed to our cold and variable climate."

Lawrence thus gives his opinion, at page 728 of *THE LANCET*, vol. i. 1829-30:—"In the first place, we find that the effect of mercury is increased by warmth, and by keeping the individual in a regulated temperature. Hence it used to be considered a rule that the patient should remain in a warm room, that he should not go out and expose himself to the air while he was going through a course of mercury. There is thus far a reason for this, that free exposure to the cold air lessens the effect of the mercury. If you wish, then, to produce the effect of mercury readily, and to its highest extent, you should keep the patient in a regulated temperature, and with warm clothing. We do not desire strictly to confine the patient to his chamber during the entire course, that is not necessary; but it is a matter of expediency not to allow him to go out; keep him warmly clothed, and, under certain circumstances, confined to his own room, but this confinement is not to be considered as a general rule."

ILLUSTRATIONS OF ULCERATION AND INDURATION OF THE CERVIX UTERI.

By J. HENRY BENNET, M.D., Licentiate of the Royal College of Physicians, London, Obstetric Physician to the Western General Dispensary, &c. &c.

CASE 8.—*Ulceration and induration of the cervix uteri, followed by phlegmonous inflammation of the cellular tissue of the lateral ligaments, and pelvic abscess opening into the vagina.*

On the 15th of September, 1845, Hannah K—, aged thirty-five, a physician's patient at the Western Dispensary, was addressed to me by my colleague, Dr. Roxburgh, as labouring under uterine disease. She had been under treatment, I was told, for some time, for general debility, accompanied by leucorrhœa, and had latterly presented symptoms indicating the existence of a pelvic abscess. On inquiry, I ascertained that her history was as follows:—Of a good and strong constitution, she had never been laid up except during her confinements. She menstruated at thirteen, and married at twenty, and had had seven children, the last four years ago. Her labours had always been easy, and she had never experienced, to her knowledge, any uterine inflammation or leucorrhœal discharge previous to her last confinement. Her last child she nursed nine months, being regularly menstruated all the time. She did not remember whether at this epoch, or subsequently, she had any leucorrhœal discharge. At all events, her attention was not directed to the uterus by any symptom that may have been present, until about four months ago, when she was seized with an abundant vaginal discharge. Under its influence her general health gradually gave way, and she was induced to apply for advice. At this time she had hypogastric and lumbar pains in the interval, as well as during menstruation, and experienced a sensation of pelvic weight and bearing-down on walking. Menstruation was more difficult and painful. A month ago, the catamenia stopped suddenly, owing to some accidental circumstance, on the third day instead of the fifth; she was nearly immediately seized with rigors, severe uterine pain and fever, and obliged to take to her bed, where she remained for ten days. Feeling then a little better, she contrived to walk to the Dispensary, and saw Dr. Roxburgh. On examination, Dr. Roxburgh ascertained the presence of a pelvic abscess, and told her to see me. She was, however, obliged again to take to her bed, and not wishing to send for me, was only able to attend my visit at the Dispensary a week later. In the meantime something had broken, she stated, and she had lost, all at once, by the vagina, at least half a pint of matter.

On examining her carefully in my usual manner in such cases, the patient lying on the back, the knees flexed, the index of the right hand behind the cervix, and the fingers of the left pressing on the hypogastric region, I ascertained the presence of a rather voluminous tumour immediately adjoining the left side of the uterus. This tumour was evidently lying on the left side of the womb, deep in the pelvis, and was completely moveable. It was not of a globular, but rather of a flattened form, and pressed down the vaginal cul de sac to the left of the cervix, so as nearly to obliterate it. On the right side of the cervix the vaginal cul de sac was perfectly free, so that the right index and the left hand placed above the pubis could be nearly approximated. The tumour on the left side was hard, but even; it presented no fluctuation, and was rather painful on pressure. The cervix was voluminous, indurated, and presented the soft, velvety sensation of ulceration, around the os. She complained of very abundant leucorrhœal discharge, and had a good deal of pain in the left groin, and in the iliac regions; she also complained of extreme bearing-down. From the above data, I concluded that there had been a phlegmonous abscess developed in the lateral ligaments, as the sequela of metritis, which, opening into the vagina, had partly evacuated its contents. The mass felt to the left of the uterus was evidently the remains of the phlegmonous tumour, which had partially suppurated. There was slight general febrile re-action, anorexia, considerable debility, and great pain in the lower part of the back. I advised the patient to remain in bed, to take a tepid hip-bath night and morning, and to wash out the vagina three or four times in the twenty-four hours with a milk-and-water injection. I also gave her a little saline opening medicine: compound infusion of roses, with sulphate of magnesia, and tincture of hyoscyamus.

Under the above treatment she rapidly recovered from the immediate effects of the pelvic inflammation. All fever disappeared, the pains in the left iliac, hypogastric, and lumbar

regions, diminished, as also the purulent vaginal discharge, and by the beginning of October the local inflammatory symptoms had sufficiently abated to admit of a careful examination with the speculum. The phlegmonous tumour of the lateral ligament was still large, and painful to the touch, but considerably diminished. The cervix was very low, and so voluminous as not to enter the largest conical speculum, No. 3. It was indurated as well as hypertrophied, and presented an ulceration the size of half a crown, extending on the cervix above and below both labia, as also into the cavity of the os, and covered with large bleeding granulations, and with an abundant sanguino-purulent secretion. I cauterized the ulceration with the nitrate of mercury, and told her to continue the same treatment as before, merely substituting weak sulphate of zinc injections to the emollient ones. Rest in the horizontal position was also enjoined, and a light diet.

On again examining my patient, a fortnight later, with the speculum, I found that the fungous bleeding ulceration of the cervix had become greatly modified by the cauterization, and that it presented the usual appearance of a healthy granulating sore; the inflammatory induration was still great, but rather less than on the previous examination; the vagina was less injected, and the vaginal discharge not so abundant, although still considerable; the lateral pelvic tumour had evidently diminished in size, and was less painful on pressure. On questioning her minutely, I found that she was aware of the existence of two separate discharges, a fact which I have repeatedly remarked in cases of this kind. Any sudden motion or effort, or the evacuation of the bowels, was generally followed by the discharge of a tablespoonful or more of thick matter; whereas the vaginal discharge which gradually passed away at other times was of a thinner nature, and, although yellow, mixed with transparent or white matter. The first evidently proceeded from the pelvic abscess, whereas the latter was formed of the pus secreted by the ulcerated surface of the cervix, mingled with the muco-pus secreted by the vagina.—The bearing-down and sensation of pelvic weight were still considerable, so much so as to render walking or standing disagreeable. She had, however, much less pain in the hypogastric and lumbar regions, and could sit upright, which she could scarcely do before. The general health had rallied considerably; her appetite had returned to some little extent; and she slept a great part of the night. The tongue was still white, and the bowels rather sluggish. The catamenia had taken place easily and freely. The ulceration was again cauterized, and the same general and local treatment recommended as before.

From this time forward she continued to progress without an unfavourable symptom under the above treatment, that which I usually resort to in these cases. Astringent injections were persevered in, and every week or ten days I cauterized the ulcerated surface of the cervix uteri either with the pernitrate of mercury or the nitrate of silver, according to the state of the ulceration. Cicatrization now commenced at the circumference, and slowly progressed towards the centre, the general induration at the same time gradually melting, and the vaginal mucoso-purulent discharge diminishing. At each examination, I found the pelvic tumour to the left of the uterus becoming smaller, until at last, about the end of December, I ceased to perceive it, the left vaginal cul de sac appearing again perfectly free.

As the phlegmonous tumour was gradually absorbed, and the indurated cervix softened, the bearing-down sensation so much complained of by the patient diminished, and at last disappeared entirely, the cervix and uterus at the same time rising in the cavity of the pelvis, so as to be no longer within an inch or two of the vulva, as at first. During this lengthened period, I first directed my attention to diet and the use of mild saline laxatives. I then gave her the citrate of iron as a tonic, in doses of five or ten grains daily. At the epoch mentioned,—the latter part of December,—the general health appeared quite re-established. The appetite and sleep were good, and there was no local pain whatever. She also felt infinitely stronger and better than she had done for months; and had I not told her that the ulceration was not yet cured, she would have considered herself quite well. There was still a slight mucoso-purulent discharge, and around the os there was a surface about as large as a fourpenny piece still unhealed, and covered with small granulations. This surface I continued to touch with the nitrate of silver occasionally, merely recommending her to use cold-water injections night and morning until the 30th of January, 1846, when I was able to pronounce the ulceration quite healed. The cicatrization of the ulcerated cervix and os uteri was

then completely effected. The labia of the os uteri were still rather large and tumid, but as they were as soft as natural, no longer presenting the slightest trace of induration, I did not look upon this state of things as morbid. All vaginal discharge had ceased for some time. There was a very slight redness around the os, which I should have wished to have seen dispelled before I finally dismissed her; but she was exceedingly anxious to leave town to join her husband, who had been absent from her during the previous two months, having obtained work at a distance. I was therefore obliged to allow her to leave, cautioning her, however, as to her future conduct, and advising her to continue to use the cold vaginal injections night and morning for a month or two.

Remarks.—The above case is an interesting example of two distinct diseases—ulceration and induration of the cervix uteri in a woman who has had a family, and of pelvic inflammatory abscess. I have no doubt but that the ulceration of the os and cervix was the primary disease; but am unable to assign its manifestation to any particular cause. The last confinement occurred four years previous to her becoming a patient at the dispensary, and was unaccompanied by any circumstance which would seem likely to give rise to uterine inflammation and ulceration; nor could the patient recall to mind any subsequent symptoms which would warrant our coming to the conclusion that the affection of the cervix originated at that time. On the other hand, slight ulceration of the cervix may, I am certain, exist for years without giving rise to any marked local symptoms, although, at the same time, deeply reacting on the general health and nutrition. Whether the local disease of the cervix was the result of the last labour or not, it is evident that it attained great intensity at the time she sought relief at the dispensary, as was proved by the profuse vaginal discharge, the bearing-down, (itself a secondary symptom, and the result, generally speaking, of chronic inflammatory induration of the cervix,) and the great general debility. Whilst in this state of ill health, the inflammatory congestion of the uterus, which the presence of an extensive ulceration in a part of the uterine tissue must keep up, was suddenly increased by the accidental stoppage of the catamenia.

Under the immediate influence of this fresh cause of disease, metritis would appear to have manifested itself; at least, we are warranted in concluding that such was the case, as we find rigors setting in, accompanied by severe hypogastric pain, and followed by fever. She was obliged to remain in bed the greater part of a fortnight, and when subsequently examined by my colleague, Dr. Roxburgh, was found to be labouring under symptoms indicating the existence of a pelvic abscess. I think it probable, if not certain, that the inflammation passed from the uterus, as I have often seen it do before, to the cellular tissue contained between the folds of the lateral ligaments, and there occasioned phlegmonous inflammation, which speedily suppurated; the abscess, thus formed, finally emptying itself into the vagina. When I saw Mrs. K.—, all this had already taken place; but the history of the case, coupled with the presence of a painful tumour lying on the left side of the uterus, and protruding into the left vaginal cul de sac, at once enlightened me as to the nature of the affection. The phlegmonous tumour continued, for some time, to discharge pus into the vagina, gradually diminishing in size, until, at last, all secretion of pus ceased, and the remains of the phlegmonous mass were completely absorbed. This is generally what I have seen to take place when these tumours—of which I have met with many, and respecting which there is still a deal to be said—open into the vagina; at least when the constitution of the patient is good, and has not been too much debilitated by disease.

The ulceration of the cervix, which may be looked upon as the original cause of the phlegmonous tumour, followed the course which, as I have shown, such diseases usually pursue, when properly treated. The first cauterization modified the irritability and unhealthy appearance of the sore, as also that of the surrounding tissues. Cicatrization soon commenced, and as it progressed under careful local and general treatment, the inflammatory induration gradually melted and finally disappeared. The general treatment resorted to was very simple, and was merely considered as the adjuvant of the local means employed. It was confined to hygienic measures, to attending to the state of the digestive organs, and to the diet; and subsequently to tonifying the system by preparations of iron. It assisted, no doubt, the local treatment, but would, *alone*, have been utterly powerless. The progress of this woman's recovery became more rapid once she was separated from her husband, owing to his absence from town.

I find, in London dispensary practice, as with the out-patients of the Paris hospitals, that uterine diseases of this description are more tedious and difficult to cure, than in-door hospital cases, or cases in private life, where dependence can be placed on the parties.

The treatment in the above case was lengthened, extending over a period of more than four months, but a very serious amount of complicated uterine disease was at first alleviated, and finally cured, by it—a result which, I firmly believe, general treatment alone would not have obtained in as many years, if at all.

Cambridge-square, Hyde-park, January, 1846.

ON LITHOTRITY AS A MEANS OF REMOVING STONE FROM THE BLADDER.*

BY SIR PHILIP CRAMPTON, BART.,

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SURGEON IN ORDINARY TO THE QUEEN, ETC. ETC.

If there be one subject more than another on which surgical opinion is divided, that subject is assuredly lithotripsy. Where, I would ask, is the young practitioner, desirous of being on a level with the improvements of the age, and, at the same time, feeling the want of a guide for his practice, to seek for information on the subject? In the systematic works he will find the highest authorities in direct opposition to one another, not merely on matters of *opinion*, but on the *facts* on which those opinions must be based. If, turning from statistics which point to directly opposite conclusions, according to the views of the parties by which they are used, he endeavours to collect the opinions of practical men, his embarrassment is only increased, professed lithotritists, on the one hand, and hospital surgeons, on the other, taking very different views of the subject—the lithotritists maintaining that the new operation is applicable to almost every case of stone, is unattended with any considerable pain, and is, *when properly performed*, quite devoid of danger—the hospital surgeons denying all this, and asserting that lithotripsy is applicable to a very limited number of cases, that it is to the full as painful and far more fatal than cystotomy.

Now, when it is considered that lithotripsy has been practised in a vast number of cases, both in Europe and America, for more than twenty years, it might be supposed that there were ample data to enable us to arrive at something like a conclusion as to the real value of the operation; unhappily, however, this is far from being the case, and the question as to which operation should be the rule and which the exception seems as far from being settled as ever.

Dupuytren, himself a celebrated cystotomist, and the inventor of the bilateral operation, was, as may be easily imagined, anything but friendly to the new operation. The cases successfully operated on in his presence by M. Civiale, induced him to mitigate his sentence, but his hostility was not the less determined, and in his "Report" to the Academy in 1831, he took so unfavourable a view of the subject as induced the Academy to withhold for another year the great prize which had been adjudged to Civiale for his discovery in the year 1827. This proceeding on the part of Dupuytren gave occasion for the celebrated letter addressed to him by Civiale, in which I am bound to say that the castigation—the most severe that, I think, is to be found in the whole circle of medical polemics—is scarcely more than the occasion justified.

As a mode of determining the relative value of the old and new operation, Dupuytren then suggested that a correct list should be made out of the total number of persons operated on by lithotripsy and cystotomy within a certain period, and that a comparison should be made (upon equal numbers) of cures and of deaths resulting from each mode of treatment respectively; and in this way he conceived that the question as to which operation should be considered as the rule, and which the exception, would be solved at once. M. Civiale at once accepted the proposal, and carried it out with an industry and ability which are above all praise: his Tables presented to the Academy contain no less than 5661 cases of calculus in the bladder, all classified and detailed with a degree of accuracy which has never before been attempted. But alas for human nature as well as for medical statistics! the humiliating truth remains to be told: each party affirms, and brings forward official documents to prove, that his adversary's lists

* Condensed from a lecture delivered at the Meath Hospital, Dublin, published in the *Dublin Quarterly Journal of Medical Science*, Feb. 1846.

of cures are not to be relied on. In France, it would appear (on the testimony of M. Amussat) that the statistics of operations are but too like the statistics of battles, each side diminishing the number of its own killed and wounded, and exaggerating the killed and wounded of the enemy. In justice, however, to M. Civiale, I am bound to say, that upon a careful and certainly unprejudiced examination of the whole controversy, the impression on my mind is, that the great "Inventor of Lithotripsy" (I give him the title conferred on him by the Academy of Sciences) has not been quite fairly dealt with; and if all the charges brought against him have as little foundation as one which I am enabled of my own knowledge to refute, he must stand fully acquitted of misrepresenting the amount of his success. The late Mr. Henn, of Merrion-square,—from whom Sir Astley Cooper had extracted some fragments of calculi by means of his forceps in the year 1824,—consulted M. Civiale in 1827, who ascertained, by sounding, the existence of several calculi in the bladder, complicated with extensive disease of that organ and of the prostate: he dissuaded him from undergoing lithotripsy or any other operation, at least under existing circumstances, and placed him under the care of Dr. Morgan. Mr. Henn returned to Dublin, where he lived for several years, but never underwent any operation. At a sitting of the Royal Academy of Medicine, on the 3rd of January, 1828, the name of Mr. Henn appears among the number of those who had been operated upon by M. Civiale, and had died of the operation!

Most unsettled, however, is the state of opinion in this country respecting the comparative value of lithotomy and lithotripsy. Much of the prejudice which is entertained against lithotripsy is founded on the exaggerations of professed lithotritists, whose interest it was to represent the operation which they exclusively practised as absolutely devoid of pain and danger, while the operation of cystotomy, as practised by hospital surgeons, was painted in the most terrible colours. The hospital surgeons, a few of whom enjoyed a monopoly of cystotomy, received, as they well might, with distrust the glowing accounts of the successes of the new operation, and with anger and disgust what they considered as an exaggerated picture of the horrors of the old.

Hear M. Civiale's account of the operation of cystotomy, which, for power of description, is, I think, without a parallel:—

"The operation is rarely performed in the chamber occupied by the patient. On entering 'the operation room,' which he has been accustomed to consider as 'the place of his execution,' the sight of the raised and covered table, the crowd of assistants, the preparations, all suggest the idea of the scaffold, and are enough to carry terror into the stoutest heart; the terrible array of instruments, mysteriously concealed from his view, but ever present to his mind, the painful, but still more terrific posture in which he is placed on the table, the cords with which he is to be bound hand and foot, the shaving of the part on which the operation is to be performed,—all these circumstances, less serious in themselves than in the fears which they foment, fill the unfortunate sufferer's mind with terrors which increase every moment. Some, unable to support even the sight of so awful a spectacle, fall senseless on the ground; others, as happened lately in the hospital at Pavia, fly from the room, and absolutely refuse to submit to the operation. On his side, the surgeon is far from feeling at ease. 'Does he know,' (observes Dechamps,) 'is he absolutely certain of what he has to do? Can he foresee all the obstacles that may present themselves? No doubt the rules are all clearly laid down, but their application is so subject to vary, that from this source alone the most insurmountable difficulties may result. The practice of the greatest surgeons is before us to attest the fact, and even in our own days we have a sufficient number of instances to convince us of the truth of it; hence it is that cystotomy has ever been, and must for ever remain, in the hands of a few surgeons, who often derive from their experience resources that genius and knowledge would fail to supply.'—*Parallèle des divers Moyens de traiter les Calculs*. Paris. 1836.

M. Civiale then proceeds to give three fatal cases of cystotomy, attended with the most terrible sufferings; one from his own practice, one from the practice of Covillard, and one from Dupuytren's. In one, (Covillard's,) "after two hours of the most horrible torments, during which several pairs of forceps were bent or broken, when the patient was so exhausted as to be able to utter only some feeble moans, and when his last breath was about to depart with the last drops of his blood, he was unbound and laid in bed, where he expired in the course of an hour." These terrible, but, I fear, not too highly-coloured details, though calculated to increase the horror in the public mind against cystotomy, are clearly

chargeable, not to the operation, but to the operator. The cause of these disasters was the attempting an operation which was impracticable, from the great size of the stone; and the surgeon who, from culpable ignorance, committed the mistake, should have been tried for manslaughter for persisting in it, "contrary," as Civiale states, "to the urgent request of all the bystanders." "But," he adds, "he was not to be dragged from the altar or from his victim." Such a scene, I rejoice to say, at least within my time, has never been witnessed in this country.*

The publication of such cases, however, was all in favour of the new operation. The public, with mind pre-occupied and shocked by such details, hailed with delight the announcement of an operation "which" to use the expression of Baron Heurteloup, "was almost entirely free from danger and pain."

Now, strange as it may appear, I do not hesitate to say, and I am in a condition to prove to you, that this is not too favourable a picture of lithotripsy, if the operation be properly performed, and restricted to those cases which come within its proper domain; but if applied generally to lithotripsy, as a substitute for cystotomy, it is lamentably untrue. This, however, is a distinction which the public could not make, and the new operation was accordingly hailed by them as "a gift from heaven."

But it becomes the duty of every hospital surgeon who has availed himself of the opportunities which have presented themselves of performing the new as well as the old operation, to give the results of his practice to the profession, and that too in such a way as to leave no room for cavil as to his statistics. This can be done but in one way, and that is, to give a nominal list of every patient whom he has treated, stating the particulars of each case, the immediate results of the operation, and the actual state of the patient after an interval of many months, and, if possible, of years. The surgical profession and the public are under infinite obligations to Mr. Key, for having led the way in this true path of inquiry. Himself one of the most expert and successful of living lithotritists, he has studied the operation of lithotripsy, and brought to its performance the most consummate skill, based on a most extensive experience. Following his example, I have determined to give, on the present occasion, the result of my personal experience in lithotomy and lithotripsy, which extends over a period of upwards of forty years, during which time I have seen the operation performed, both in these countries and in France, by the most celebrated surgeons who have lived during the last half century, and I have myself operated on sixty-eight individuals,—on forty-nine by lithotomy, and on nineteen by lithotripsy, and on two of these by a combined operation consisting of lithotripsy and cystotomy, or rather, by what Mr. Willis calls lithectasy, that is, by opening the urethra at its membranous part, and dilating, but not dividing, the neck of the bladder, and extracting from the bladder the fragments of the calculus, which had previously been crushed by the lithotrite.

The origin of lithotripsy, like the origin of many of the inventions which exercise the greatest influence on human happiness, is involved in darkness; but beyond all question, to Civiale is due the honour of having first constructed and successfully applied an instrument for the crushing or reducing to powder a stone in the bladder of a living man.

Four cases which came before my own eyes determined me to know something more of lithotripsy. I therefore proceeded at once to London, and waited on Baron Heurteloup, to witness his mode of operating, with a view of practising it myself. He received me with the utmost liberality, and brought me to witness an operation on Admiral Cumberland. The operation was performed with Civiale's three-branch instrument, for the Baron had not then employed his *perceur a marteau*. Nothing could exceed the dexterity and skill, unless it be the gentleness, with which it was performed. I supplied myself with the instruments, and, after making some trials on the dead subject, I satisfied myself that the operation was applicable only to a very limited range of cases, and that even in the most dexterous hands it was likely to prove as dangerous as it was difficult. I determined, therefore, never to attempt it. The invention, however, of the two-branch *perceur* changed the whole character of the operation, and with it changed my resolution, so I immediately procured one, and laid myself down to the study of it. Respecting the invention of this admirable instrument, conceding, as we are bound to do, to Civiale, if not the discovery, at all events the application of lithotripsy, I would assign to Heurteloup the merit (scarcely inferior to that of Civiale) of having invented lithotripsy, that is to say, the seizing of the stone with a two-branch

* Sir Philip has forgotten the operation on Stephen Pollard in 1828.—Ed. L.

curved instrument, instead of a three-branch straight one, and reducing it to fragments by means of repeated blows of a hammer. This is the *percuteur courbe a marteau* of Heurteloup, and it is, beyond all comparison, the best instrument that has as yet been invented for pulverizing calculi in the bladder; and this is true, whether the effect be produced by percussion, when the branches are closed on the stone, by the blows of the hammer, or by compression, as when they are closed by the action of a screw. The best proof of the superiority of the *percuteur* to the three-branch instrument, is the fact that it is the instrument which is now exclusively employed by Civiale and by every lithotritist in Europe and America. In justice to a most ingenious artist, it is but fair to state, that an instrument in all material points identical with the Baron Heurteloup's was invented by Mr. Weiss, of London, so early as the year 1824. Whether or not this instrument suggested the curved *percuteur* to the Baron is more than I will decide. We have the evidence of Sir B. Brodie as to his having seen the instrument with Mr. Weiss in 1824.

To return to my narrative. Furnished with a *percuteur*, I had not long to wait for an opportunity of employing it. In February, 1834, a man named Doyle was admitted into the hospital with a small stone in the bladder; he was thirty-five years of age, and seemed in perfect health. When I told him that I intended to endeavour to remove the stone by breaking it up in his bladder, without cutting him, he seemed transported with joy. I then began by preparing a subject in such a way that I could look into the bladder while manipulating with the instrument: this can be done, when the anterior wall of the abdomen is removed, by cutting away the upper fundus of the bladder, and keeping the opening distended by stitching the cut edges to a ring of strong wire about three inches and a half in diameter. By practising on a subject so prepared, or even on a well-stuffed cushion, on the centre of which the calculus may be laid, you will soon discover a knack, (which very few lithotritists have, so far as I know, as yet made public,) by which you can, while your eyes are closed, catch the calculus with certainty at the very first attempt.

After a few days' practice in this way, I performed the operation in the Meath Hospital, March 7th, 1834. The stone was seized, and broken by means of a small hammer; repeated on the 10th; the whole detritus discharged before the 14th; on the 18th the man returned to Waterford, and has had no return of his complaint. This is the first case in which lithotrity was performed in this country (Dublin): it is now more fully adopted, and its true value in course of being duly appreciated.

Now, what is the problem which lithotrity has to solve? It may (according to Civiale) be conveniently stated under the following heads:—

1st. The reducing of calculi within the bladder into fragments sufficiently small to be discharged or removed through the natural passage.

2ndly. The effecting this by such means as shall excite no dangerous irritation in the urinary organs.

3rdly. The freeing the bladder or urethra from the fragments which these organs may not have the power to expel.

To effect these objects, the instrument should combine a sufficient strength, with a form and dimension which will admit of its being passed through the urethra without exciting any considerable irritation: let us see how these desiderata are fulfilled by the instruments now in use. I need not detain you by a detailed description of various instruments, for all instruments are rendered obsolete by Heurteloup's or Weiss's curved *percuteur*.

The *percuteur* has undergone several alterations and some improvements, but I consider that the most important improvement is the provision for preventing the accumulation of detritus between the jaws of the instrument. I early perceived this great defect, and applied to one of the most ingenious mechanics that any country has produced, to remedy it, (the late Mr. Oldham.) The invention has been claimed by many, but here is the original instrument, made in 1834, which I have used ever since.

The preparation of the patient is general and special.

The general consists in light diet, abstinence from fermented liquors, free bowels without purging, the use of the hip-bath; if the urine be acid, administering alkalies combined with uva ursae or Peruvian bark, and Vichy water; mineral acids when the urine is alkaline, and the infusion of Pareira brava when there is mucous deposit; also absolute rest, with occasionally anodyne enemata.

The special preparation may be summed up under the heads of gradual dilatation of the urethra, when necessary; division

of its orifice, when preternaturally contracted; and the frequent introduction of the catheter; on this latter I lay the greatest stress, as, if properly conducted, it allays the irritability of the urethra and the bladder. [Here the lecturer demonstrated the position of the patient on Heurteloup's bed, and proved that a fixed point in the instrument is not only unnecessary but dangerous. He also showed the mode of injecting the bladder, cautioning his hearers against the too rapid introduction of the fluid—more than one fatal case having arisen from this cause. In executing this manœuvre, the water should be so slowly introduced as to imitate, in some degree, its descent from the kidneys. The various steps of seizing the stone were gone through, as well as the removal of detritus from the bladder, by means of the lecturer's exhausting apparatus, and the mode of removing fragments from the urethra by cutting down upon them, as well as by means of Leroy's jointed curette.] So much, then, for the purely mechanical part of lithotrity, on the dexterous and delicate performance of which, much, no doubt, of the success will depend. In calculating, however, the probable result of the operation, there is a far more important element to be taken into account—namely, its proper adaptation to the case. If from a too exclusive admiration of lithotrity, founded on the exaggerated representations of some of its advocates, uncorrected by an extended experience, lithotrity be applied to a case to which it is inapplicable, and that properly comes within the province of cystotomy, the certainty is that the operation will fail, and the probability is that it will prove fatal; and to a certain, but not to so great an extent, the converse is true: if, for instance, lithotomy be performed on a person labouring under phthisis, extensive disease of the liver, or kidneys, it will certainly prove fatal. Such cases are not likely to succeed when treated by lithotrity; still they may succeed, and if the stone be small, and the bladder tolerably sound, the probability is that they will succeed, and life may not only be prolonged, but, what is scarcely less desirable, what remains of it may be spent in comparative freedom from pain. Again, if perineal cystotomy be attempted in a case where the size of the stone is so great that it either cannot be extracted through the lower opening of the pelvis at all, or without employing such violence as to render the operation almost certainly fatal, then lithotrity affords a means of relief, whether applied alone or in aid of cystotomy or lithetasy.

It appears, then, that cystotomy and lithotrity are not to be considered as rivals, and that the question, as to which of the operations should be the rule and which the exception, should never be brought into discussion; each operation has its special province, the boundaries of which (if, indeed, they admit of being fixed at all) can be determined only by a comparison of a vast collection of facts, carefully noted, and, above all, faithfully reported, and properly authenticated.

If we look to the state of professional opinion in France, we find M. Velpeau, the most able, eloquent, and determined opponent of lithotrity, admits, that in cases of small stones, and even of large ones, if they be friable, and the bladder and its appendages be healthy, lithotrity is the preferable operation; but in all cases of children under fifteen years of age, and even in adults, where the stone exceeds in volume a small nut, and is of excessive hardness, and when the urinary organs are in a state of disease, as evinced by catarrh of the bladder, contracted or irritable urethra, then he would prefer lithotomy. Amussat, Lisfranc, Dubois, and Leroy, on the contrary, are vehement supporters of lithotrity; they would apply it to almost every case admitting of any operation, even to children and infants. M. Civiale, however, though sufficiently partial to what may fairly be called his own operation, is far from applying it indiscriminately. Now, what is the state of opinion on this subject in England?

Sir B. Brodie's opinions are recorded in his lectures on the diseases of the urinary organs. "You should be made acquainted," says this sagacious practitioner, "with the unfavourable circumstances which may attend on this mode of treatment; but you are not to suppose that it often happens that these exist to any considerable extent. The new operation often presents great advantages over lithotomy. It would be a great error to represent it as preferable on all occasions, but it is so in a great many instances."

Mr. Liston, himself one of the most distinguished and successful lithotomists in Europe, is, naturally enough, strongly prepossessed in favour of an operation in which he so much excels. His opinion of lithotrity is, therefore, far less favourable than Sir B. Brodie's. He is not so sanguine "as to suppose that the breaking up of the stone in the bladder will ever entirely supersede lithotomy. If, by some miraculous interposition of Providence, the deposits from the urine should

uniformly be pulverizable, and that bladders be made of less irritable stuff than they are, and if, above all, the affected individuals could only be prevailed upon to apply in due time, then might such pleasant anticipations be entertained, and then might we, with some reason, hope to see them realized; but as matters now are, urinary concretions must, in a great many instances, be cut out of the bladder. Nor is it a circumstance to be very much deplored, since, in good hands, the patient neither endures so much suffering, nor incurs so much risk, as by the proceedings already detailed. The cure, besides, is far less tedious. The stone-grinders, whilst they conceal their own unfortunate results, endeavour to depreciate lithotomy by blazoning abroad the practice of some unlucky surgeon, who, perhaps, loses four in twelve, or six in twelve, of the patients who come under his knife." Mr. Liston acknowledges that now "the screw lithotrite can with great propriety and safety be employed in cases in which the concretion has not attained any very large size, and in which also the urinary apparatus is healthy, and tolerably free from irritability. The cases for this operation must be well chosen, and the proceedings conducted throughout with great caution, gentleness, and judgment."

The last book which has been published on the subject is the work of a well-informed physician—Dr. Willis. It is altogether opposed to the opinion and practice of Sir B. Brodie, and of several other hospital surgeons of high reputation, and particularly of Mr. White, of the Westminster Hospital. The *author* does not, I believe, draw from any fund of considerable personal experience. Speaking of the supersession of the cutting operation, he says, "Such a substitute was, in its first introduction, and for some considerable time afterwards, believed to have been discovered in lithotripsy. But this is beyond all question a rotten staff, which, leaned upon by all who suffer from stone, will certainly fail five-sixths of the number; nearly one-half will find that it is totally inapplicable to their case; from one-third to one-fourth will fall immediate victims to its determined application; and from one-third to one-fourth will escape, to lead miserable lives from diseased bladder, and then die of diseased kidneys: not more than one in three or four of all who were held favourable subjects will find it a safe, effectual, and final remedy for their disease. The public and professional mind has been singularly abused in regard to the value of lithotripsy as a general means of treating stone in the bladder." This is a terrible picture; nevertheless, I believe, if applied to lithotripsy, considered and employed as a substitute for lithotomy, it is not too highly coloured. Dr. Willis supports his opinion by a reference to what he considers as *authentic* documents, (for when *unfavourable* to the operators, and given by themselves, they may be safely so considered.) From a great number of unsuccessful instances collected from various authentic sources, Dr. Willis arrives at this conclusion respecting the circumstances in which lithotripsy is admissible, and those in which it is inadmissible. "Lithotripsy," he says, "is admissible, and only admissible, in cases in which the bladder is perfectly healthy, and in which the stone is small, of the size of a filbert, a shelled almond, or it may be a nutmeg at the utmost; under all other circumstances, it ought to be held impracticable. In other words, lithotripsy is admissible where it is estimated that the stone can, at one sitting, be seized and reduced to fragments of sufficient minuteness to be passed by the urethra. No second, certainly no third operation ought ever to be contemplated; if the patient who has had lithotripsy performed on him is not relieved at once, he is in imminent danger of losing his life. Lithotripsy, I do not hesitate to say it, has now been fairly tried, and found wanting as a general means of relief for stone. Restricted to the circumstances just indicated, it is a great addition to our surgical therapeutics; applied indiscriminately, and as a substitute for lithotomy, and all other means of dealing with stone in the bladder, it is a most fatal present made to humanity." But Dr. Willis draws his conclusion from documents which have reference chiefly, if not altogether, to the original operation with the three-branch instrument, and the drill, as first practised by Civiale; though even then, his picture is too highly coloured; but if applied to the operation as now performed with Heurteloup's *percuteur*, it is far from being a correct representation of lithotripsy; and this I am in a condition to prove upon evidence which I am not afraid to say is the most exact that has as yet been offered on any disputed point of surgical practice. I propose to take the last eleven years, and to give every case of stone in the bladder on which I was consulted during that time, the particulars of each case, including the operation (if any) which was performed for its relief, and the issue up to this day, constituting a catalogue

raisonné of all the cases, whether treated by lithotripsy or cystotomy.

From May, 1834, to September, 1845, I have had to deal with thirty-four cases, of which four were females, and twenty-nine were males, all adults, excepting two boys. They have been disposed of in the following way:—

Rev. G. Ouseley, not operated on, on account of his great age, and the diseased state of the prostate. Four were sent to be operated on by Baron Heurteloup, and three of them were permanently cured. The fourth was operated on three times by him within six months, and twice by me within twelve months; for the last time, four years before his death. He died, aged 76, free from urinary complaint. The detritus was removed (as before stated) by means of the exhausted ball. To this complete removal of the particles I attribute the immunity from relapse during the last four years of his life.

[The lecturer then gives a list of "his own cases," twenty in number, on which lithotripsy was performed, and that account is followed by his cases of lithotomy, nine in number, concluding them with the following summary.]

It would appear, then, that the thirty-five cases of stone in the bladder which have applied to me for relief between March, 1834, and November, 1845, have been disposed of in the following way:—

Two (the Rev. G. Ouseley, aged eighty-one, and a gentleman at Coolock) were set aside as unfit for any operation—both had diseased bladder and kidneys; four were sent to Baron Heurteloup, and were cured by lithotripsy; twenty were operated on by me, (by lithotripsy,) all adults; and nine by cystotomy, three under twelve years of age. Total, 35.

All that were operated on by *lithotripsy* were cured, with the exception of one, and in his case the operation cannot be said to have failed, because it was performed expressly to bring the stone into a condition to be removed by lithotomy, and this the operation fully effected. In another case, the cure was not completed, from causes that had no reference to the operation.

All that were operated on by *cystotomy* recovered, though one died three months afterwards of old inflammation of the kidney and testicle; but the wound had nearly healed.

It appears, then, that of the 33 patients operated upon, nine only were submitted to cystotomy, (about one fourth;) it is not, however, to be inferred, that out of any given number of cases of calculus only one-fourth should be operated on by cystotomy; for if ten or twelve of the twenty-four operated on by lithotripsy, instead of being adults, were children and old persons, the proportions might probably be reversed, and the cases suitable to lithotripsy might be reduced to ten or twelve, and the difference placed to the credit of cystotomy. And this affords a striking illustration of the utter uselessness (not to say the absolute mischief) of drawing any inference favourable or unfavourable to lithotripsy, from a statement of the mere numbers operated on, without reference to the *circumstances* of each particular case. The numbers of cases that I have given (I admit) are far from being sufficient to justify any general conclusion as to the respective values of the old and new operations, but they are sufficient to establish some points of great practical importance upon which surgical opinion is still much divided. 1st. It is abundantly proved that lithotripsy may be successfully applied to cases which are considered to be beyond the domain of cystotomy. I believe the most intrepid cystotomist would have hesitated (if he did not at once refuse) to operate by cystotomy in four of the cases I have quoted, for it is nearly certain that it would have proved fatal. Another patient, aged sixty-eight, and weighing sixteen stone, would have been a very unfavourable case for cystotomy; he was, however, relieved of his stone (a very large one) by lithotripsy, without suffering one hour's confinement. 2ndly. In certain cases, to which neither cystotomy nor lithotripsy are applicable singly, (as two of my cases proved,) the combination of the two operations (and especially of lithotripsy with lithectomy) may be employed with success. Finally, it is proved that when the urinary organs are in a healthy state, stones of great hardness, and upwards of an inch and a half in diameter, may be removed by lithotripsy with safety. It by no means follows, however, that, in such cases, lithotripsy is *always* to be preferred to cystotomy; the choice of the operation must often be determined by various considerations (not purely surgical) connected with each particular case, and having reference to the operator as well as to the patient. A very skilful cystotomist may not have sufficiently practised lithotripsy, and a patient who might make up his mind to suffer one operation, however painful, might be quite unequal to submit to several comparatively slight ones.

But the important question still remains to be determined—a question upon which the cases I have just detailed throw no sort of light—namely, what circumstances forbid lithotripsy? It may be stated, as a general fact, that in calculous patients the bladder is not unfrequently found in one of two opposite states, which, if they do not absolutely forbid lithotripsy, render its application in the highest degree dangerous, and (as a remedial means) far inferior to cystotomy. The bladder, like the stomach and the heart, has not inaptly been termed a “hollow muscle,” which is constantly receiving and transmitting a fluid; like the heart, it is liable to hypertrophy, or thickening of its walls, diminution of its capacities, and increased irritability, or power of contraction; like the heart, too, it is subject to a thinning of its walls, an increase of its capacity, and a diminution of its contractile power: these opposite conditions are easily recognised, and are familiar to every surgeon of experience; but to M. Civiale is due the merit of having shown the influence which these states of the bladder exercise on the success of lithotripsy. In the hypertrophied bladder, the patient is harassed by the almost incessant desire to pass water; the quantity discharged seldom exceeds an ounce, or an ounce and a half; the pain, especially in expelling the last drops, is excessive; the urine is always high-coloured, and deposits, on cooling, a mucous sediment, frequently tinged with blood. In such a case, the mere operation of sounding, or even of injecting warm water into the bladder, may excite a severe or even fatal inflammation of the organ. I have knowledge of two cases in which the injection of tepid water into the bladder (though done with the utmost care) proved fatal in three days, by exciting acute inflammation of that organ; on examination after death, the mucous membrane was found inflamed, thickened, and corrugated. In such a state of the bladder, it is scarcely necessary to say that lithotripsy is not to be thought of.

The opposite state, in which there is atrophy or wasting of the walls of the viscus, with increase of its capacity (M. Civiale justly observes), exercises a great influence on the sensations which are caused by a calculus as well as upon the manœuvre of the operation, and on its result; it masks all the symptoms of stone, or renders them different from those we are accustomed to observe. As the bladder never empties itself completely, its walls scarcely come in contact with the stone; the consequence is, that the pain and the peculiar sensation in expelling the last portion of the urine (the most certain of the rational symptoms of stone) are wanting. Exercise does not cause those bleedings from the bladder, and those painful spasms, of which calculous patients, under other circumstances, complain so much; the urine is loaded, foetid, and alkaline, the debility increases daily, the pulse is quick and weak, and there are frequent chills, followed by heat flushes—the bladder is in a state of low inflammation, with diminished vital powers, and the kidneys generally participate in the disease. In such a state of things, M. Civiale justly considers that the operation of lithotripsy would almost certainly prove fatal; but I believe the same might be said, with equal truth, of cystotomy. He thinks it of so much importance, with reference to lithotripsy, that this condition of the bladder should be clearly understood, that, in addition to the signs above mentioned, he gives several others that are deserving of the utmost attention. This morbid thinning and atony of the walls of the bladder must not be confounded with paralysis, or want of action from defect of innervation; this last state furnishes no objection to the application of lithotripsy, provided sufficient means be employed to rid the bladder of the fragments of the broken calculus. This is well illustrated by one of my own cases, where the bladder was so completely paralyzed, that for several years the patient had been obliged to draw off the urine by the catheter four or five times in the day.

In addition to the morbid states of the bladder described by M. Civiale, I should say that a contracted and irritable urethra, an enlarged and irritable prostate gland, and, above all, a constitution prone to sympathize with a disordered state of the urinary organs in general, and with the urethra in particular, a large and very hard stone, or numerous small ones, forbid the application of lithotripsy, and bring the case within the proper domain of cystotomy.

Lithotripsy is in general considered as inapplicable to children under fifteen or sixteen years of age, on account of the narrowness of the urethra in early life, and the comparative safety of cystotomy in young subjects; but considering that in children the urethra is (except at its external orifice) highly dilatable, and that the most violent symptoms of calculus in the bladder are often created by the presence of a stone so small that it might with the greatest facility be crushed, and

the fragments extracted, at a single operation, I cannot but hope, that at no distant period the operation of cystotomy will be superseded by lithotripsy, in a great proportion of cases of calculus in children. I think that these four calculi [showing them] which I have extracted from infants under six years of age, are the last of the kind that I shall either extract or see extracted by that painful and dangerous operation. But a few days since, Mr. Cusack performed cystotomy on a child of four years of age, in Steevens' Hospital; the moment he divided the membranous part of the urethra, the stone started out into the external incision, and was removed by the fingers of the operator; only the membranous part of the urethra had been opened; the prostate and bladder were untouched. What a triumph it would have been for lithotripsy, and what an advancement in operative surgery, if lithotripsy had been applied to this case. The bladder not having been opened, the wound was healed in three or four days, and the child was perfectly cured. Nevertheless, it is impossible not to regret, for the sake of the advancement of operative surgery, which is immeasurably improved by everything that renders operations more safe and less painful, that lithotripsy had not the merit of this cure.

ON THE EXPULSION OF ENTIRE OVA.

By JAMES MACKNESS, Esq., M.D., Hastings.

A TWIN, APPARENTLY STILL-BORN, ANIMATED BY LONG-CONTINUED FRICTIONS, ETC.

Two or three cases have lately been reported in your columns where the ova have been expelled entire. The following case of ova being expelled entire is somewhat singular:—

I had been attending a lady, staying at St. Leonard's, for some slight illness. During the latter part of the month of August last, she was far advanced in pregnancy. On the night of the first of September, her husband called me up, and told me that his wife was much indisposed, but that he did not think she was in labour. On entering the room, a friend of the patient who was with her, said, “Doctor, it is all over; the child has been born these ten minutes or quarter of an hour, but it has not cried, nor have I looked at it.” On making an examination, I found an ovum entire. I broke the membranes, tied the cord, and gave the child to the attendant, while I paid a little attention to the mother. To my surprise, I found another ovum, also entire, from which I extracted another infant. Both appeared to be still-born, and my efforts were immediately directed to excite the function of respiration by inflating the lungs, dashing cold water over their bodies, wiping them dry, and having their skins well rubbed. By assiduously employing these means for about a quarter of an hour or twenty minutes, I had the satisfaction of seeing both infants show signs of animation, and having by this time got a fire lighted, and exposing them to its warmth, they both cried out very lustily. There was no hæmorrhage, and the placenta of each child was separate.

There are three points which claim our consideration in this case.

1st.—The length of time which had elapsed from the expulsion of the ova, and my arrival at the house.

2ndly.—The success which resulted from the persevering efforts employed to arouse the vital powers.

3rdly.—The absence of flooding after the expulsion of entire ova.

Ten or fifteen minutes were alleged to have passed from the expulsion of the ova and my arrival, and although it is quite possible that the impatience and anxiety of the patient and her friend might have somewhat over-calculated the time, yet, from other accompanying circumstances, I do not think they had much exaggerated. Dr. Campbell, the lecturer on midwifery at Edinburgh, used to relate a case where a young student of midwifery had for one of his earliest patients a case where the ovum was expelled entire, and not being prepared for such an event, and not understanding it, became alarmed, hastily ran for the lecturer, who returned with him to extract a child from the ovum, which had thus negligently died from asphyxia.

2nd.—The means which I adopted had in them nothing unusual, except that I had nothing but cold water and the employment of artificial respiration at my command. It is true that Dr. Blundell, in his “Principles and Practice of Obstetrics,” says, page 246, 1834—

“Of the various practices recommended for the resuscitation of still-born children, I may observe, there are two on which I place a principal reliance, and which I would recommend you to urge with diligence, not, however,

excluding the subordinate remedies, and these two remedies are, the artificial respiration and the warm bath." And again in the same page, he says,—"The artificial respiration should be diligently tried, indeed, if this and the warm bath fail us, I know of no other resuscitants on which we can confidently rely." For my own part, I have always found a shock from a dash of cold water more efficacious in rousing the vital powers than warm, but where warm water is ready at hand, I have found a sudden dash of cold water, alternating with a plunge into the warm bath, more efficacious than either alone; and, in my opinion, this plan, combined with friction and artificial respiration, kept up for a considerable time, will give the greatest chance for success. In this case, cold water only was at my command, for it was in the middle of the night, and labour had unexpectedly come on. I alternately dashed cold water over each of the infants, wiped them dry, and, while the nurse was employing friction with the warm hand on one, I was inflating the lungs of the other. The same process was repeated for several times on each, until at length I had the great satisfaction to hear one of them utter a faint cry, and the other a sob; still continuing my efforts, they both cried out lustily, and are now living.

This is an instance where complete success attended persevering efforts to resuscitate still-born children, and may well encourage others not to relax their efforts until a probability of doing so no longer exists.

Flooding very frequently accompanies the expulsion of the entire ovum; in this case it did not take place. I do not now usually practise midwifery, but at one period of my life I had much of this practice, and I have occasionally had cases where, in the sixth or seventh month of pregnancy, the ovum has been passed entire; most generally I have found this event accompanied by considerable hæmorrhage. Dr. Blundell says, also, "Principles of Obstetrics," p. 234—"In the sixth and seventh month especially, the ovum tends to come away unbroken, like the egg of an ostrich, and when this is the case much flooding may occur, and the child will most probably be drowned, as it comes into the world immersed in a bag of water, and may perish." Again, "Should the laxity of the parts, or the capacity of the pelvis, allow of the transmission of the membranes entire, floodings fatal to the mother and destructive to the fœtus may be the result." The lady in this case was, according to her reckoning, a little more than the seventh month of pregnancy; this was her second confinement, and she not only had no flooding, but not a single untoward symptom: the infants, although small, appeared fully seven months' children.

Hastings, January, 1846.

REVIEWS.

Elements of Materia Medica and Therapeutics. By EDWARD BALLARD, M.D., Lond., and ALFRED BARING GARROD, M.D., London. Taylor and Walton. 1845. pp. 447.

THE enumeration of the divisions treated of by each author will convey an idea of the plan of the present work. The Therapeutical Introduction, the Vegetable Materia Medica, the Animal Materia Medica, and the article on General Bloodletting, with the Appendix, are by Dr. Ballard; while the Chemical Introduction, the Inorganic Materia Medica, and the article on Electricity, are written by Dr. Garrod.

This work we do not hesitate to say is a very valuable contribution to educational medical literature. The department of Materia Medica has been too much overlaid with ponderous tomes of a thousand pages, a circumstance by no means conducing to the advance of the student or the interests of the profession. Overgrown works of this kind only tend to elevate into undue importance the study of drugs, and to obstruct the student in his way to the higher branches of medical science. Large works are valuable for reference; but we believe the feeling which at present obtains, both among teachers and students, is in favour of more concise manuals on pharmacy and materia medica.

It is no more for the good of the student to pore over an overgrown book on the materia medica, than it is to spend five years of apprenticeship in compounding physic. Another advantage in the work of Drs. Ballard and Garrod is, that they have brought the most recent knowledge in the other departments of medical science to bear fully on therapeutics.

In the therapeutical introduction, Dr. Ballard has done something towards breaking up the old arbitrary arrangements, and he might have gone still further with safety in the same direction. Even to the superficial observer it will be seen, that for the past few years medical science has been advancing rapidly by two great routes, Neurology representing the one, Organic Chemistry the other. Neurology must be placed first, since it constitutes the chief branch of *dynamics*, of the *imponderable* agents in physiology; while Organic Chemistry chiefly deals with the *ponderable* substances.

Bell was stung to the commencement of his career of discovery by the taunt of the chemists of his day—that the old methods of investigation were exhausted. It is fashionable for Chemistry to use the same language now, and with equal injustice, since so much has been done by Hall. Dynamic and organic progress must *both* continue, till physiology, the knowledge of the animal Cosmos, has reached its final limit.

The remarkable discovery of Liebig, that there is a distinct relation between the composition of the vegetable alkaloids, quina, brucia, morphia, &c., and the composition of the substance of the brain and nerves, and between these and no other elements, as far as can at present be shown, is adduced; this, and the corollary, that they may be "supposed to take a share in the formation of new, or the transformation of old brain and nervous matter," are among the most interesting points in modern therapeutics. On another action of these bodies, the following passage is worthy of attention:—

"In considering the mode in which remedies of this class alter the quantity of a secretion, or modify its chemical composition, two principal circumstances must be kept in view. It must be recollected, that the secreting organs are merely the agents by which the material is separated from the blood; and the amount of the secretion will depend on the circulation through them, and the healthy state of their nervous supply. The separated matters themselves, however, do not originate here, they are derived from the transformations of tissue which are constantly proceeding, with greater or less rapidity, in the body at large. Medicines, therefore, which affect secretion, must do so in one of two ways: either they must act upon the nervous centres, increasing or diminishing their influence upon the organs, and modifying the circulation through them, or, in the words of Liebig, 'they must take a direct share in the change of matter in the body,' or, 'exert an influence on the formation, or on the quality of a secretion, by the addition of their elements.'"—p. 6.

The nature of the nervous actions induced by various remedies, and the therapeutic action of the *vis nervosa*, are not so specifically referred to as they might with propriety have been; though much more information on these points is dispersed throughout this volume than we have seen in other works of the kind. We propose briefly to follow Dr. Ballard through some of his notices of the different classes of remedies.

Stimulants.—These are of particular organs, or of the whole system, diffusible stimulants, as ammonia, and specific stimulants, as copaiba:—

"But of all the remedies which can be denominated stimulant, strychnia and brucia are the most decidedly specific in their action; for while their excitant influence is most powerfully exerted upon the excito-motory function of the spinal cord, we are not aware of their manifesting any operation at all, either upon the rapidity of the pulse, the energy of the mental functions, or the general temperature of the body. There are, doubtless, some who would look upon this as sufficient ground for denying them a place in the class of stimulants at all; but so far from agreeing with them in this respect, we regard the alkaloids of nux vomica as presenting the very simplest type of an excitant drug; and we do not hesitate to express our deliberate conviction, that every stimulant which augments the activity of the general functions of the body, does so by the influence, primary or secondary, which it exerts on the cerebro-spinal centres. We would even be disposed to go a step further, and to hope that the time is not far distant, when tonics, and some of the diaphoretics, purgatives, diuretics, and emmenagogues will be removed from their present unnatural connexions, and put side by side with strychnia, in the class under our notice."

We object to the term "cerebro-spinal centres," the phrase "cerebro-spinal" is a solecism in physiology, as inferring some common centre to the spinal and cerebral, the excito-motory and voluntary, divisions of the nervous systems.

Dr. Ballard might have considered with advantage the contrary effects of certain substances on different organs, and on the same organs in different states of the circulation. Thus in convulsions with fullness of the circulation, opium is a stimulant to the spinal marrow, while in anæmic cases it is sedative; the ergot of rye, while it increases the action of the uterus, diminishes the action of the heart. It would have advanced Dr. Ballard's plan of enlarging the class of stimulants if he had arranged them as they affect the cerebral, spinal, and ganglionic systems, and as they affect certain organs. The subdivision of spinal stimulants is especially indicated. Errhines affect the excito-motor arc which presides over sneezing; emetics, that which produces vomiting; strychnia, besides its general spinal action, produces spasm of the glottis; in doses insufficient to produce any other motor effect, the ergot of rye affects the spinal action of the uterus, cantharides and aloes that of the bladder and rectum. An important place ought also to have been given to the application of cold to the surface as a spinal stimulant.

Sedatives.—These are also divided into *general* sedatives, as bloodletting and tartar emetic, and *special* sedatives, as digitalis and tobacco. "Just as the alkaloids of *nux vomica* operate as specific stimulants upon the excito-motory function of the spinal cord, so there are some medicines which in an equal measure depress it." The special sedatives of the reflex function are "hydrocyanic acid, Indian hemp, and conium." Conium may be pronounced doubtful, and according to the observations of Dr. Hutchinson, of Nottingham, hyoscyamus should be added to the number. A place also should be given to the warm bath, as a sedative of spinal motor action.

Narcotics.—Dr. Ballard is not of opinion, with Dr. A. T. Thompson, that the narcotic effect of opiates depends upon the collapse produced by the excitement they cause in the first instance. He rather believes the stimulant and sedative effects of opium to be two separate consequences, and not in the ration of cause and effect. The constipation, tardy digestion, and diminished secretions following their administration, he refers to their sedative effects on the alimentary canal and the secreting glands.

Anti-spasmodics.—This is a class of remedies to which little attention has been given of late years. Since the discovery of the reflex function more care has been bestowed on the removal of irritating matters from the different excitor surfaces than on the relief of spasm by nervine remedies. Dr. Ballard very properly says, that anti-spasmodics "may be distributed under two heads—namely, those which remove the remote cause of the affection, and those which directly diminish the excitable state of the nerves or nervous centre, either of which will give rise to an increased display of reflex acts." The spinal marrow is recognised as the great organ involved in spasmodic action, and that "the direct anti-spasmodics are the specific sedatives of the reflex function," and under certain circumstances, also, "the class of narcotics at large."

Tonics.—Under this head the following preliminary observations are made:—

"Tone or tonicity in a muscle is that continued state of contraction which its fibres always maintain in the healthy body, and which is not followed by relaxation. As any special act of contraction is due to an influence exerted in the nervous centres, and accompanied by a special change of tissue, both in them and in the conducting nerves, so we look upon tone as dependent upon a similar influence, not special but constant, originating in the same source, accompanied by a constant change of tissue, though in a similar way, conducted by the same nerves, and manifested by a constant contraction of muscular fibre throughout the body. Under certain conditions of the frame, we have stated this tonic contraction to be morbidly increased, and that sedatives were to be opposed as the remedy:

when, however, circumstances are reversed and the tone is lessened, the class of medicines now under consideration is employed to restore its energy. We may, accordingly, understand how stimulants, the class most opposed to sedatives, shall act as tonics, when administered in small and repeated doses; and one of the specific stimulants especially—namely, strychnia—has been recommended for employment as exhibiting active powers of this nature. With the exception of iron we are accustomed to regard tonics as acting in the first place upon the nervous centres, and through them, producing effects upon the muscular system at large."—p. 15.

There seems to be no reason why iron should be excepted, why it should not affect the centric organs of the nervous system after its reception into the circulation, as well as in the modes specified. The action of the other tonics is intra-vascular. With respect to the physiology of this passage, special contractions from volition do undoubtedly originate in the cerebral centre; but contractions from special actions are caused by centric, or by eccentric, causes. May not tone also depend rather on excitation affecting the peripheral terminations of the incident spinal nerves of the whole body, and not on centric stimulus or change? May not tone, in fact, be an equable and continuous reflex action, excited chiefly by the external agencies to which the body is exposed, instead of an influence derived from the nervous centres?

Emetics.—These are divided into two classes. The one "are mostly local irritants which stimulate the nerves distributed on the mucous membrane, and when these are employed vomiting is a reflex act." Mustard, sulphate of zinc, and sulphate of copper, act in this way, and are called "direct emetics." The other class must first enter the circulation. It is remarked, "in the case of the direct emetics, the part which the nerves and spinal centre take in the accomplishment of vomiting, scarcely admits of question; nor, on consideration of their entire effects, can we doubt that the other medicines of the class also act through the medium of the spinal centres." There is a good deal of unnecessary circumlocution here; why not say at once that vomiting may be either centric or reflex, may depend on intra-vascular excitement of the nervous centre, or on excitation of the incident nerves of the stomach, and that there are two classes of emetic substances acting in these modes respectively? The opinion of Dr. Paris is quoted, to the effect "that we cannot hesitate to admit that the influence of the nervous system is indispensably necessary to produce vomiting," because "this act will not take place, however forcibly the stomach may be goaded by emetics, when the energy of the nervous system is suspended." By the nervous system nothing very definite is here meant. It is an interesting question, why, in cerebral insensibility, it is so difficult to promote vomiting? No one has answered the question. It must be remembered that the key of the reflex nervous arc, presiding over vomiting, is seated in the medulla oblongata, within the cranium. May not the cerebral compression, present in insensibility, affect the medulla oblongata mechanically, and thus obstruct the act of vomiting? It is certain that at the same time the reflex acts of respiration are imperfectly performed.

Purgatives.—"Of this class of medicines it is remarked, that different cathartics have acquired a reputation for acting, in a specific manner, upon different parts of the intestinal canal. We have no hesitation, however, in rejecting many erroneous views which have been advanced on this head, which succeeding experience has shown to be so. The special operation of calomel upon the liver and duodenum is one of this nature; and though we are willing to admit that mercurials have the power of increasing the biliary secretion, all practical men, unbiassed by the prejudices imbibed in their youth, consider this but as part of the effect they produce upon the secretions generally. We would wish especially to impress this point, because it is an error which has not only infected the minds of a very large majority of practitioners in medicine, but is continually being repeated in the lecture-room. One point, however, with regard to the specific action of purgatives, appears to be pretty clearly established, and it is this—that some act more especially by increasing the amount of fluids

poured into the canal, and others more particularly by stimulating its peristaltic action. This, however, is a mere question of excess, both apparently possessing the two kinds of action conjoined; the stools produced by the full operation of aloes, for example, are more fluid than natural, while those which colocynt occasions are expelled with straining and force."

We confess to hold with the majority *in re* mercurials. We do not think their special chologogue action can be so speedily overthrown. Doubtless calomel increases secretion generally; but does it not stimulate the liver, and, in its ultimate action, the salivary glands, beyond other secreting glands? We think "old experience" is in favour of the affirmative. It is even supported by a note to this identical passage by Dr. Garrod, to the effect that biliary matter, (choleic acid,) though rarely seen in natural evacuations, is found in considerable quantity after calomel has been administered.

We may pass over refrigerants, astringents, diuretics, diagogues, errhines, expectorants, diaphoretics, emmenagogues, antacids, diluents, demulcents, vesicants, and caustics, as offering no very salient points for criticism or explication, though well and scientifically handled.

We have dealt thus largely with the introductory chapter, because it is the most prominent and the most novel of the volume, though Dr. Garrod is equally able in the departments he has undertaken. In therapeutics, all our progress, past and to come, must depend on "our acquaintance with the physiological relation of the several functions." All the merits of Dr. Ballard's Essay on Therapeutics depend on the spirit of physiological application which pervades it, and it will be seen that the function of the spinal marrow is the great forte in this respect. We are sorry to add that the eminent name—but for which neither he could have written, nor we could have criticised as we have done—is never once mentioned. For the rest of the volume we have only space to give a general commendation. There is throughout a greater mixture of scientific botany, chemistry, natural history, and, above all, of physiology, than usual in works of this kind. Dr. Ballard has done most; we will not say that Dr. Garrod has done best, but what he has done is well done.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

(Concluded from p. 161.)

CASE OF ANEURISM, PRESENTING SOME PECULIARITIES, WITH REMARKS. By Mr. PRESCOTT HEWETT.

G. B.—, aged thirty-one, was admitted into St. George's Hospital, under the care of Sir Benjamin Brodie, in May, 1839, with a pulsating tumour in the groin, of the size of a pullet's egg, and presenting all the characters of an aneurism. The tumour had existed about three weeks, and had made its appearance without any apparent cause. The patient's general health was good, but he had been in the habit of drinking hard. As a careful examination of the heart and large arteries did not point out any disease in these parts, Sir B. Brodie applied a ligature, on the 30th of the month, to the external iliac artery, and all pulsation in the tumour ceased immediately. The operation was followed by peritonitis of a low character, from which he, however, gradually rallied. The ligature came away on the 25th day after it had been applied. The wound in the groin healed; the tumour became solid, and gradually decreased in size, and the patient was discharged cured on the 14th of August. At the latter end of November he was re-admitted, on account of a slight return of pulsation in the tumour, which had somewhat increased in size. The pulsation had re-appeared at the beginning of the month. Pressure by means of graduated compresses was ordered to be tried. This plan was persevered in for two months, at the end of which all pulsation and sound again disappeared. In November, 1841, the patient was seen again, and it was observed that there was a slight recurrence of the pulsation, but without any increase in the size of the tumour. In January, 1842, all pulsation had ceased in the tumour, but it had increased somewhat in size. From this period it gradually but steadily increased, and in the course of the ensuing twelve months it grew to the size of the egg of an ostrich, without even presenting either pulsation or sound of

any kind. In January, 1843, the tumour became stationary, and some time afterwards it begun to diminish. The decrease in size continued until July in the same year, when the patient died of phthisis.

On examination after death, the tumour was found to be connected with the superficial femoral artery, immediately below its origin. When separated from the neighbouring parts, it was of the size of a full-grown foetal head, and perfectly solid. Upon being cut into, it presented the characteristic layers of blood observed in aneurisms. Its covering was formed by the outer coat of the artery, and its cavity was completely blocked up by coagula. About two inches of the superficial femoral connected with this tumour were completely obliterated. The common femoral was dilated to the size of the common iliac. The internal surface of this dilated vessel was lined with some thin coagula, and covered over by a membrane of new formation, beautifully adapted to the internal coat of the artery, of which it at first appeared to be a part. A large and distinct channel was, however, still left for the circulation of the blood through the vessel. The external iliac, from a little above the origin of the epigastric and circumflex arteries to within a quarter of an inch was obliterated, and reduced to the size of a small quill. The branches given off by the external iliac, common and deep femoral arteries, were much increased in size.

Having remarked on the recurrence of pulsation in this tumour, Mr. Hewett proceeded to call the attention of the fellows to the fact of this aneurism having grown in the space of twelve months from the size of a hen's egg to that of an ostrich's egg without either pulsation or sound of any kind being heard in it, although it was repeatedly and carefully examined by several experienced surgeons, many of whom explained the case by the supposition that the tumour was of a malignant character, and fed by large arteries, the supply of which had been cut off by the obliteration of the external iliac—a fact most worthy the attention of practical surgeons, especially when the details of this case are compared with some of the details of the cases of pulsating tumours brought before the Society by Mr. Stanley, and published in the last volume of the Transactions.

Mr. Hewett concluded by making some remarks upon the general pathology of aneurisms, in connexion with the thin coagula, lined by a membrane of new formation, which were found in the dilated common femoral artery.

Mr. BRANSBY COOPER said that it was not uncommon for pulsation to occur in an aneurismal tumour after operation, if proper means, such as quiet, were not resorted to, particularly in a main artery, and where there were anastomosing branches. Excitement of any kind impeded the formation of a coagulum. He related a case in point, which he had fully related at a previous meeting of the Society, and which was reported in this journal at the time.

Mr. TOYNBEE noticed another interesting point in Mr. Hewett's case, which was, the formation of a dilated cavity, of considerable size, in the space between the obliterated artery and the aneurism, and forming almost a second sac, as the result of the operation. This cavity would account for the great increase in the size of the tumour after it had become to all appearance quite solidified.

BRITISH AND AMERICAN MEDICAL JOURNALS.

ON THE TREATMENT IN CASES OF URINARY DEPOSITS.

In connexion with the above clinical investigation of the urine, we may refer, with advantage, to the views of Dr. ALDRIDGE on the treatment of some of its morbid conditions. We find them in the *Dublin Hospital Gazette*.

"Treatment of lithic acid deposits.—The deposits are either crystalline or amorphous. When the urine for any length of time continues to deposit, after each emission, the rhombic prisms of lithic or uric acid, it is desirable to exhibit either bicarbonate of soda or potash, in doses of ten grains or a scruple, dissolved in half a pint of water three times a day, so as to render the urine neutral or alkaline; but this effect being obtained, the practitioner ought to direct his efforts to subdue the gouty condition which is the cause of the symptom. If the urine be albuminous or sanguinolent, and there is much pain in the loins, it shows the attack to be of an inflammatory character, and to require a treatment locally antiphlogistic, otherwise recourse may be had to colchicum.

"If the lithic acid deposit be amorphous, its precipitation may depend either upon an excessive secretion of the solid constituents of the urine, or upon a deficiency in the secretion of water. In the former case, the specific gravity of the urine becomes normally increased in proportion to its quantity. The treatment should be directed to a rheumatic state of system; at the same time, it is desirable to hold the excessive lithates in solution by means of alkalies. Iodide of potassium is a medicine that fulfils both indications, and given in doses of five or ten grains, three times a day, will usually be found serviceable.

"When the amorphous lithates become deposited from a deficiency of water, the quantity of urine will be ascertained, upon inquiry, to be less than usual. Sometimes, however, the patient is deceived as to this point by the concentrated and stimulating secretion, demanding frequent evacuation; under all circumstances, it is most desirable, for diagnosis, that the daily discharge of urine should be measured. Diminution of the watery part of the urine may be produced by irritation of the kidneys, either idiopathic or symptomatic; or it may be the result of a lesion or innervation; or it may be the consequence of a vicarious watery secretion from some other organ. When the deposited lithates are of a brick-red colour, the scanty secretion of water which produces their subsidence is the effect of the first of these causes; in that case, a fever, either essential or symptomatic, exists; and the remedies calculated to remove the fever are those fitted to increase the urinary secretion, and diminish the lithic deposit. If the deposited lithates be pale or buff-coloured, the chances are, that they are caused by a nervous diminution of the watery element, connected with that weakened action of the ganglionic nervous system to which the name of dyspepsia is given. If such be the case, the internal exhibition of a scruple of alum, in half a pint of water, three times a day, will soon remove the tendency to lithic acid deposit. A pink colour of the sediment is usually found in connexion with an imperfect discharge of the biliary functions.

"*Treatment of phosphatic deposits.*—These deposits when principally crystalline, generally depend upon the urine being deficient in acidity; in that case, the treatment will be described under the head of alkaline urine. Sometimes, when the bladder has been long diseased, a copious deposit of amorphous phosphates subsides from the urine; it is always under such circumstances accompanied by pus.

"*Treatment indicated by weakly acid, neutral, or alkaline urine.*—If the urine be neutral, or weakly acid, from a vice of secretion, it usually shows that the kidneys are inflamed. In acute nephritis, the employment of general and local depletion, as well as the exhibition of emollients and contrastinulants, must be regulated by the severity of the disease, and the state of the constitution, according to the ordinary principles by which inflammations are combated. In chronic nephritis, great benefit is derived from local depletion and counter-irritation, especially from the establishment of setons in the neighbourhood of the affected glands. In the renal complication of typhus, large blisters to the loins, [?] and the internal administration of wine, are usually indicated; small doses of oil of turpentine will, in these cases, often increase the quantity and restore the acidity of the urine.

"*Treatment of the oxalate of lime deposits.*—Although there can be little doubt that oxalic acid is generated in the urine by the putrefactive decomposition, and often occurs subsequent to secretion, in a manner totally independent of disease, yet it is also certain that this decomposition frequently results from an essential vice of secretion. The morbid conditions which give rise to this change are not yet known; but it is well ascertained, that in every instance of the kind there is frequent desire to pass water, pain in passing it, and that the secretion is commonly loaded with epithelium. These phenomena proclaim the existence of irritation of the mucous membrane. Sometimes the crystals of oxalate of lime, like those of uric acid, cohere in the calyces and infundibula, forming calculi, which produce paroxysms of nephritic colic, by their descent into the bladder. In such cases, inflammation of the lining membrane may be mechanically produced; but it is doubtful whether the symptoms of mucous irritation, which usually accompany the oxalate of lime deposit, are due to the irritating contact of the sharp crystals. Whatever is the cause of the mucous irritation, it constitutes the lesion which in oxalate of lime diathesis you are especially called on to remove; and its successful treatment requires no little delicacy in the application of therapeutical agents. Unlike acute mucous inflammation, depletion and emollients will act in this irritation injuriously, if employed in the first instance;

you must have recourse to tonics immediately, such as the mineral acids, vegetable bitter astringents, &c.; and having employed those means for some time, you will then find the greatest benefit from alkalies largely diluted. It will be often necessary to alternate these methods of treatment for a considerable period, but you will generally find that ultimate benefit will be derived from steady persistence in their use."

SYMPTOMS PRODUCED BY EATING DISEASED POTATOES.

Dr. O'BRIEN thus writes, in the same journal:—

"I wish to describe a peculiar affection I have met with, and which I have invariably traced to the use of diseased potatoes. It is ushered in by rigors, hot skin, quick pulse, and pain in the abdomen. In the next stage, rose-coloured patches appear, and as suddenly vanish, and, in the majority of cases, diarrhoea. In the third stage, there is a swollen state of the muscles of the neck, shoulders, and arms, with pain so acute that the patient will wince on the slightest pressure. Inability to raise the arms, pains in all the bones, a red erysipelatous state of the face and scalp, with œdema-tous swelling of the eyelids, so as to nearly close them. I have seen ten cases of this affection in three or four days, and in the same locality, all similarly affected."

If these observations be correct, we should hear of this disease from other quarters.

From the proceedings of the New York Medical and Surgical Society, as reported in the *New York Journal of Medicine*, we make the following extracts:—

"*Electro-Magnetism as a Remedial Agent.*—Respecting the case, Dr. BUCK gave the following details:—A nervous female, aged forty, had been subject to derangement of her menses since the age of eighteen, and she also suffered from severe neuralgic pains in the spine. About two years ago she had the epidemic influenza, since which she has not been able to speak above a whisper. Various remedies had been resorted to during several years that she has been under Dr. BUCK's notice. Recently, electro-magnetism was daily employed without acupuncture. Since its use, her voice has returned, and her menses have appeared without their previous painful symptoms."

OPIMUM A HAZARDOUS APPLICATION IN STRANGULATED HERNIA.

Dr. BUCK relates some cases intended to show, that by the use of opiates the symptoms of strangulation may be masked, and the chance of recovery by an operation allowed to escape. Such is one of the cases detailed.

"The husband of a female, aged 60, objected to the performance of the operation on his wife, and in consequence it was deferred from hour to hour. Sixty drops of laudanum were given to allay irritation, and a consultation called. Croton oil was prescribed to relieve the bowels. At the next meeting the patient was so comfortable and free from pain that the operation was deferred until the next morning, when she was found moribund, being twenty-four hours from the occurrence of the strangulation."

M. LOUIS'S WORK ON PHTHISIS.

To the Editor of THE LANCET.

SIR,—It does not require the eye of an eagle to perceive that the medical profession is undergoing an important change. Its science and its ethics are alike advancing. I am led to make this remark by observing the correspondence on the subject of the translation of M. Louis's matchless work on phthisis. I always thought the profession much indebted to Dr. Cowan for his able translation of the first edition of that work. By his useful labour I think Dr. Cowan acquired as legitimate a vested interest in the matter as can be supposed; and I think the lowest degree of ethical feeling on the part of the members of the council of the Sydenham Society would have induced them to offer the translation of the second edition to the excellent translator of the first. Nor can I quite exculpate Dr. Walshe. In his place, and under the circumstances, I would not have undertaken the work (I do not mean to call it dirty) of the Sydenham Society. We must—everything shows it—make an effort to raise the ethics of our profession.

Speaking of the Sydenham Society, what a dismaying job was that of Paulus Ægenita! More on this subject anon.

January, 1846.

CENSOR.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 14, 1846.

ALL members of the medical profession have some idea of the vastness of the system of quackery. They come too much in contact with its fatal consequences to the public, and are too much affected by it, both in pocket and respectability, to allow of its escaping their frequent attention. Few amongst them, however, we are persuaded, bestow upon it that concentration of thought which is necessary to gain a full knowledge of its extent and workings. There are some abuses which, seen at a moderate distance, appear to be of immense size, but when minutely examined, dwindle down to moderate proportions. So is it not with quackery in medicine. The more steadily this is contemplated, the larger it grows, the more it is seen creeping through channels which at first sight seemed pure, and wearing forms of apparent legitimacy. The following is an example of the many modes in which it may be approached for examination.

One of the "patent medicine venders, perfumers, chemists, druggists, and general medical booksellers," has for some years published an annual almanack. This publication extends to 224 pages octavo, and is sold for sixpence. On every copy there must be a considerable loss, but it is only ostensibly an almanack, being, in reality, an ingenious mode of advertising quack medicines. There is an immense array of quack advertisements, not as these things generally are, appended to the end, but mixed up with the information, or proper almanack material. They have one page of intelligence for the year, and another page of quack advertisements, and if the plan does not extend throughout the whole 224 pages, they contrive to make it go as far as possible. The readers have not much choice left them, the two kinds of matter are so carefully intermixed. If the information is modestly printed, the advertisement glares with giant-type and staring wood-cuts, to catch the reader's attention. Thus you cannot look for the acts of the last session of parliament, without being caught by "Dyson's antibilious pills," or an "Ophthalmic ointment." "Imports and exports" are mixed up with "MULREADY'S Cough Elixir," "Weights and Measures" with "CHEDDON'S Herbal Tonic," "Royal Genealogies" with "SNOOKS' Antibilious," and so on to the end.

Thus much for an ingenious mode of advertising the various pretences and frauds of quackery. But the *numbers* of the quack nostrums are astounding. Column after column, page after page, pass under the eye almost interminably. The mere index, which simply enumerates them, occupies upwards of twenty columns of close printing. The index of the *Pharmacopœia* of the College of Physicians is an infant beside it. Take number as the test, and quackery has a greater *armamentarium medicum* than is furnished to the simple practitioner by all the *Pharmacopœias* of all the colleges, London, Edinburgh, and Dublin together.

The titles of the different nostrums are a study. Here and there stands the name of some notorious quack, alone in his humbug, as far as name is concerned, like HOLLOWAY or MORRISON; but the great number of titles are taken from the names of chemists and druggists, or living and dead medi-

cal practitioners, with a sprinkling of divines and titled ladies. With the chemists and druggists whose names thus appear we have now no concern: we commend the matter to the respectable portion of their own body. Among the names of past physicians and surgeons thus polluted, we have ARMSTRONG, BAILLIE, DENMAN, BABINGTON, BATEMAN, FORDYCE, FOTHERGILL, GARTHSHORE, GREGORY, HOOPER, HUXHAM, LATHAM, LETTSON, SYDENHAM, and many others. The living medical names in this list connected with patent medicines or other nostrums, voluntarily or involuntarily, are—COCKLE, CORY, DURLACHER, FRANK, HALSEE, LOCOCK, SIR JAMES MURRAY, NASMYTH, and WRAY. The assumption of the names of LOCOCK and NASMYTH are evident forgeries. For the rest, we here merely mention the simple fact of their appearance, reserving this branch of the subject for another occasion.

Besides the medical names shining as titles, a professional air is given to the whole subject by quotations of letters "from an eminent surgeon," "from an eminent London physician," without, of course, in the majority of instances, either name or date. When names are given, it is generally from the late Dr. So-and-so, or from some ordinary name to which it is quite safe to add a medical title. "Cheddon's herbal tonic pills" are rich in this respect. Dr. BELL's and Dr. BROWN's are safe names to give; but imagine the impudence which could print the following as a letter "from the late Dr. DARWALL of Birmingham."

"April 10th, 1833.

"DEAR SIR,—I have for several months been prescribing your pills in all cases of scrofula and scorbutic affections, with the greatest possible success. As these complaints are greatly upon the increase, there being scarcely a family free from them, I consider your medicine the most valuable ever discovered. I have also prescribed them in gout and rheumatism, as well as other complaints, in which I found them equally successful.—Believe me, dear sir, yours very sincerely,
"TO C. S. CHEDDON, Esq." "JOHN DARWALL, M.D.

The inference we wish to draw from all this is, that quackery is of itself weak, that it could not exist in its present rampant state if all the overt and covert assistance it obtains from medical men and medical names were entirely withdrawn. The names of dead men, however eminent, would be of little use unless they were endorsed by the living. The great mass who swallow quack medicines do so under the full impression that the medical profession in their hearts know them to be beneficial, and are only withheld by form and self-interest from avowing it openly. The great supporters and, indeed, creators of this morbid form of public opinion are those who thoughtlessly or intentionally give quack or pseudo-quack preparations their testimonials of efficacy; those who allow quacks to forge their names to lying documents to any extent without let or hindrance; and, above all, those unworthy members who actually are so lost to self and professional respect as to become the proprietors of patent medicines, or secret remedies, or who in any way issue their medicines in company with the lowest quack nostrums. Each of these divisions of the medical support, or countenance, of quackery, we shall have rigidly to dissect before we come to the naked thing itself.

There is a point in connexion with this Almanack which we commend to the notice of the profession as one instance of the cool unblushing impudence with which they are robbed by the pretenders who infest the borders of the profession. These "vendors and perfumers" actually issue the following notice:—

"The immense number of applications soliciting advice have of late become so very onerous, that D. and H. find it impossible to answer them gratuitously; they therefore beg to say that no letter asking advice will in future be replied to unless the customary fee of a sovereign, or a Post-Office order for that amount, be enclosed." !!!

It is not enough to sell their wares, but they must have a sovereign for any special recommendation! The difference between COCKLE and SNOOKS is worth a "customary fee." Will the medical profession quietly continue poor, and let others batten upon their rights in this manner?

THE recent discussion in the House of Commons, on the re-introduction, by Lord ASHLEY, of his Ten Hours' Bill, shows a considerable advance in public opinion in favour of that measure. Not only was Lord ASHLEY supported by many of the most enlightened and philanthropic members of the House, unconnected with manufactures, but he also received the unreserved sanction of several of its most influential commercial and manufacturing members, among whom we may mention the names of Mr. FIELDEN, the representative of Oldham, and Mr. MUNTZ, the representative of Birmingham. Mr. BRIGHT, himself one of the principal organs of the manufacturing interest in the House, although opposed to the Bill, confessed that "he believed that many years would not pass by before the operation of the ten hours' system would become universal in the woollen and cotton districts of the north of England; and no one," he continued, "would rejoice more heartily than he should, to witness such a state of matters, though he felt himself, in accordance with principles which he could not abandon, compelled to oppose the Bill of the noble lord."

The steady and rapid progress that all questions connected with the physical and mental welfare of the population is making in this country, is one of the most peculiar and interesting characteristics of the present age. We are daily seeing subjects, which but a few years ago were considered idle theories, fit only for the closet meditations of visionary philanthropists or speculative physicians, accepted as truths by nearly the entire thinking part of the community, and acted upon in real life, to the surprise of even the most sanguine among those who first propagated them. And so it will be with measures for restricting the labours of children. Already is the vigorous opposition which they first encountered on the wane. The advantages which would necessarily accrue to the manufacturing classes, in a physical and moral sense, are no longer denied; the entire opposition being made to rest, with evident sophistry, on the "danger and injustice of interfering with the rights of labour." We say, with evident sophistry; for when this argument is used, as it invariably is, it is developed as if it were intended to trammel, by legislative enactment, the labour of adult males. Now this has never been even thought of by the most ardent supporters of the measures to which we refer. It is universally admitted, that the state has no right whatever to coerce or limit grown-up men in the disposal of their time, and that any interference with them would be tyrannical and unjust in the extreme. They are free agents, able to defend themselves, and it is neither advisable nor necessary for the law to step in to protect them in this respect. Far different,

however, is it with women and growing children, more especially the latter. To them is the protection of the law indisputably due, if an artificial state of society, such as now exists in England, gives to their labour an unnatural value, and exposes them, consequently, to a pressure inconsistent with their due physical development—a pressure which they cannot resist.

As medical men, intrusted with the health of the community at large, we are morally bound to oppose, by every means in our power, any state of things which threatens the physical welfare of the rising generation, apart from all considerations of pecuniary expediency; but we are happy to find that the gloomy anticipations of the opponents of restriction to the labour of women and children have been entirely falsified by the results of the last ten or twelve years. Within that period, extensive restrictions have been already imposed, compared with which the one now demanded is trivial; and yet our manufacturers are still thriving, and our manufactured products still take the lead in foreign markets, although the ruin of the former and the exclusion of the latter were generally predicted at the time. In 1832, the period of age at which young children were permitted to enter a factory was limited by law to eight, and their work was limited to six hours in the twenty-four, night-work being prohibited. Adult female labour has been since limited to twelve hours, and young persons, both male and female, between the ages of thirteen and eighteen, have also been restricted from working more than twelve hours out of the twenty-four. It is this last class whose labour it is desired, and very justly, still further to alleviate by the Ten Hours' Bill. The period between the age of thirteen and eighteen is a most important one, both in the male and female. In the latter, it is one in which a most momentous change takes place in the economy; and in both, one in which growth is progressing with great activity, and in which the constitution is peculiarly open to all physical causes of deterioration. A system of bodily labour which, as Mr. FIELDEN remarked, drags a young person out of bed at five in the morning, and works him or her continuously, or with but trifling intermission, until eight in the evening, cannot allow either the body or the mind to expand freely. Indeed, there can be no doubt but that it lays the foundation of future disease and early death, by debilitating the constitution, and stinting the growth, and is one of the principal causes of the great mortality that prevails among our manufacturing population.

Influenced by these considerations, we again repeat, that no pecuniary considerations ought to stand in the way of a modification of the existing disastrous state of things. It is the duty of those who govern, to adopt every possible means to protect the juvenile part of the community from the undue pressure of artificial social conditions; and if the invention of machinery has rendered the cheap labour of women and children more valuable than the dear labour of men, humanity imperatively demands that these women and children should be shielded from the merciless demands of avarice.

At the same time, we feel convinced, that by so doing, government will neither injure, in the long run, those who work, nor those who employ them; the course that is morally right is always the best in the end. Of this fact we have had the most convincing proof in the results already obtained. Did we wish for an additional guarantee, we should find it in the efforts made by the manufacturing labourers themselves

to effect the change. Many meetings have taken place in favour of the Bill since the last session of parliament; and within the last fortnight, fifty delegates from various parts of the country assembled at Manchester, when a deputation of twelve was chosen to be sent to London to watch the course of the Bill. These efforts are made, be it remembered, by the workmen, not for themselves, but for their children, whose health and constitution they now mournfully see are sacrificed to Mammon.

HOSPITAL REPORTS.

UNIVERSITY COLLEGE HOSPITAL.

ON PERICARDITIS.—By JOHN TAYLOR, M.D., Professor of Clinical Medicine in University College, and Physician to University College Hospital, London.

[ALL the examples of pericarditis which I have already recorded, occurred in connexion with well-marked, or with probably existing, rheumatism. Those which are now to follow had their origin in other circumstances, and they have been especially, but not exclusively, observed in connexion with renal disease; and, as a class, they have arisen in a worse condition of the general health, and in their progress have become complicated with a greater variety of other diseases, and have been more fatal in their issue than the class of cases which we have hitherto examined.]

CASE 24.—A female, advanced in life; the subject of habitual dyspnoea from infancy; more recently, paroxysms of asthma; violent palpitations of the heart; increased impulse; murmur at apex; white alvine evacuations; ascites; anasarca; pleuritis; pericarditis; death.—Post-mortem examination: emphysema and oedema of the lungs; pleuritis, with serous effusion; hypertrophy, with dilatation of heart; recent pericarditis; disease of the liver; Bright's disease of the kidney; congestion of stomach; hypertrophy of œsophagus; polypus uteri; hydrops ovarii.—Remarks: Signs of hypertrophy, with dilatation of heart; diagnosis from nervous palpitation; mode of conveniently measuring the auriculo-ventricular orifices; circumstances in which these orifices dilate or contract apart from cardiac disease; characters of murmur in mitral regurgitation; variations in its seat and intensity; causes of weak pulse, and of small aorta, and left auricle; disproportion between capacity of left ventricle and of aorta not a cause of murmur; examination of some of the causes of hypertrophy, with dilatation of the left ventricle in this and other cases—viz., pericarditis, endocarditis, and valvular disease; diseases of the aorta; nervous palpitations; inordinate muscular efforts; alcoholic drinks; renal disease; obstruction in the lungs; phenomena of spasm of the heart; signs of the pericarditis; emphysema, its signs and symptoms; form; causes; asthmatic paroxysms, their phenomena and causes; signs of oedema of lung and of pleuritis; transmission of respiratory murmur through fluid in the pleura; causes of pleuritis and pericarditis; disease of the liver; its symptoms; Bright's disease of the kidney; causes which determine the production of anasarca in some cases of slight renal disease, and the absence of anasarca in other and more advanced cases of the same disease; co-existence of Bright's disease; cirrhosis of the liver and morbus cordis; their relation to each other; treatment of the asthma; of pericarditis; influence of mercury.

MARY S—, aged fifty-two, admitted July 8th, 1839; a night nurse in the hospital; a short, stoutly-built woman; has been troubled with shortness of breath since her childhood; this is not worse in the winter, or in foggy weather, than at other times; has had no asthmatic paroxysms; no cough nor expectoration, nor any palpitation of the heart. In other respects she was in good health, until the age of thirty-six, when she had inflammation of the eyes and of the bowels, for which she was in St. George's Hospital. After this she remained well until she became a nurse at the Fever Hospital. She continued there upwards of three years, and had fever three times, each attack lasting about a month. She left the Fever Hospital two years ago, and has continued well until the present attack.

Six or seven weeks ago, after eating a salad with her tea, she was attacked with most urgent dyspnoea, or, rather, orthopnoea; great palpitations; with pain in the region of the heart. She had a cough, at first without, but afterwards with, expectoration, and accompanied also by vomiting; the two

affording relief. She took opium and ether with benefit. After this she had a similar attack once a week, without being able to discover any cause for it. She has a good deal of flatulency in the stomach at all times. Between these paroxysms she feels tolerably well. She was admitted after having been twice seized in the preceding twenty-four hours. The bowels are open, and the stools clay-coloured. She had a return of the paroxysms of asthma on July 21st, and again on the 29th. These were relieved by opium and ether.

August 9th.—Legs œdematous; abdomen swelled; urine scanty; she cannot say what brings on the paroxysms, but they are always preceded by a ravenous appetite and much flatulency. She is often attacked during her sleep. There is a spasmodic catching of the lower jaw, by which the tongue is sometimes injured. This awakes her, and she finds the heart beating violently and rapidly; pain under the left breast; shooting to the back, and down the left arm; then follow cough, and extreme dyspnoea, with a feeling of suffocation, obliging her to sit up in bed, and to stoop forward; her face, at the same time, is pale, slightly livid, anxious, and bathed in perspiration. The medicine prescribed has generally caused vomiting, and this, followed by copious expectoration, brings relief. After the attacks she feels much exhausted. She has derived most relief from a combination of opium with ether. Lobelia inflata has been also used with benefit.

14th.—Great pain in both feet, increased by slight pressure; some œdema; no redness, but there has been; the mouth is sore from the calomel she has been taking.

On the 20th and 21st, she had each day another attack. The heart's action was very violent during the paroxysm; impulse increased; pulse 154 a minute; a harsh bellows-murmur accompanied the heart's systole; mucous and sonorous rhonchi were heard over both lungs, but chiefly over the left.

Sept. 6th.—Had an attack this morning, which was relieved by morphia. The dyspnoea and palpitations are now almost constant; urine scanty, pale, and without sediment.

18th.—She has three or four paroxysms during every twenty-four hours, but they are less severe than they were. She obtains some relief by pressing a small pillow over the heart.

21st.—The respiration is not very difficult; no pain in the chest; little or no cough or expectoration; sleeps with trunk rather elevated.—Physical signs: No bulging of the chest under the clavicles.—Left lung: The vesicular murmur is almost absent anteriorly, and is too feeble behind.—Right lung: The vesicular respiration is too feeble in the upper part, both in front and behind, but less so than in the left lung; mucous rhonchus behind and inferiorly. Impulse of the heart not too strong, but is too extended; a distinct bellows-murmur with the first sound, to the left of the apex, in a line with the anterior fold of the axilla; no murmur at the base, nor in the back; no purring tremor; when the patient lies upon the right side the bellows-murmur is heard more towards the right side than before; pulse 100, rather small; percussion yields a clearer sound than usual behind, but not much clearer in front; a dull sound over a small extent only in the cardiac region; no headach or giddiness; sleeps well, and without dreaming; tongue large and thick, moist, furred; appetite very bad; she is always troubled with flatulency; generally vomits soon after eating, (she thinks in consequence of the calomel and elaterium which she is taking,) and is always relieved by it; no burning pain in the stomach after eating; some tenderness at the epigastrium; the liver projects into the epigastrium; bowels relaxed, (they were confined before taking elaterium;) the stools resemble milk and water; there are no hæmorrhoids; urine copious; feet slightly œdematous; no increased heat of the skin; no perspirations.

23rd.—I saw the patient as the attack of asthma was coming on. The heart's action was much increased in force and frequency; the dyspnoea only moderately severe; an abundant mucous rattle in the upper part of the left lung anteriorly, and in the posterior part of the right lung. She had taken two half-drachm doses of Hoffmann's anodyne, and the nurse was giving her a draught, containing one drachm of spirit of sulphuric ether, with twenty minims of the sedative solution of opium. After ten minutes, I ordered half a drachm of ipecacuanha powder as an emetic. This did not operate in the usual time, and she took two more doses of the anodyne. Sickness then came on, and was gradually followed by relief. After this the patient had two more doses of the anodyne, making seven in all. Before she was relieved, she expectorated a large quantity of white frothy mucus.

Nov. 26th.—Since the last report the patient has become much worse, the dropsy and debility having increased much. A friction sound is now heard over the upper and anterior part of the left lung, both with inspiration and expiration;

vesicular murmur too feeble in both lungs. Percussion yields a dull sound over the lower and back part of the left side; the dullness is much less over the right side; the respiratory murmur is more audible on the right than on the left side behind; muco-crepitant or mucous rattle over the lower part of right back. *Heart*: a morbid sound with the first sound at the apex, and with sounds at the base.

29th.—The patient is gradually sinking; she is occasionally delirious, but is quite aware that she is dying. Tongue dry, and cannot be protruded; teeth covered with sordes; numbness of the left side of the head; twitchings of the left side of the body; dimness of vision. Urine passed involuntarily. To have six ounces of wine.

30th.—Pulse weak, thready, and intermitting. Great pain in the region of the heart; only relieved by large doses of the anodyne.

Dec. 2nd.—Died.

Inspection of the body thirty-six hours after death.—*Exterior*: considerable oedema of the legs and back.—*Chest*: the left pleura contained twelve ounces of serous fluid. There was also effusion of lymph on the upper and anterior part of it, neither very soft nor very firm; the surface was rough; The right pleura was partially adherent, and contained no serum; there was a quantity of thickish bloody mucus in the bronchial tubes; the mucous membrane had a uniform deep-red colour in the larger tubes, but in the smaller divisions it was pale.—*Left lung*: apex emphysematous; volume of the lung small; the back part especially of the lower lobe was dense, dark-coloured, contained a moderate quantity of serum, and broke down readily on pressure; weight, thirteen ounces avoirdupoise.—*Right lung* much larger than the left; the greater part dense; non-crepitant; contained a large quantity of frothy serum, and broke down readily under the pressure of the fingers; weight, twenty-two and a half ounces avoirdupoise.—*Heart*: six ounces of serum in the pericardium; there was a layer of coagulable lymph over the anterior surface of the right auricle and ventricle, and also on the lamina of the pericardium opposite to these; its surface was rough and granular, of a red colour, and adhered with moderate firmness; there was also a smooth white patch on the pericardium, but no deposition of fat. The heart, as a whole, was much enlarged.—*Left ventricle*: walls very much thickened; cavity enlarged; endocardium slightly opaque towards the base; mitral valve very little changed; the orifice admits three fingers; aortic valves rather thickened and contracted from a slight adhesion of the contiguous margins. *Aorta*: the outer coat at the commencement was considerably injected, and the pericardium over it was covered with coagulable lymph. The lining membrane, as far as the vessel was examined, (eight or ten inches,) was elevated in spots by a yellowish-white deposit beneath it. There was no calcareous deposit. *Left auricle*: not increased in volume; foramen ovale, closed. *Right ventricle*: walls rather too thick; cavity scarcely enlarged; endocardium slightly opaque; all the valves healthy. The tricuspid orifice admits three fingers. Weight of the heart sixteen and a half ounces avoirdupois. *Abdomen*: peritoneum healthy, but contained a very large quantity of light-coloured clear serum. *Liver*: volume little, if at all increased; considerable induration; colour yellower than natural; peritoneal coat rather thickened and opaque; the incised surfaces variegated throughout by very numerous small greyish-yellow oval spots, of about a line in length; weight, 3lbs. 12oz. avoirdupoise. *Spleen*: larger and firmer than usual, of a deep-red colour; weight, seven and a half ounces avoirdupoise. *Pancreas*: too large. *Kidneys*: only one examined; volume very small; capsule thickened; outer surface mottled and uneven, like the surface of a cirrhotic liver; tissue firmer than natural; cutical portion dotted with spots of a light-yellow deposit, in small quantity only; weight, two and a half ounces avoirdupoise. *Stomach*: mucous membrane generally much injected, especially in the great cul de sac, and near the cardiac orifice; large veins much distended with dark blood; mucous coat thicker and firmer than usual; weight, five and a half ounces avoirdupoise. Coats of the oesophagus of double the natural thickness; otherwise healthy; the lower third dark coloured. *Uterus*, of about the natural size; a very small polypous excrescence was attached to the inside of the body; one ovary was much enlarged, and converted into a serous cyst. *Head*, not examined.

SUMMARY OF THE CASE, WITH REMARKS.

Symptoms and Diagnosis.—*Heart*: 1. The hypertrophy and dilatation of the left ventricle were found to be very considerable. They were indicated during life by the increased extent of the impulse, and the displacement of the apex towards the left side. The force of the impulse was not much

increased, except during the paroxysms of palpitation. During these paroxysms, to the sharp stroke and rapid contractions of a nervously excited heart, were added an impulse of such power as is never found without hypertrophy. Notwithstanding the great enlargement of the heart, the patient had not complained of palpitations or other symptoms referable to this organ until her last illness.

2. The mitral orifice was dilated. In the healthy state, I have found, in a great number of trials, that the mitral orifice will allow my two first fingers to pass with ease from the auricle into the ventricle, and that the tricuspid orifice will admit the three first fingers in the same circumstances. I have long been in the habit of relying upon this as a sufficiently accurate and very convenient measure of the size of the auriculo-ventricular orifices. In cases of wasting of the whole body, with more or less of consequent atrophy and contraction of the left ventricle, the mitral orifice, without any disease, will be generally found contracted also, so as to admit no more than one finger. In these cases, (most of which have been generally mistaken for cases of concentric hypertrophy, in consequence of the small size of the ventricular cavity, and the comparatively thick walls,) however, the orifice can be artificially dilated without force, so as to admit two fingers. In like manner, when the valves are healthy, the auriculo-ventricular orifices generally become dilated in dilatation of the ventricles, so that the orifice on the left side will admit three fingers, and that on the right side four fingers, to enter it with more or less ease in different cases.

In these circumstances, the tricuspid valve, I believe, usually permits some regurgitation of blood during the ventricular systole, and it may be presumed that the same thing takes place in dilatation of the mitral orifice. The frequent dilatation of the left auricle, in such circumstances, is an argument in favour of this opinion. When the valves themselves are healthy, this regurgitation is not commonly, if ever, accompanied by any murmur on either side of the heart. In the present instance, therefore, the dilatation of the mitral orifice was perhaps a mere accompaniment of the dilatation of the ventricle; but as the valve also appeared to be somewhat, although hardly appreciably diseased, the consequent regurgitation was accompanied and indicated by a murmur. This murmur was heard over the apex only, and not over the base of the heart, nor above the clavicles. As the apex was displaced towards the left side, so the murmur was heard very far in that direction; and as the apex moved towards the right side, in changing the patient's position, the murmur experienced a corresponding change of seat. This morbid sound was constant, but was much louder and harsher during the violent fits of palpitation than at other times. Notwithstanding the regurgitation, there was no dilatation of the left auricle in this case, probably in consequence of a comparatively small quantity of blood passing into its cavity by reason of the emphysematous condition of the lungs. This imperfect supply of blood to the left side of the heart, together with the mitral regurgitation, would leave but little blood to be sent into the aorta, and will thus readily explain the habitually small and weak pulse, notwithstanding the increased volume and power of the ventricle.

3. A want of proportion between the capacity of the left ventricle, in cases of hypertrophy with dilatation, and the size of the orifice of the aorta, was formerly assigned by Dr. Hope as a frequent cause of a bellows-murmur, at the usual site of the murmur, occasioned by disease of the aortic valves; but this opinion has been abandoned by the author in the last edition of his work. These physical conditions were present in our case, and, in addition, some little disease of the aortic valves themselves; yet there was no such murmur produced even during the most violent paroxysms of palpitation, when, if ever, such a result might be expected. This is quite in accordance with my previous and subsequent experience. I do not know that I have met with an example of an aortic valve murmur which could be certainly and unequivocally referred to the conditions assigned by Dr. Hope, whereas the occurrence of these conditions in the highest degree, without the production of any murmur, is a matter of daily observation.

4. What was the cause of the hypertrophy, with dilatation of the left ventricle? This question is not easy to be answered, either in the present case, or in a large proportion of the examples of this disease of the left ventricle. Probably less blood found its way to the left cavities of the heart than in health, and this circumstance, when not counteracted in its operation by other and modifying causes, usually leads to a diminution of the volume of the left ventricle.

(a.) There had been no previous pericarditis to which the enlargement could be referred, nor any sufficient amount of endocarditis. Much more valvular disease than existed here is often found without hypertrophy, and regurgitation through the mitral valve does not lead to any increase of the left ventricle.

(b.) The aorta was so far diseased as probably to impair its elasticity. This has been assigned as a cause of enlargement of the left ventricle. It is certain, however, that such disease of the aorta is very common without any such accompaniment; and I do not clearly understand the mode in which disease of the aorta can produce the effect in question. I assume it to be now an established doctrine that the elasticity of the aorta is not a source of power in carrying on the circulation, but that it merely modifies the operation of the force derived exclusively from the heart. In fact it acts like the air in the reservoir of a fire engine, and causes the blood, which it receives in jets from the heart, to pass in a continuous stream through the capillary vessels. Whether disease in the large vessels does frequently reach such a degree, and so far impair their elasticity as to cause the blood to pass by jets through the small arteries and capillaries, I am not able, from observation, to say; and whether, if such an effect were produced, it would lead to any amount of obstruction to the circulation through the capillaries, so as to call for increased efforts in the heart, as the source of motor power, is also a question I will not pretend to decide: neither of these two propositions, however, has been established to my satisfaction, either in theory or by actual observation.

(c.) There had been no nervous palpitations until after the hypertrophy existed, and therefore they could not be the cause of the latter affection. I may further observe, in respect to this supposed cause, that I do not remember ever to have seen a case of enlargement of the heart which could be clearly ascribed to mere nervous excitement of the organ, however long continued.

(d.) There is no evidence that the woman had been accustomed to any unusual muscular efforts, and even if she had, it appears to me that the opinion that such efforts do frequently at least cause much enlargement of the left ventricle requires to be supported by very different evidence from any which I have yet seen adduced in its favour, before it can be considered as entitled to much confidence.

(e.) The patient may have been a drinker, but this is not stated as a fact, nor do I know what is the effect of habitual indulgence in liquor upon the muscular tissue of the heart.

(f.) There was well-marked renal disease. Bright's disease is believed to be a cause of enlargement of the heart. If such be the fact, this may have been the cause in the present case. But we meet with many cases of Bright's disease, in an advanced stage, in which the substance of the heart is not increased, and the opinion referred to appears to me to demand a stricter scrutiny than it has yet received.

(g.) A certain amount of obstruction in the lungs, such as existed in this case, may be a cause of enlargement of the left ventricle, as we know it is of the right. When the blood, for a long time or habitually, cannot pass freely through the lungs,—as in emphysema for example,—it accumulates in the right cavities of the heart, and causes them to become dilated and thickened. But this obstruction must also be reflected upon the capillary circulation. The right cavities of the heart being full, the blood cannot flow into them from the veins, and the veins, thus in a state of engorgement, cannot receive the blood from the capillaries; hence the necessity for increased efforts on the part of the left ventricle. The observations already made upon the effects of increased action of the heart, in cases of nervous palpitation, and from great muscular efforts, do not appear to be opposed to the opinion now stated. In the one class of cases, the increased action, although more violent, is of temporary duration; in the other, the excitement, if it exist at all, is permanent. In considerable and permanent obstruction in the lungs, hypertrophy, with dilatation of the right ventricle, is perhaps always produced, (except when some modifying cause co-exists, such as great wasting of the body,) but in this case, in addition to the increased efforts demanded of the ventricle, there is another influential cause of enlargement—viz., habitual accumulation of blood. These remarks are speculative; their value can only be appreciated by an appeal to a large body of facts. In many cases of emphysema, I have found the left ventricle of the heart atrophied: no doubt, for the reason already hinted at—viz., that in great pulmonary obstruction enough blood does not pass through the lungs to fill the left side of the heart. This effect will often be further increased by the general wasting of the body, and consequent diminution of the

mass of circulating fluid, which frequently results from long-continued disease, and from the treatment employed for the patient's relief. When, however, the obstruction in the lungs is less, and there is, at the same time, no great wasting of the body generally, it seems to me not improbable that enlargement of the left ventricle of the heart may be induced in the way which has been explained.

I doubt, however, whether even this supposition will explain all the facts of the present case. Although the dyspnoea had been of very long duration, it was not until very recently great in amount. Hence, there was but little hypertrophy or dilatation of the right ventricle and its orifices; so that if this were the cause of the enlargement of the left ventricle, the effect produced was much greater upon the motor organ at a distance than upon that immediately behind the seat of obstruction, which is opposed to the analogy of other cases of obstruction in the course of muscular tubes, and besides, is not, I think, what we should à priori expect.

5. Structural disease of the heart existed no doubt for a long time without any such disorder of function as to attract the patient's notice. More recently, there was, in addition, great functional disturbance. The action of the heart was regular, but greatly excited; the contractions amounted to upwards of a hundred and fifty in the minute, and were much increased in force. This action of the heart may, I think, be properly called spasmodic, for it was accompanied by severe pain in the cardiac region, extending to the back and down the left arm, and also by spasmodic contractions of the muscles of the tongue and lower jaw. This is the only kind of spasm of the heart which has ever fallen under my notice: it seems to affect equally all the muscular fibres of the organ, or at least of the left ventricle. I know of no good ground for the notion, that a portion of the fibres may be affected with spasm so as to induce a constriction of any of the cavities of the heart. The causes of this disturbed action will be considered in connexion with the asthma.

6. Pericarditis supervened only about a week before the patient's death. On Nov. 26th, in addition to the single morbid sound at the apex of the heart, there was a double one at the base. This corresponded exactly with the part of the pericardium upon which coagulable lymph was found, after death, to have been effused. It is not stated that any distinction was noticed between the characters of the friction sound at the base and a bellows-murmur; nor is it mentioned whether the sound was audible above the clavicle: I presume, however, that neither of these circumstances was observed.

Two days before death, the pulse was weak, thready, and intermittent. These characters of the pulse might arise from the failing power of the heart; but they might also be the effects of serous effusion into the pericardium, which was found after death, and probably existed at this time. No mention is made of the murmurs at this date. With the exception of this condition of the pulse, and the probable disappearance of all the morbid sounds, no symptom of the effusion of serum into the pericardium has been recorded. Percussion, which would at once have revealed its existence, was not employed. No bulging of the cardiac region is mentioned, although effusion into the pericardium co-existed with very considerable enlargement of the heart.

Lungs.—1. The emphysema was indicated by the characters of the dyspnoea. It has been shown by Dr. Jackson, jun., (*Louis' Recherches sur l'Emphyseme des Poumons*, in "*Memoires de la Societe Medicale d'Observation de Paris*," t. 1, p. 186.) that habitual dyspnoea existing from infancy, and especially when increased in paroxysms, is an almost pathognomonic symptom of emphysema of the lungs. The habitual dyspnoea in this case appears to have been due to the dilatation of the air vesicles; for the patient was not subject to cough or expectoration, and the affection was not worse in the winter season; there is therefore no evidence that it was occasioned by bronchitis. The emphysema had probably, therefore, likewise existed from the patient's infancy, yet it was found to be moderate in amount—agreeing in this respect with the moderate dyspnoea, and the consequent comparatively inconsiderable hypertrophy of the right ventricle of the heart. (See a corresponding case by Dr. Jackson, *op. cit.*, p. 186.) Among the physical signs were, feebleness of the vesicular murmur, and a clear sound on percussion, and these, like the disease producing them, were most marked on the left side. The emphysema was of the atrophous variety, for the volume of the lung was diminished; hence, also, the absence of any bulging of the chest under the left clavicle.

2. *What was the cause of the emphysema?*—It may have followed some of the epidemic or other diseases of infancy, which are accompanied with bronchitis, and so may have been due

to bronchitis, but of this there is no evidence; or the disease may have been hereditary, but again, this state of health of the parents has not been noticed. That the disease really is hereditary seems to have been clearly established by Dr. Jackson, who has likewise shown that it is much more frequently due to this cause in those cases in which the dyspnoea has existed from infancy, than in those in which this symptom began only at, or just before, twenty years of age.

3. *Causes of the asthmatic paroxysms.*—The development of the paroxysms of dyspnoea can be traced from the patient's account, the correctness of which I had on one occasion an opportunity of observing. First, there was usually evidence of some disorder of the stomach, such as a ravenous appetite and flatulency. Next followed the violent and spasmodic action of the heart already described. To this succeeded dyspnoea, soon increasing to orthopnoea, an extreme sense of suffocation, lividity of the lips, extreme palor and anxiety of countenance, and profuse perspirations. There was an abundant mucous rhonchus in both lungs, and the patient was relieved by the expectoration (generally accompanied by vomiting) of a white frothy mucus.

The first paroxysm came on very soon after eating a salad, but in the subsequent ones no error in diet could be discovered. We may suppose the stomach to have been disturbed by some article of food, and the heart to have suffered by sympathy with the stomach; or it may be, that the uneasy feelings in the stomach, as well as the spasmodic action of the heart, were due to the impurity of the blood, which was certainly present from the imperfect action of the liver and kidneys. Other spasmodic symptoms certainly arose (Nov. 29th) from this condition of the blood, which, in similar cases, also often gives rise to epileptic paroxysms. The same cause may have produced a spasm of the muscular fibres of the bronchi, and consequent dyspnoea.

But whichever of these two hypotheses respecting the immediate cause of the disturbed action of the heart we adopt, the case might be adduced in support of the opinion of those who think that a congested state of the mucous membrane of the air-tubes is the immediate cause of the asthmatic paroxysm.

By the accelerated action of the heart, we must suppose that a larger quantity of blood would be sent into the branches of the pulmonary artery. The imperfect aeration of this blood in consequence of the emphysema would prove an obstacle to its free transmission from the arteries into the veins; hence it would accumulate in the former vessels, and give rise to a congested condition of them. This would explain the dyspnoea and lividity of the lips—an increased secretion into the bronchi would be a natural mode of relieving the turgidity, and would occasion the mucous rhonchus which was found, and the expectoration of the mucus might be expected, as it was observed to coincide with the relief of the dyspnoea.

4. The other morbid appearances found in the pleurae and lungs corresponded accurately with the signs observed during life. (a.) There was a double friction-sound over the upper and anterior part of the left lung, and over the site of the coagulable lymph in the pleurae. (b.) There was dullness on percussion over the lower and back part of the left side, where, also, there were found about twelve ounces of serum. The respiratory sounds were still audible, although diminished in intensity, and were, of course, transmitted through this fluid in the pleurae. (c.) A less amount of dullness over the right side behind, together with a muco-crepitant rhonchus, both of which must have been mainly due to the oedema and engorgement of the right lung.

5. The pericarditis and pleuritis were both observed on the same day. Neither of them were indicated by pain or any other general symptom; but both were revealed by the physical signs. They belong to the class of secondary inflammations, and occurred, as such inflammations are especially prone to do, at an advanced period of the case. Their source was no doubt the same; and this I believe to have been the impurity of the blood, induced more especially by the disease of the kidneys. I have elsewhere shown that renal disease has a greater tendency to produce pericarditis when in the advanced than when in the incipient stage.

6. The liver was probably affected with cirrhosis; but the appearances are not so minutely described as to make this a matter of certainty. It was not enlarged, and must therefore have been displaced, since it was felt during life considerably below the false ribs. There was some tenderness; the evacuations also were like milk-and-water; yet there was no jaundice. Probably the suspension of the secretion of bile was temporary only, or occurred by fits. The ascites, also, was no doubt due to the hepatic disease, and consequent

obstruction of the portal circulation. It was not a mere extension of the dropsy from the lower extremities, because its amount was disproportioned to the amount of the anasarca.

7. The mucous coat of the stomach presented the appearances of congestion so common in cases of great obstruction to the general venous circulation. The hypertrophy of the coats of the oesophagus is much less common.

8. There appear to have been no symptoms of the small polypus uteri, nor of the more advanced ovarian disease.

9. *Kidneys and Dropsy.*—The morbid appearances observed in the kidney, (for only one was examined,) are quite characteristic of Bright's disease in an advanced stage. The urine was not tested. The anasarca was probably due in part to the renal disease, and in part to the obstruction in the chest. The oedema of the lungs might also be occasioned by either, or by both of these causes. In respect to the causes of anasarca in such circumstances, I may take this opportunity of stating one or two results to which my observations have led me. 1. It is well known, that many cases of Bright's disease in the most advanced stage are met with, in which there is no dropsy, whilst in other cases, less advanced, the dropsy may be very considerable. 2. In like manner, in some cases of excessive obstruction in the heart or lungs, or both, and enormous consequent general venous engorgement, the anasarca may be trifling, whilst in other cases, in which the obstruction in the chest and venous turgescence are comparatively inconsiderable, the anasarca may be of great amount. 3. What is the cause of this difference? Observation and experiment concur in proving that venous obstruction alone is a sufficient cause for the production of an effusion of the watery parts of the blood, and consequent oedema. It equally results from observation, that a watery condition of the blood will, in certain circumstances, lead to the same consequences. This condition of the blood is, no doubt, one of the causes of the anasarca in Bright's disease. It might be expected, however—and as far as I have observed it is the fact—that the dropsy would be most considerable when these two causes operate together. Hence, if the kidneys be healthy, and the blood not otherwise impoverished, there may be great obstruction in the heart or lungs, with but little general dropsy. The most striking examples of this kind which I have met with, have been cases in which the obstruction has been primarily seated in the lungs, as in emphysema, and in which I suspect the blood is thicker than in the healthy state, and perhaps thicker than in most cases of obstruction primarily seated in the heart. In like manner there may be considerable disease of the kidneys, and an impoverished condition of the blood, with little or no anasarca, if, from the absence of disease in the chest, or from the wasting of the body, and consequent diminution of the mass of circulating fluid, there be no inordinate accumulation of blood in the veins. The cause last adverted to—viz., the diminution of the whole mass of the blood—may even prevent the production of much dropsy in cases in which a certain amount of renal disease and thoracic obstruction are observed to exist together.

10. Bright's disease, cirrhosis of the liver, and disease of the heart, were here found together after death, and the combination is one very frequently met with. There can be little doubt that in this case the affection of the lungs and of the right side of the heart was antecedent to either of the abdominal affections; but whether the same statement be true, of the much more considerable affection of the left ventricle, there are no means of determining. In the present state of our knowledge it is more easy to understand how disease of the heart may induce cirrhosis of the liver and Bright's disease than how either of the latter affections may cause the former. In some cases, at least, these three affections, instead of producing each other, may be the common effects of some ulterior cause. For example: spirit-drinking will probably produce the diseases of the liver and kidney in question, and the same habit may also be one of the causes of enlargement of the heart. It is not stated whether this patient was a drinker or not; but from the circumstances in which she had been placed, and from her employment as a night nurse for some time, it is very probable that she was addicted to drinking, and also that she was exposed more than persons in general to the injurious influences of cold.

Treatment.—1. The asthma was always most relieved by whatever occasioned vomiting and free expectoration: an emetic generally accomplished both these purposes. In this way any offensive matter would be removed from the stomach, and the free secretion from the bronchi might remove the turgid condition of the mucous membrane which there is reason to think existed. 2. Anti-spasmodics—more especially a combination of opium and ether—stood next in point of

efficacy. We may suppose them to have rendered the heart less susceptible of sympathetic excitement, and also to have relieved the spasmodic contraction of the muscular fibres of the bronchi, which no doubt constituted one of the causes of the dyspnoea. 3. The general condition of the patient appears to have forbidden the adoption of any special treatment for the pericarditis and pleuritis, occurring as they did in the last stage of existence. We may here notice a fact which has a relation to the question of the influence of mercury in inducing a state of system unfavourable to the development or continuance of inflammation, especially in serous membranes. This patient was salivated more than once, (having taken calomel with elaterium for the anasarca.) About Sept. 27th the mouth was excessively sore, and from this time to Oct. 25th the pytalism was so severe as to cause the patient to complain of it as much almost as of any other of her sufferings. It was a month after the last-mentioned date that the pericarditis appeared. Whether the patient had more calomel in the interval is not stated. Some of these particulars respecting the administration of mercury are not to be found in the history of the case above given, but are recorded in the report in the hospital case-book.

ON THE NEW "SUCCESSFUL TREATMENT" OF OVARIAN DROPSY.

To the Editor of THE LANCET.

SIR,—Your apposite remarks upon Mr. Isaac Brown's work, on the "Treatment of Scarlatina by Acetic Acid," excited my curiosity to read his history of "Another Case of Ovarian Dropsy successfully treated by Pressure, Mercurials, and Diuretics," in the same number of your valuable journal. I, in this instance, as yourself in the other, find it "impossible to conceive on what ground Mr. Brown writes, 'successful treatment,' for, according to my view of it, I cannot discover in what respect the recovery of his patient was owing, either to the pressure, mercurials, or diuretics.

To begin from the time when Mr. Brown took charge of his patient: we cannot, without injustice, withhold from the latter no small share in the credit of her recovery, inasmuch as "she was engaged to be married to a clergyman, and was (very naturally) most sanguine of being cured by the proposed mode of treatment."

Mr. Brown at once commenced his attack with vigour, by the application of a bandage, and the administration of mercurials and diuretics, the result of which was, a speedy and severe pytalism. At the expiration of eighteen days, we are informed, that the body was reduced in size by four inches, which reduction I attribute more to the mere support afforded by the bandage, and also to the emaciation consequent upon the salivation: it is evident, however, that no radical improvement had taken place, for "the health being now good," which implies that it had, at some time or other, been the reverse, "ten pints of fluid" were removed by tapping, on the 16th of May. Mr. Brown next describes, most minutely, the manner in which he applied the bandages, which were retained until the 21st, when a book was enclosed within the folds, which, judging from the sickness almost immediately excited, (whether by the power of clairvoyance, or owing to its being a very heavy production,) leaves one to infer that it must have been Mr. Brown's own book. Notwithstanding the increasing debility and exhaustion, this "pressure from without" was persisted in, counterbalanced, however, by a corresponding support from within; a generous diet, followed up by port wine, prescribed, not by the doctor, but the patient; the exhaustion, however, daily increased, when, on the 25th, the doctor first intimates that he considers the patient in "great danger,"—an opinion in which I quite agree, although he and I may not be so unanimous as to the quarter from which the greatest danger is to be feared! "During the night (the report states) she had some sleep; 'but' every two hours took a glass of wine," to which is added, "clear turtle soup every two hours." Here I may be excused (more for the sake of others than myself) if I ask Mr. Brown to inform me, (as he appears to consider it an essential in the treatment of scarlatina as well as dropsy,) by whom is the soup provided, and at what rate per pint we might procure "turtle soup for the million!"

26th.—The patient is pronounced as "considerably better," but lo! on the 28th, the book, which had been a constant companion from that day week, is removed, and, behold the effect, "she is faint, easily depressed in spirits, and hysterical." Surely, Sir, this cannot be another Okey case? I should be glad to learn why Mr. Brown should have removed the book on this day, when, so far as I can see, there were no particular

symptoms demanding any alteration in the course of treatment.

31st.—She discontinues the brandy, which we presume had been recommended as a substitute for the book.

June 1st.—The soup is rejected by the Doctor as well as the patient, the latter suggesting a little beer as a substitute; the bandages are "re-applied tightly, (query, and?) the bowels distended with flatus." The sickness continuing, two pills, containing "James's powder" are prescribed, after which we need not be surprised that the sickness returned on the 2nd, when "the bandages are again removed, and the whole abdomen is discovered tympanitic." The turtle soup, we presume, now beginning to act, as it has often done before, to the no little inconvenience of lord mayors and aldermen, Mr. Brown very judiciously does not re-apply the bandages, until the uncomfortable feeling of the patient induced him to do what, for the same reason, he was soon again required to undo.

3rd.—"She is to have no more wine or brandy." When was it renewed after the order of the 31st?

5th.—Pause, ye "gentlemen who intend giving Mr. Brown's treatment a fair trial." The cyst is reported to be again filling, but thanks to turtle soup, book, beer, brandy, bandage, and Brown, not with water, but, as Mr. Lane the next day discovered, with matter, "consequent upon the suppurative inflammation which has been going on," the patient, in the meantime, having been nearly going off. Now we regret that an "earnest request" had not been made by the patient against the application of the blisters, which so much added to her sufferings.

The great pain complained of on the 7th is justly attributed to the "adhesions" of the doctor and his remedies, which also "had been going on for some time."

There is nothing worth notice again until the pointing of the cyst indicated what nature intended doing "at her own earnest request," had she not been forestalled by her opponent the Doctor, after his having immortalized himself by committing to paper the following opinion:—

"That the cyst was filled with pus." Now, might it not have been turtle soup?

"That the inflammation which supervened the tapping was suppurative inflammation." Who could have supposed that Mr. Brown had suspected inflammation, by his treatment? Is it not also possible that "certain auxiliaries" may have had some share in producing such results? The author, however, being afraid yet to express himself too confidently as to whether pus or soup forms the contents of the sac, adds, "If this were the case, there was increased hope, by drawing off the pus, (if really so,) that the cyst might remain a dead mass within the pelvis, and produce no mischief." We would fain hope that the literary productions of Mr. Isaac Brown may equally prove to be a dead mass in the world, and be as little productive of mischief.

To conclude: we cannot but admire the minuteness with which the author informs us how he performed the operation precisely at half past three P.M.; how he placed his patient on her back; how he attended to her position; how judiciously he acted in guarding against fainting; and how the result justified his so doing; how, and why, he placed the soft tablecloth round her body; how he passed the trocar in at the most projecting point; and how that point was situated just where nature had placed it; and how the pus passed through the canula; and how, at last, his patient returned home, "escorted by her sister, who had been one of the best and most indefatigable nurses through a long and trying illness."

I am, Mr. Editor, your obedient servant,

Braintree, Essex, Jan. 19th, 1846. A COUNTRY PRACTITIONER.

THE REFLEX FUNCTION.

To the Editor of THE LANCET.

SIR,—The author of the discovery of the reflex function of the spinal marrow has published his determination not again to defend himself against his assailants publicly, and I think him justified in this determination. He may, indeed, safely leave his doctrine to time to establish.

But, in the interim, is it right in the profession to allow a discovery of this magnitude and importance, if really true, to be treated injuriously?

I take up the pen as one convinced of the truth of this theory,—hypothesis it is not,—and my present object is to say a word or two in reply to the observations in the last number of THE LANCET, p. 152.

It is indeed lamentable that any member of our profession should be so deplorably ignorant of the thing he writes about, as the author of that paper. It is, I venture to affirm, im-

possible to accumulate, in one short paragraph, more blunders than those contained in the paragraph at p. 152, beginning with—"In the integrity," &c. The very first statement is an egregious error—"impressions on the olfactory nerves occasion the muscular phenomena of sneezing," &c. What incipient tyro in his studies would write such stuff as this?

It is impossible—it would be a waste of your valuable space—to proceed with a communication which begins thus. But I will say, that whilst this first statement is erroneous as to anatomy, the next statement is of a fact of a different kind—viz., of emotion; the third is really excito-motory, but not exerted through a nerve of "spinal sense," any more than the first, &c., &c. In a word, all is blundering; and as to the analogy of the Sun, Saturn, and Uranus, I am tempted to remind the writer of a line by Peter Pindar—"Fleas are not lobsters," &c.

If, Sir, you will allow me, I will henceforth reply to the observations of your correspondents on this subject, as they deserve. I am but for the truth, and I shall, as I believe the author whom I defend would, readily, nay eagerly, admit any new and good fact, principle, or view. But I do think it high time that we should write carefully, and not ignorantly, on the subject.

It is true enough that we may speak of reflex actions of the brain, as Dr. Laycock has done. But then this is not the same reflex action as that of the spinal marrow, as Professor Reid has shown, and to use the term in this loose manner is only to introduce confusion into the subject. Dr. Laycock's instances are instances of emotion, (I speak in general terms,) and it is most important every way to point out and bear in mind the distinction between this, which is psychical, and the special excito-motor action of the spinal marrow, which is physical.

I have been reading the life of Jenner, and I am struck with the similarity in the history of his discovery and of that under consideration. Blunders in the selection of matter had wellnigh proved fatal to vaccination. Let us take warning.

But what strikes me most forcibly is, that, to this day, the profession has not passed the threshold, and still refrains from viewing the discovery of the reflex function in its important relation to physiology, pathology, and practice.

I am, Sir, your obedient servant,

February 9th, 1846.

VINDEX.

THE MEDICAL SCHOOL OF THE MIDDLESEX HOSPITAL.

WE insert, at the request of Mr. SHEDDEN, the following note:—

"Middlesex Hospital Weekly Board, 10th Feb. 1846.

"Mr. SHEDDEN, Secretary to the Middlesex Hospital, is desired by the Board to acquaint the Editor of THE LANCET, that he is the only Secretary of the Hospital, and that, consequently, the notice respecting Mr. TUSON, in THE LANCET of January 24th, did not emanate from the Weekly Board, nor was it in any way authorized by them."

In our own justification we shall now publish the official communication, which was the cause of the insertion of the paragraph respecting Mr. TUSON, in THE LANCET, of Jan. 24th.

"To the Editor of THE LANCET.

"Middlesex Hospital School, Jan. 21st, 1846.

"SIR,—The Lecturers would be obliged by your insertion of the following notice in the next number of THE LANCET.

"I am, Sir, your obedient servant,

"C. DE MORGAN, Secretary.

"In consequence of certain transactions with reference to the entrance of pupils by Mr. Tuson, it has been resolved by the lecturers of the Middlesex Hospital School, that no pupil of Mr. Tuson will in future be admitted to the School."

NEWS OF THE WEEK.

Sir B. BRODIE has resigned his seat in the Council of the College of Surgeons. Mr. GREEN will be elected examiner in his place.

Mr. WADE and Mr. G. COOPER have been elected vaccinators, in the room of Mr. Carpué, deceased.

The Committee of the Society for Improving the Condition of the Insane have awarded their second prize of ten guineas to George Wilson, Esq., surgeon, of Leeds, for an "Essay on the Pathology and Treatment of Puerperal Mania."

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted members on Friday, February 6th, 1846:—J. H. May, M.D., E. Devey, W. Bannister, J. Webber, G. E. Nicholas, E. Whately.

APOTHECARIES' HALL, LONDON.

Names of gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, 5th February, 1846:—Charles Husband, London; James Eastwood Taylor, Whitworth, Lancashire; Henry Birkett, Kelloe, Durham; Arthur Prime May, Maldon, Essex.

CORRESPONDENTS.

One of the two lectures forwarded by Dr. James Turnbull (Liverpool Northern Hospital) shall be published in an early number.

Mr. C. T. Mackin.—We would not advise that the experiment should be made. Very many of the "Lecons" have already been translated, singly.

A Constant Subscriber.—No especial payments are allowed by the Poor-Law Commissioners for any operations which are performed in the Union workhouses. But payments are made to the medical officers for their attendance in cases of midwifery occurring in the workhouses. The rules of the commissioners will be found at page 16, in vol. ii. of THE LANCET for 1841-42.

A Subscriber.—We really cannot devote any portion of our pages to a correction of the "errors" in "Dr. Ranking's Abstract."

A Subscriber (Kent-street-road) should direct his binder to excise the leaf in question, simply leaving its inner margin for the purpose of the stitcher.

A correspondent at Islington states, that a surgeon in his neighbourhood is secretly practising homœopathy, and advertises to compound his globules *sub rosa*. We cannot insert the "medical advertisement" rhymes which accompany his letter.

Gratia requests that "W," whose letter appeared in THE LANCET of Feb. 7, page 168, will furnish the particulars of the formula referred to in that communication.

We are obliged to Mr. H. J. G. Young (Wells, Norfolk) for his note, and the copy of the letter which he received from the War Office, but after the announcement made by the Government, which was published in the last LANCET—viz., that there is to be no ballot for the militia, under the existing laws,—it would appear to be useless to publish any further communications on the subject. When the new Bill for regulating the militia is laid on the table of the House of Commons, an immediate explanation of any clauses which may relate to the medical profession shall be published in THE LANCET.

The communication of Mr. C. Carter (Billericay) was received, but a great press of matter has prevented us hitherto from noticing the subject in our columns.

R. R.—There are many such persons, and their proceedings are not only contrary to the rules of professional etiquette, but contrary to law.

Mr. P. S. Watson, (Newcastle-on-Tyne.)—It has already been stated in our pages, that the Minister has declined to make "the movement" in question.

F.R.C.S., (London.)—The certificate of an unqualified practitioner in such a case is of no value, and ought to be rejected as "waste paper." An application, under the circumstances stated, might, with propriety, be made to the Secretary at War.

A Student.—The Government Medical Bills have been abandoned. Foreign degrees in medicine do not confer titles, or legal qualifications in this country.

Will Mr. Ernest P. Wilkins favour us with his address.

L. T. would have a perfect right to inquire respecting the disposal of any letter which he himself might have written and signed, relative to the conduct of any officer connected with a public institution, but he must perceive that he can have no right whatever to ask what has been done with the communications of other persons. We may, however, remark, that it is the invariable rule of the conductors of periodicals not to make a secret use of the communications which are addressed to them. Occasionally, without doubt, private inquiries are made, previously to publication, as to the accuracy of the statements which some letters contain; but even in such cases, neither the names of the writers nor the signatures and handwriting are ever exposed to any of the parties concerned. That rule has not been violated, in the slightest degree, in the case to which L. T. has directed our attention.

The Rev. W. C.—It was an error of the press; the paragraph should have stood thus:—"The clergy cannot better employ their influence than by endeavouring to procure for the destitute sick poor, the advice, skill, and attention of qualified medical practitioners. Most of the 'popular' Treatises on Medicine are 'popular' nuisances."

Communications have been received from—Mr. J. L. Levison, (Brighton,) Mr. John Shirley Miles, (Woolwich,) Mr. Charles J. Gibb, (Newcastle-on-Tyne,) Dr. Kelso, (Lisburn,) Mr. Walter Yates, (Nottingham,) Mr. T. Cattell, (Braunston,) A Surgeon, (Birmingham,) Mr. Edwards, (Bath,) Veritas, (Liverpool,) X. Y. Z., Mr. Alfred Markwick, Mr. Bascome, and Mr. Smith.

ERRATA.—At page 150, in the title of the article on Anteversion of Uterus, for "Conway Thomas Edwards, Esq.," read "Samuel Conway Edwards, Esq."

At page 151, in the title of the article on the Non-Duality of the Mind, for "J. Cattell, Esq.," read "Thomas Cattell, Esq."

THE

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE HUNTERIAN ORATION,

DELIVERED BY

WILLIAM LAWRENCE, ESQ., F.R.S.,

ON SATURDAY, 14th FEBRUARY, 1846.

ON entering the theatre, the orator spoke as follows:—

MR. PRESIDENT,—

Before commencing upon the topic on which I have the honour to address this company, I beg to express, on the part of the College, my sense of the prosperous state of this Institution, manifested by the very large assemblage in the theatre this day, and to express, on my own part, that I fear I shall not be able to recompense the gentlemen present for the inconvenience of the position in which many of them are placed by the large number in attendance.

It is, Sir, in my opinion, the glory of this country to have produced three of the greatest men in the annals of medicine,—namely, William Harvey, John Hunter, and Edward Jenner. Harvey made the greatest organic physiological discovery,—that of the circulation,—thereby affording a clue to what had previously been an inextricable maze of multiplied complexities. Until the true motion of the blood had been ascertained, it was impossible to understand the science of physiology. Harvey has been justly styled the “*physiologiæ lumen, Angliæ gloria immortalis*!”—the light of physiology, the immortal glory of England! Haller, a competent judge on such a subject, and by no means given to extravagant eulogiums, calls him “*lumen physiologiæ*.”

The new light of our art,—whose name is second in rank only to that of the immortal Hippocrates,—John Hunter, was the first to cultivate the extensive and interesting fields of general anatomy and physiology, though that expression was not used in his lifetime, and does not occur, I believe, in any of his own writings; but with a feeling that could only have been prompted by the consciousness of intellectual power, he undertook, single-handed, to explore the structure of animals throughout the whole extent of creation, extending his researches to plants, as being living (though not sentient) beings, and therefore a link in the great chain of organized existence. He examined their organs in every stage of their development, from the simplest to the most complicated forms; he examined them in every stage of development, both in the various species, and in the ascending scale of beings, in order to discover the general laws of organization and life. He gave a new form to surgery by applying to it physiology, and then he laid the only rational ground of pathology, or, as he was fond of calling it, the physiology of disease. Everything that he did bears the unequivocal mark of inventive genius, that stamp of sterling value which can never be effaced by the hand of time, the fluctuation of doctrine, or the caprices of opinion.

It fell to the lot of Jenner, the favourite pupil of Hunter, to make the most important practical discovery in medicine, that of vaccination. He has been hailed by the unanimous voice of all countries as one of the greatest benefactors of mankind.

Harvey was a Member of the College of Physicians, Hunter and Jenner were surgeons; and although the latter was better known under the name of Dr. Jenner, he was educated as a surgeon, and he practised surgery for many years. He subsequently received the degree of Doctor in Medicine from the University of St. Andrew, this being one of the instances where the diploma confers honour, not on the recipient, but on the learned body which has the good fortune to grace its register with so illustrious a name.

Jenner completed his professional education under the roof of Mr. Hunter, who kept up a correspondence, in after life, with his pupil, employing him in physiological experiments, and pointing out to him objects for investigation; and it is not improbable that we are indebted, in a great measure, for the discovery of vaccination to the love of science, and the spirit of research, kept alive in the intelligent pupil by the precepts and example of the great master.

It well becomes us, gentlemen, to take every proper opportunity to do honour to the memory of these great men, for they have exalted us. Their genius, their labours, and their

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public services, shed a lustre on our common profession, raising its intellectual character and the social position of its members, while their names occupy a conspicuous place in that roll of master-minds, the proud inheritance of our land, and the bright rays of whose fame and influence, extending over the world, are destined to last as long as genius shall be held in reverence, and science itself shall endure.

The College of Physicians long ago instituted an annual oration, in commemoration of the many illustrious men who had belonged to that body. Following this example, Sir Everard Home, the brother-in-law of Dr. Baillie, and nephew of Mr. Hunter, presented a handsome sum to this College for the institution of an annual oration, to be delivered by a member of the council, in commemoration of Hunter and others who had adorned the profession of surgery. In compliance with the conditions of that donation, an oration has been delivered, on the anniversary of Hunter's birthday, in this theatre, regularly, with two or three exceptions. It has been remarked, by a late biographer of Hunter, that it is a matter for consideration whether it would not be better that these orations should occur less frequently. “It is,” he says, “a hopeless task to seek for novelty every year on a subject so limited.” The Council have long been of opinion that the Hunterian oration would command greater interest if it were delivered less often: not that the subject is limited, for it affords sufficient scope and variety in its numerous branches of knowledge, scientific, literary, historical, and personal; but the choice of orators is confined, by the conditions of the grant, to the official members of the Institution; and the council have been of opinion, that it might be better if the orations were delivered by any of its members, if he were eligible by talent and scientific attainments. In accordance with this view, and with the previous sanction of one of the donor's representatives, the other being out of England, no oration was delivered last year. Probably there would have been none this year. The Council of the College, however, found it necessary, in order to avoid misconstruction, that the oration should be delivered this day, whatever course it may be thought proper to adopt in future. Here a little explanation is necessary. Heretofore, medical men had been contented to cultivate a knowledge of their profession, to practise it diligently, and to prosper by attending to their own business. This plan, however, seems to be rather too simple for what is called the spirit of the age—which, at all events, is not a very quiet spirit. Hence, the medical profession,—instead of enjoying that tranquillity so necessary to its successful cultivation, and so much in harmony with the nature of the practical pursuit of it,—during the past year, indeed for a longer period, has been vexed and disturbed by agitation and clamour, for what is called reform, (hear hear, and hisses)—by noisy meetings and angry discussions. Hopes and fears were raised to the highest pitch by the introduction into the House of Commons of successive schemes, intended no doubt to improve, but calculated to change, the organization of the profession, by introducing into it strange and startling doctrines. The violent partizans of change seemed to have considered that this College would be an obstacle to their schemes, and they have accordingly spared no pains to diminish or remove this impediment, not disdaining the unworthy arts of misrepresentation, falsehood, and abuse, (cheers and hisses.) Hence, they have circulated reports that the oration was not to be delivered, because the council were afraid to meet the members of the College; and they did not hesitate to say, that the council would not dare to assemble the members again in this theatre.

Sir,—I stand here to proclaim and to prove the falsehood of that assertion, (cheers and hisses,) to give it the flattest contradiction, and to brand it as a foul calumny by those who made it and circulated it. (Hisses, mixed with applause, and loud cries of order, order, continued for some time.)

I am in no hurry, Mr. President, and when the geese have done, I will go on. (Violent hisses and other noises.) Weak indeed, most weak, would the council be, and unworthy of its position, if it could be frightened by the well-known artifices of the enemies of this Institution,—if it could be alarmed by the empty noise and common boisterousness of youth, or the bitter revilings of its opponents. Indeed, Sir, the council has never deemed so unworthy of its members as to suppose that they could entertain the intention of profaning this sanctuary of science by vulgar brawl and clamour, fit only for the hustings or the tavern, (hisses, cheers, and cries of name, name,) that they could intend to interrupt, by disgraceful tumult, a meeting held for the almost sacred purpose of doing honour

to him who has honoured us and our profession, (hear, hear, and cheers,) and who has exalted the scientific character of our country. Why, Sir, should the council be afraid of meeting the members of the College, here in this noble building, raised by their public-spirited exertions, and the liberal employment of the College funds to make it worthy of the precious treasures it contains, and the profession of surgery in this country—in this temple of knowledge, resorted to by noble men from other lands, as well as our own countrymen, for instruction in those sciences which are the foundation of the healing art—in this building, which contains a museum, of which there is no parallel in the world, brought to its present state of richness and variety, perfect condition and order, by their unceasing vigilance and labour—in this building, in which they have accumulated a library, the first in its department of any in this country—in this place, where the immediate business of the College, its examinations, are so conducted as to have obtained the approbation and confidence of the great body of the profession, while the candidates themselves acknowledge their fairness, and they have escaped abuse, even from the systematic calumniators of the Institution? In the turmoil of business, in connexion with the subject called Reform, it becomes apparent that the nature and extent of the powers possessed by this College, and the manner in which its duties have been performed, are not known to the public, and are even imperfectly understood by the members of the profession, unless we can suppose that agitators and reformers, in the eager prosecution of their visionary schemes, are unable to restrain their statements and their declamation within the bounds of truth and justice—the reform most needed by many of these noisy persons is that of their own language and manners. (Loud cheers and hisses, and cries of “Question, question—Hunter, Hunter.”)

The College of Surgeons in England owes its origin to a charter granted by George the Third in the year 1800. This charter directs the formation of a Council, and Court of Examiners, in order to examine such persons as might present themselves for that purpose, and if they are found sufficiently qualified for the practice of surgery, to give them a diploma, attesting the fact. Such is the constitution of the College—such the whole extent of the powers and object of the duties entrusted to those who have the custody of the charter—the custody of the Hunterian collection has since been added. In the year 1799, a collection of preparations, left by the late Mr. Hunter, having been purchased by public money, was presented to this College in trust, under the conditions of providing a building for its reception, keeping it in good preservation, making catalogues of its contents, and opening it during four hours in the forenoon of two days in each week, to the members of the College of Physicians, members of the Company of Surgeons, and other persons properly introduced by them.

To ensure the due performance of these conditions, and to provide for the safety of the collection, a body of trustees was appointed, thirty in number, sixteen of them being persons holding the highest offices in the state, and trustees by virtue of those offices, and fourteen persons, conspicuous for their scientific character and social position, nominated in the first instance by the treasury, and then elected from time to time, as vacancies occurred, by the general body of trustees. The trustees meet at stated periods, in order to inspect and examine the state and management of the collection, and to see that the conditions of the grant are properly carried into execution. After the incorporation of barber-surgeons, it was resolved, in the year 1745, just three years before Hunter came to London, to remove, and the Company of Surgeons took up their official residence in the Old Bailey, on the spot now occupied by the prison building. Upon receiving a special Act of Parliament in the year 1796, the Company removed from its residence in the neighbourhood of Newgate to Lincoln's Inn Fields, to rather an old house, with not a very high character, and rather low in finance. This Company having become dissolved under circumstances which it is not necessary to mention, was reconstituted by the charter of George the Third, under the name of “The Royal College of Surgeons.” The scientific character of the Institution, the efficiency of the examinations, and the estimation in which the diploma is held, have gradually and steadily increased from that period, and they have never stood higher than they do at the present moment. The diploma of the College is not necessary as a legal authorization of the practice of surgery; but public opinion demands that they who presume to undertake the care of the limbs and lives of her Majesty's subjects, shall possess at least this evidence of their fitness for so important

a trust. It is therefore virtually, if not legally, necessary for the holding of any public sort of appointment, and for respectability of position in the surgical profession. These points are fully proved by the number of diplomas that have been given at different times. In the two years before the Company removed from the Old Bailey, the numbers were 212; in the two years subsequently to 1800, the numbers were 289; and in the two years subsequently to the charter lately granted by her present Majesty, which has altered the style of this College from “The Royal College of Surgeons in London” to the “Royal College of Surgeons of England,” the number of diplomas was 829. Those who come to the College for diplomas do so voluntarily; they tender allegiance to the College, and submission to its rules and ordinances, of their own free will and for their own purposes, entering into a solemn obligation to do everything in their power to uphold the dignity and welfare of the Institution. They are not obliged by Act of Parliament to come here, as they are to the Society of Apothecaries; there is no necessity in the case, excepting the high opinion entertained of the College by the profession, and the confidence reposed in it by the public.

Mr. Hunter's mind was so entirely engrossed by the pursuit of knowledge, that he seems to have been almost a stranger to the cares and anxieties which are felt by ordinary men; thus he was indifferent to wealth, except as the means of aiding the favourite pursuits, on which he spent everything he could procure, and thus he died poor, leaving to his family no other inheritance, except the glory and honour of a name that will never perish, and the matchless collection, which is the clearest evidence of his genius and industry, and the fittest monument of his fame.

Mr. Hunter directed by his will that his collection should be offered to Government on reasonable terms, and if refused by them, that it should be offered in one lot to some foreign power, or otherwise disposed of as his executors might direct. So imperfectly was the splendid creation of his genius estimated at the time, that the offer to the British Government was received coldly, and six years elapsed before it was finally accepted. This may be accounted for, in some respect, by the political circumstances of the times. When the matter was mentioned to Mr. Pitt, the Prime Minister, he said, “What, buy preparations! I want money to buy gunpowder.” This was the answer of the great statesman, whose whole soul was intent upon the task of rousing and maintaining the spirit of his countrymen, and wielding the energies of Britain in the tremendous conflict for life and death which then agitated the whole of Europe. We cannot easily explain some other incidents of this negotiation. A noble lord who took some interest in the subject, principally on account of the family, writes to a gentleman holding the highest position in the scientific world, to this effect: “I do not pretend to be able to form any estimate of the general value and importance of this collection of science. It is quite out of the sphere of my observation; but I have always understood that the scientific world concurred in thinking it highly curious, and well calculated to do service to the study of medicine and natural philosophy in general.” This correspondent—the President of the Royal Society, and an intimate friend of Hunter himself, very fond of natural history, and in constant daily intercourse with all the first scientific characters of the country—replied in rather a singular way,

“MY DEAR LORD,—Had I thought my friend John Hunter's Collection an object of importance to the general study of natural history, or indeed to any branch of science except to that of medicine, I hope that two years would not have elapsed without my having taken an active part in recommending to the public the measure of purchasing it. I was consulted, in the first instance, by the gentlemen concerned, who, if I rightly understood them, agreed with me in thinking that the history of disease was the only interesting and valuable part, and the natural history was not of consequence sufficient to be brought forward as an object of public purchase.

“Concluding that the history of diseases arranged itself naturally under the protection of the College of Surgeons, and knowing that the corporate mansion of that learned body was roomy enough to receive the Collection; being well aware that matters of abstract medicine did not come within the province of the Royal Society; knowing that the apartments of that body are scarce able to contain the property they already possess, and thinking the museum, to which students could not have a convenient access, an improper deposit, I declined—with the full approbation, as I thought, of the parties concerned—taking any lead in the matter.”

The Collection had been offered, in the first place, to the College of Physicians, and declined. We must remember this, that although the members of that learned body had heretofore cultivated anatomy with success, they had abandoned the pursuit for many years, and although the Institution was rich in historical recollections, and in the talent and learning of its members, it was poor in funds, and therefore could not have borne the expense incidental to the acceptance of what the College has found a very costly though invaluable present. Thus, the collection may be said to have gone a begging. Refused by the College of Physicians, it was declined by the President of the Royal Society, on the part of that learned body, and also by the British Museum, when it was joyfully accepted by this body, to which the public is indebted for having retained to the country the intellectual treasure created by one of her most gifted sons. (Cheers.) In accepting this magnificent present, the Council have never lost sight of the responsibility they incurred, not only to the British public, in reference to the mere terms and conditions of the grant, but to the whole body of the profession and to men of science in all countries, to all interested in the great subjects of the organization and constitution of animal life, and in the progress of the healing art, of which they are the essential foundations. It has been their constant aim to administer the collection in the spirit of its great founder; to do what they feel certain that he would have done had a longer life been granted to him—that is, to fill up deficiencies, and to complete in all its parts the great scheme he had projected—namely, the exhibition, in consecutive series, of all animal structures and organs, from their simplest to their most complicated forms, as the first step towards understanding the phenomena and the processes of nature and of life, and as the essential foundation to a scientific investigation of diseases; to enlarge the collection in all its departments, so as to keep it on a level with the progress of advancing science, and then to render it a national depository worthy of the country which gave birth to its author. The collection, as delivered to this body by the executors of Mr. Hunter, contained 10,563 specimens. To these the College have subsequently added 12,347 specimens, so that more than half of the contents of the present museum has been brought together by the College, and is, in fact, collegiate property, many of the additional specimens being objects of peculiar rarity. The College gave 1200*l.*, and expended 4000*l.* in purchasing the entire collection of preparations left by the late Sir Astley Cooper, and other large collections, including all the most valuable parts of the collections of Messrs. Heaviside, Brookes, Langstaff, and Liston. The expense of the purchase of the Hunterian Collection was 15,000*l.* For the erection of the museum, the theatre, and repairs; there were two other grants, amounting, together, to 27,000*l.*, to which it was necessary for the College to add, out of its own funds, 23,000*l.*, as the Collection was greater than the means of accommodation afforded by the society's building. It became necessary therefore, in 1835, to provide more ample space for its arrangement and display, as well as for the accommodation of the rapidly accumulating additions to the Collection. This involved the necessity of taking in additional premises, and of nearly rebuilding the College, at an expense of 40,000*l.* The mere expense of raising and maintaining the Collection, without considering the lectures and other incidental matters, have taken, up to the present time, at least 70,000*l.*, and the annual outlay on this department of the College is about 3000*l.* at present. The Council were bound to form a catalogue, and this it could have done, so as fully to satisfy the condition of the parliamentary grant, with little trouble or expense; but putting aside all considerations of this sort, they determined, at once, that the treasure intrusted to their care should be described in a manner worthy of the founder of the Collection. It was an arduous undertaking, requiring the employment of several persons, and extending over several years. They deemed it, however, a sacred duty, due to the memory and character of Hunter, the extent of whose services in the cause of science was imperfectly known at the time of his death, although appreciated by a chosen few, yet imperfectly known even to his own country, and not known at all beyond the limits of England. He published a pamphlet, from which it appears that, having been for a great part of his life incessantly engaged in new discoveries, he entertained the intention, at some future period, of embodying the whole result of his researches, physiological as well as practical, in a great work, which, however, he did not do; intent, like other collectors, on increasing his store, he constantly put off the less agreeable and more serious task of recording the results of his labours. Thus, at the time of his death, there was no regular

catalogue of his Collection. If there had been, of course the parliamentary grant would not have been required. The physiological series left by Hunter is an abridged result of his physiological and anatomical labours. To draw, not only a mere list of the preparations, but such a description as should exhibit fully the important light they are calculated to throw on physiology and pathology, such a description as should do full justice to the genius and the memory of the great author, required a rare combination of mental endowment and knowledge of general anatomy, equal to that of the great collector himself, a just and full comprehension of Hunter's views, and doctrines, and power, and, if I may so say, an identification with Hunter, so as to view the objects in the same light in which they had appeared to him. The College were fortunate enough to find these qualifications in one of its own members, a gentleman of its own establishment. The death of Cuvier had left a great void in the world of science, the loss seemed irreparable, but the mantle of the great natural historian and philosopher descended on their conservator, Mr. Owen (cheers), who, it will be seen, has well performed what he undertook for the benefit of science, the credit of the College, and the honour of our country. (Cheers.) The labours of Mr. Owen on the physiological series are completed in these five volumes, [exhibited on the table]. The catalogue of that series, which occupied him seven or eight years, contains an introduction to each division of the series, being taken from a manuscript fortunately preserved and intended to form part of the projected work. Each preparation is fully and accurately described, so as not only to identify the specimen, but to give an account of the subject in minute detail. Whenever it was practicable, the description and illustrated remarks are drawn from the Hunterian manuscript unpublished, and the species in each preparation is particularized in almost every instance, being mentioned under both the popular and the scientific names, the latter derived from the best modern authorities, convenient aids, in many instances, in supplying the correct denominations of species, and without which the whole of the catalogue would have been much impaired, and have involved long and laborious investigation. In the preface to the first volume, Mr. Owen states that he had found it necessary to examine and to dissect more than two hundred animals in reference to this point alone. The catalogue is illustrated with seventy-six highly finished engravings, taken from a collection of beautiful drawings, which are not only highly interesting on account of their own intrinsic merit, but also as showing, by unequivocal evidence, how far Mr. Hunter had gone in advance both of his own contemporaries and of his age. There can be no doubt that the catalogue, as now completed, is nearly in that state in which it would have been had it been made by Mr. Hunter himself, while its accomplished author has given to it those additions which make it consistent with the present state of science, without sacrificing that character of originality which belonged to all the works of Hunter. In some respects, indeed, it is more instructive than it would have been in Mr. Hunter's lifetime, inasmuch as it would then have consisted of 1714 specimens, whereas now it is much larger, the College having added 998, many of which are included in this catalogue.

The catalogue of osteology is contained in this volume, [pointing it out,] drawn up by Mr. Clift with the same attention to designation of species and illustrative remarks as in the other instance. This department of the Collection has been greatly augmented since the museum came into the possession of the College. The Hunterian specimens of osteology were 963; the collegiate specimens, 2119; but a great addition has been made to the Collection since the date of this catalogue; a great number of specimens have been added since its publication, and a new catalogue has become necessary. The indefatigable curator of the museum is now occupied upon it, it being the intention of the College that it should be made, as far as is practicable, conformable with the general character of osteology. Mr. Taylor, a member of the College, who has distinguished himself by his acquaintance with chemistry, and particularly with the animal department, undertook, from his love of science, the laborious task of accurately describing the collection of calculi. He has finished the catalogue, which has been published in these two parts, illustrated with a great number of very interesting figures; and the catalogue may be considered as one, in a great measure, giving an account of the subject; for it not only describes the external characters belonging to the history of calculous formations, but it gives a complete chemical analysis of them. This labour occupied Mr. Taylor four years.

In the year 1830, a short catalogue was published, of the Hunterian pathological specimens, to indicate their general characteristics, consisting of two parts; but this department of the Collection, which will be the most interesting to a great part of the members, has received a very great accession of late years, raising the numbers from 1709, which are the Hunterian specimens, to 5216. It is very fortunate, therefore, that the preparation of a full illustrative catalogue has been deferred until the present time, the catalogue I have just alluded to containing merely the Hunterian specimens. The increased number of specimens now requires a larger catalogue, and the preparation and execution of this work have been entrusted to Mr. Paget, the Warden of the Collegiate Establishment, St. Bartholomew's, and a Professor of General Anatomy and Physiology in that College; and it would not have been possible to find a person better calculated to do this work, by talent, industry, and clearness of head, combined with quickness of comprehension, and lucid powers of arrangement and description. Each preparation will be fully and accurately described, with an indication of the points which it is calculated to illustrate; and the histories of the cases referred to in the specimens will be included in the catalogue, wherever such documents can be procured. The particulars respecting the Hunterian specimens are derived from a manuscript, written under the direction of Mr. Hunter, and now in the possession of Mr. Clift, (for I will observe that Mr. Hunter took the same minute and accurate pains in detailing the daily progress of the cases under his care, and the appearances he observed after death, as he did in all his researches,) or the histories and illustrations are derived from his published writings, or his other works. A great part of the additional specimens will be illustrated in the same way by the details of the cases referred to in the specimens. That mode of constructing the catalogue certainly adds very much to its length, but gives value to its instructive character. The whole of the closely-written manuscript under my hand is the Pathological Catalogue, now ready for the press. It will form, I think, about three good-sized quarto volumes, and, if I mistake not, will be found, when complete, especially in conjunction with the specimens described, to contain a more valuable body of information on pathology than can be found in any other quarter. Mr. Hunter had formed a large collection of fossil organic remains, from which circumstance, as well as from others, it is clear, that although he had not leisure to prosecute the history of these important subjects, his sagacious mind had not failed to perceive the bearing which they had on the general laws of organization and the history of the globe. These remains of a former world have an important bearing on the illustration of the laws of organization, and thus they become necessary in a collection of general anatomy, and may be studied with every advantage in the College museum, where they are brought into juxtaposition with the later existing species. These fossil remains could not have been described in Mr. Hunter's lifetime, nor, indeed, when the Collection came to the College, for that branch of science devoted to their consideration did not then exist. A flood of light has since been thrown on the subject by the labours of men of inquiry, among whom Cuvier and Owen stand pre-eminent for patient industry, close observation, and sagacious reasoning, guided and enlightened by an intimate acquaintance with all the higher departments of anatomy and physiology. This volume is a Catalogue of Fossil Aves, the remains of which are in the museum. I need not say that all the information that can possibly be produced in such a work as this will be there found. It is illustrated by a great number of beautiful figures of various specimens in the possession of the College, and not described in any other work.

If the museum is, as I believe, superior to any other in extent and variety, and in perfect condition and order, it certainly far surpasses all in the excellence of its descriptive character. I may observe on this subject, that there are facilities afforded to visitors, and that it is open four days in every week, instead of twice, as stipulated in the conditions of the Parliamentary grant, and the number of weekly visitors is upwards of 120. I think that every member of the College will feel an honest pride in reflecting that this great assemblage of scientific materials, so necessary for establishing the principles of our art, has been brought together entirely by the labour of English surgeons. The whole of this Collection, together with the elaborate and instructive catalogues by which it is described, is the work of members of this College, with the exception of a few microscopical specimens purchased from the representatives of the late Dr. Todd, of Brighton. In the course of the numerous accessions which the museum

has fortunately received, there have been frequently objects of peculiar interest and value, which have seemed to the Council worthy of separate publication, and two works of this description have been published from the pen of the conservator. The first, "A Memoir of the Nautilus," contains a minute description, illustrated with numerous figures, of the animal which inhabits this shell, called the pearly nautilus. In this bottle there is a splendid specimen of the shell, with the animal in its natural position. This is a specimen of the shell in its empty state, [exhibiting it.] This creature, almost unknown, is an object of the highest interest, not only on account of its zoological affinities, but as being, according to the statement of Mr. Owen, the living, and perhaps the sole living, archetype of the great tribe of organized beings whose fossil remains attest their existence at a remote period, and under another state of things.

The other volume is entitled, "A Memoir of the Mylodon," the bony remains of an enormous animal, an inhabitant of a former world, found at a small distance from the surface in the great basin, watered by the Rio de la Plata, in South America, and it discusses minutely its zoological affinities. This is the skeleton of the mylodon, one sixth of its natural size, [exhibiting a diagram:] below is the skeleton of the nearest existing species on a similar scale, so that you have a comparison of the proportion between the existing and the primeval animal. This gigantic skeleton, after having been drawn from the deposits in which it had lain entombed so many ages, since the last revolution of the earth's surface, and brought from Buenos Ayres, is now seen on the floor of the great museum in as perfect a state as if the animal had only recently perished.

Anxious to render the Collection as useful as possible in the higher departments of education, and to give every encouragement to those who are inclined to perfect themselves in general anatomy and physiology, the Council, some years ago, instituted studentships of anatomy. They are three in number, with salaries of 100*l.* a year each, to be held for three years, and are given as the reward of merit, after a close competition by strict oral, practical examination. The students are employed under the direction of the conservators in the museum, and have the opportunity of profiting by the scientific labours constantly going on there. Mr. John Queckett, the assistant conservator of the College, formerly an anatomical student, and admirably adapted for his present situation by a thorough knowledge of the subject, (the duties of the situation being fulfilled by him with exemplary zeal and diligence,) and distinguished by a most obliging disposition, (cheers,) possesses singular dexterity in unravelling minute structures, and in the art of injection. He has preserved and prepared, in a state for microscopical exhibition, specimens, showing the most minute formations and vascular arrangements of all the principal structures of the human anatomy. By the direction of the Council, he gives, weekly, microscopical illustrations to the public on this subject, on which so much attention has been bestowed of late years, with the view of throwing light upon the organization and development of animals.

I have now, gentlemen, endeavoured to represent to you faithfully the course which the Council has taken in administering the affairs of the College. Remember that the Charter gives no other power, and imposes no other duty, than that of examination, and that the conditions of the Hunterian trust require little more than the preservation of the Collection in good order. Then observe the present enlarged state and excellent condition of the museum. Observe the admirable descriptive catalogue which increases its value tenfold as a means of instruction. Contemplate the library, the studentships, the microscopical demonstrations; reflect on the talent called forth and encouraged by the Council; that of Owen, a host in himself, and who has fulfilled his duties in this Institution, during a period of nearly twenty years, in such a way as to gain a reputation inferior to none in Europe; that of Taylor, of Queckett, and of Paget: remember that the diploma of the College is held in the highest estimation; and that British surgery, of which this College is the head and fountain, has attained an acknowledged pre-eminence for soundness of scientific principle and practical skill. Then answer the question, which I put to you fearlessly, whether this Council has been contented with fulfilling in a cold and literal manner its duties? or whether, casting aside the letter of the bond, it has embraced its true spirit, and honestly and liberally presumed what the intentions of the Crown and Legislature were, and has shown an earnestness and a zeal worthy of the honourable profession to which you belong, and of the great man who

dignified and adorned it, and to whom we shall ever look up with veneration as its presiding genius. (Silence.)

If, gentlemen, you should be of opinion, as I am, that the Council has been faithful to its trust,—that its organization and management, in virtue of which the government of the College is invested in those gentlemen who, by their professional eminence and social position, may be considered the best able to manage its affairs, are well calculated to secure, as in point of fact they have secured, the great objects of the Institution,—you will, I think, be of opinion with me, that they deserve the patronage and the encouragement of the government; and I fancy you will not be less surprised than I have been, that a design should have been entertained of incorporating another body, armed with higher powers than this College ever possessed, to examine in anatomy and surgery—may more, in medicine also,—thus combining the attributes and usurping the functions of the two existing Colleges, (hisses and cheers.) That this scheme should have been abandoned is far less remarkable than that it should ever have received the slightest countenance from a secretary of state. Having, however, been once encouraged from high quarters, it may be resumed, or the deserted offspring of the minister may be fortunate enough to receive a father's care from some legislator who has no progeny of his own, (laughter;) I must therefore take the liberty of submitting to you a few observations on the proposal of incorporating by a charter a Royal College of General Practitioners, to be endowed by the legislature with extensive powers. I beg you, gentlemen, to observe and reflect upon this title—"A Royal College"—"A Royal College of General Practitioners."

Why, gentlemen, what is a college? Is it not an institution designed for the advancement of learning, or the promotion of science, or for both of these purposes? May it not be described, in another sense, as a community of learned men, associated for the purpose of attaining these noble objects?

Who, then, are the learned and scientific persons that are to constitute this new College? And what branches of science and learning are they to cultivate? I shall show you presently that the apothecaries of London are the parties, and that the range of their exertions is no less than the entire extent of medical and surgical science and practice. They who presume to undertake so high a mission should be able to produce some evidence to show that they possess the scientific qualifications necessary for so arduous an undertaking. (Murmurs.) Satisfactory evidence on this point would be afforded by their contributions to the proceedings of learned societies, such as, for example, the Royal Medical and Chirurgical, now before the public for a period of thirty years—by books on medical subjects, published during the same time—by their labours in teaching anatomy, physiology, surgery, midwifery, and materia medica—and by evidence given of practical skill in the offices of surgeons and physicians to hospitals or other institutions. If the scheme of incorporating a new college is to be revived, no doubt some member of the legislature will move for returns embracing these points, so as to afford a knowledge to the public of the manner in which the Institution of Apothecaries have conducted their affairs, and for the purpose of convincing all the world of the extent of their qualifications for the office. (Murmurs.)

The Colleges of Physicians and Surgeons have been instituted for the cultivation of their respective branches. How the College of Surgeons has performed its duties, I have attempted to explain to you in some detail. It is not my place to speak to you of the elder College—we all know how the members of that venerable Institution have contributed in past times to the advancement of medical science—we know how many zealous cultivators of science are numbered in its ranks at the present moment. Nobody doubts its fitness to preside over the department of medicine, to direct medical education, and to conduct medical examinations. Where, then, is the necessity, where is the room, for another College, a "Royal College," not of physicians, nor of surgeons, but of General Practitioners? And, by the by, gentlemen, what is the import of the epithet "royal"? Is it a word without a meaning, merely intended to round the name, and give it a fuller sound to the ear? or is it intended to convey the highest and most respected sanction to the Institution thus designated, conveying to the public an assurance that cannot deceive, that it is calculated to attain its proposed objects, and therefore worthy of entire confidence?

In the meantime, what will become of the apothecaries? Heretofore, the medical profession consisted of physicians, surgeons, and apothecaries. This threefold division, which has arisen in the progress of society, and which has answered

to the wants of the day, and of the community, was recognised by law, and was authorized by general approbation and consent. The public, knowing pretty well what is meant by a physician, a surgeon, or an apothecary, will, I apprehend, be sorely puzzled when they come to deal with the general practitioner. (Murmurs.)

An act of parliament relating to the medical profession was passed in 1815, (that act was called, by the by, "The Apothecaries' Act,") and its object was to regulate the practice, or the trade, I forget which, of apothecaries. (Hisses.) It owed its origin to an association of gentlemen who called themselves the Associated Apothecaries of England. That association, if I mistake not, exists at the present day, under the same name. It does appear, that the general practitioners of 1845 are merely our old friends the apothecaries under a new denomination, having taken the liberty to change their names without the previous necessary formalities of the Royal consent and registration in the Herald's College. Is the race of apothecaries extinct? Is their occupation gone? Are we to seek among the pupils of the College for their organic remains, as specimens of the state of the medical world prior to the present day. (Loud hisses.)

A MEMBER.—Are they not members of the College? You are insulting your own body. (Loud cheers.)

MR. LAWRENCE.—Do the gentlemen who tacitly give up this, mean altogether to abandon the practice of the apothecary in preparing, compounding, dispensing, and sale of medicine. Is that their intention? Nothing can be further from their intention. (Murmurs.)

In the country, generally, with few exceptions, medical practitioners embrace all parts of the profession. They are physicians, surgeons, apothecaries, and accoucheurs, and they might, perhaps with propriety, be termed general practitioners. Many of them possess a thorough knowledge of their profession, have obtained great skill and experience, and are competent to all the emergencies and duties both of medical and surgical practice. But in London, generally speaking, the three branches of the profession are preserved distinct, and we assign to the members of the third division, properly distinguished as apothecaries, a range of duties and practice different from those of the physician or the surgeon. If a new college is constituted, its governing body, or at least its examining corps, must consist of the London members, that is, of apothecaries properly so called; for remember, gentlemen, those in the country, generally speaking, could not leave their homes and their practice for purposes of this kind, and it is just probable that those gentlemen might prefer continuing as they now are, members or fellows of the Royal College of Surgeons of England, to being enrolled in a college of apothecaries. The object of the Apothecaries' Act was laudable—that of insuring a better medical education to the general body of medical practitioners. The error, unavoidable under the circumstances, consisted in the constitution of the examining body. The College of Physicians, who ought to have undertaken the duty, declined it. The company of apothecaries was a body not organized for scientific purposes, but for trade in drugs and medicine, which they conducted with skill and success, and they must have been much surprised when the news came to them that the legislature devolved on them the duty of examination in the various branches of medical science. They have performed it as well as they could be expected to do. (Cheers, hisses, and cries of "shame," "question," "Hunter.") But we cannot shut our eyes to the fact, that the interests of science require that they should be freed from duties which ought never to have been imposed upon them. Indeed, during the past year, the Worshipful Company of Apothecaries, with a modesty highly commendable, acknowledged themselves unequal to the duty, and with a correct appreciation of their position, exhibited a readiness to abdicate—to resign this duty. Every facility should be afforded to them for carrying this intention into effect. (Laughter, cheers, and hisses.) I know it would meet with general approbation.

Let me here observe, that in the first and the best of measures introduced into the House of Commons during the last session, it was proposed to repeal the Apothecaries' Act, and thus to relieve the Worshipful Company from the duties of examination. This part of the Act received, I believe, universal approbation, except on the part of those immediately concerned. But this, gentlemen, is an act which they are not prepared to do unconditionally. They propose to bequeath their powers to the new College, and thus they would be in the peculiar position of being their own heirs. The examiners before certainly would have belonged to the same class of the profession as that out of which the examining body of the

new College would be formed; they would be descended from that former examining body; it would be a mere shifting of the cards and taking a fresh hand out of the same pack. The new examining body, formed of the same materials, would be neither better nor worse than the old, out of which they had been formed; we might take this motto—*alter et idem nascitur*. Is it contended that the Royal College of Apothecaries is necessary in order to examine in medical practice and pharmacy? This, indeed, would be employing a club to knock down flies. Many professors of that branch of science are found in London, members of the Pharmaceutical Society, especially instituted to cultivate that branch of science. To the institution of an Incorporation of General Practitioners I should not object, except that it would expose us to division, on one or two conditions. Let this body be put upon the same footing as the College of Surgeons; let them be established by Charter, but not by Act of Parliament; let the College of Physicians examine in medicine; let the College of Surgeons examine in anatomy; and let the body of Apothecaries, who feel themselves competent to all the branches, give a general examination; but let a man have a free choice, either of being examined by the three existing Colleges, or by the new body; let there be no compulsion. I deem it an unwarrantable interference with the liberty of the subject to compel any man, against his will, to belong to the Society of Apothecaries. (Cheers.)

After a mature consideration of the subject in all its bearings, the conclusion seems to me irresistible, that if a College of General Practitioners in name, Apothecaries in reality, were instituted, it would be either a disgrace to the profession, by its weakness and want of public respect and confidence, or if it proved to be of stronger constitution than a consideration of the materials out of which it must be formed would lead us to expect, it would introduce among us jealousies, discords, and division, which are the natural result of conflicting authorities and divided allegiance. (Murmurs.)

England, gentlemen, has numbered among her physicians, Harvey, Sydenham, Linacre, Ratcliff, Meade, Whytt, Pringle, Baker, Warren, Everett, and Baillie. She has numbered among her surgeons, Cheselden, Pott, John Hunter, William Hunter, Jenner, Home, Cline, Blizard, Cooper, and Abernethy. Let us invoke the memory of the mighty dead. Let us appeal to the merits and services of existing institutions, and to the high scientific character and social condition which the profession has attained in this country as a protection against this so-called reform, but in truth, injudicious change, under whatever form they may be disposed to disguise the distasteful reality. (Cheers and hisses.)

I willingly, however, turn from this subject, which is not very inviting, and I am sorry to find, rather unpleasing to some of my audience, every one of whom I am most unwilling to offend. I turn from it to the more agreeable theme—the life and character of John Hunter.

His family were small landed proprietors, cultivating their own estate, and not conspicuous for wealth or rank, learning or talent. It is, however, remarkable for having produced, at one and the same time, three men who attained, in this metropolis, the highest eminence in the same profession—John Hunter, his elder brother, William Hunter, and Dr. Baillie, his brother-in-law. Their zeal, their success, and their well-earned fame, operated beneficially on the lives of their contemporaries, exciting the spirit of research which characterized the times, hence not unjustly termed sometimes the age of the Hunters.

John Hunter, the youngest of ten children, lost his father at an early age, and from being averse to restraint and the discipline of school, was allowed by an indulgent mother to amuse himself with country sports, and to lead an idle life. He was averse to the study of languages, and continued so during his life. Three or four years afterwards he came to London, and entered as a gentleman commoner at Magdalen Hall, Oxford. Speaking of this, in after life, he said—"They wanted to make an old woman of me, and stuff me with Latin and Greek, but I would not give in to any of these schemes." His want of learning has been lamented. It is really difficult to satisfy some people! they wish to combine incompatible circumstances and qualities. They who are not contented with what Hunter was, and what he did, may at least remember some obvious truths—namely, that there are only twenty-four hours in a day, and only 365 days in a year. Now we know that Hunter habitually worked twenty hours out of the twenty-four, and therefore we do not see exactly how he could study the Latin and other learned languages without giving up some of his own peculiar pursuits.

The case of Hunter has a rule and law of its own. Those who say that Hunter might have written better if he had had more learning, I would refer to his volume on animal economy. For clearness of statement and arrangement, for propriety of expression and correct reasoning, these papers cannot be surpassed, while for weight of matter they have rarely been equalled, and they illustrate the just remark of one of the most sensible writers of the age "that he who knows a subject thoroughly is most likely to describe it clearly."

Hunter had attained the age of twenty without having received the ordinary education required by the conventional rules of society without having shown any signs of particular talent or mental attributes, or without determining on his own course in life. That he selected the medical profession seems to have been merely an accidental circumstance. The success of his brother, then in the height of his professional celebrity, appears to have suggested to him the idea of belonging to the same profession. He accordingly wrote to Dr. Hunter, begging his permission to come to London, and expressing a hope that he might be able to make himself useful. This request was kindly granted. John Hunter accordingly set out for the metropolis on horseback, his usual mode of performing journeys at that time. Under the roof of his brother he found himself in his proper element. The mind that had recoiled with a kind of disgust from the study of languages, and dry scholastic pursuits, was roused and excited by the congenial objects which surrounded him on all sides. The dissecting room, the museum, the lectures, the conversations of his brother, and the other enlightened men whom Dr. Hunter had collected around him, awakened those faculties which had hitherto lain dormant, and feeling conscious of his own great powers and genius he started forwards at once, and commenced that career of anatomical inquiry which he continued with unabated ardour until the time of his death, a period of forty-five years. Mr. Hunter commenced his pursuits under the guidance of his brother, but he soon struck out a path for himself, and he followed it to an intellectual height, which had never been attained before nor since. Here he reigns alone, like the Jupiter of the heathen mythology, "*nemo simul aut secundum*;" and those who aspire to be *proximi generis* must be content to be placed far below the monarch of the surgical Olympus. From this commanding eminence he surveyed the whole expanse of animated creation, examining it both in mass and in detail. He investigated every organ in all the animal field, tracing them from the simplest forms of organized life, through every successive gradation, to man, the highest order. Hence, he was able to deduce the essential nature, and to determine the accidental circumstances of each. The results of this inquiry, unparalleled for its extent and accuracy, are exhibited in the physiological series in the museum, under an arrangement devised and executed by the author himself, which is so simple, so clear, and so pregnant with instruction, that in the subsequent progress of science no improvement could be proposed. After surveying organization in detail, Mr. Hunter was prepared to examine animals in the aggregate, to group them together, to distinguish them by their classes, and to marshal them in their natural orders; and he had dissected more than 500 species of animals, including specimens from all the various classes, as shown by Mr. Owen, the evidence being the preparations in his Collection, the manuscript notes, the sections, and drawings, and published works. It is doubtful whether an equal amount of labour, applicable to this subject, can be shown to have been performed by similar evidence by any other anatomist.

To his anatomical and physiological labours, Hunter added the closest and most correct observation of disease, carrying his researches into all parts of the animal economy, both in health and in disease, and thus collected materials for his labours, which were combined into one grand result, a body of physiological doctrines applicable to the elucidation of disease; for remember, that at the time Hunter started, surgical science and practice were the ultimate object of all his labours. Here we see enthusiasm kindled and kept alive by a single branch of a great pursuit, and working upon a great mind, raised to its highest pitch of power by concentration of purpose, and the study of one great subject, and that of the most elevated and ennobling character. If it be an attribute of genius to collect, combine, enlarge, and analyze,—to impart that energy, without which judgment is cold and knowledge is inert, then was Hunter pre-eminently a man of genius. He had an insatiable thirst for knowledge, which was rather a passion than an intellectual attribute. Hence he derived an energy, before which all obstacles and difficulties disappeared, and which would have induced him, in the bold language of a former

statesman, to trample upon hostilities, and an industry that no labour could exhaust. Thus he gathered around him a provision of the rough materials of knowledge, of which he made the most skilful and efficient use; for his powers of reflection were equal to those by which he had accumulated facts. He was a profound and original thinker, spending hours together in patient meditation, surveying the object of his researches in every possible light, examining them and testing them by the aids of analogy. His collections, his experimental researches, and his writings, all bear this stamp of genius; and the great artist who painted his portrait—Sir Joshua Reynolds, could not fail to observe this characteristic trait, and he has accordingly represented him in the attitude of meditation which was known to have been habitual with him.

Some of Mr. Hunter's biographers have thought fit to enlarge on his failings. It has been said he was overbearing, wanted command of temper, and would at times indulge in swearing. Mr. Hunter, like other great men, was open and candid, exhibiting what Lord Bacon calls, "That fair round bearing which is the honour of man's nature." He may possibly sometimes have expressed honest indignation at unworthy conduct, more warmly perhaps than the conventional rules of society would warrant. It is acknowledged that he was warm in his friendship, and of a generous disposition; that he readily bestowed, not only professional advice, but more substantial assistance when it was in his power, on those in distressed circumstances. He was always ready to do himself what he recommended to his brother in a short characteristic note delivered by an applicant for advice: "Dear Brother,—The bearer is desirous of having your opinion; I know nothing of his case, he has got no money, and you don't want any, so that you are well met." The unfavourable statement I have just alluded to, proceeds not from personal and intimate knowledge; while on the other hand, in those who had the happiness of being personally intimate with him, he inspired sentiments of affection and esteem, I may use stronger language—veneration. This was particularly the case with the former conservator of this museum, Mr. Clift, who has laboured, in the most disinterested manner, to perpetuate the fame and memory of the great man whom he was proud to call his master. He has done me the favour of communicating part of a letter that he wrote to Mr. Palmer, the editor of a late edition of Mr. Hunter's works, in order to correct some statements of a disparaging nature. Mr. Clift had greater opportunities of knowing Mr. Hunter than any other individual; and his testimony is particularly valuable, as that of a man who combines with talent and shrewdness, perfect simplicity, candour, and inviolable truth. I shall take the liberty of reading a short extract from this document. Mr. Clift writes—"I may say at once, from observation, and from all I have ever heard, that Mr. Hunter was not the vulgar-minded and swearing brute which some of your informants ill-naturedly hint that he was." Mr. Clift observed that this was equally the case when Hunter was labouring under the influence of "such untoward circumstances as would have made a parson swear,—internally, if not audibly;" that, in fact, "he was generally known as a cheerful, but taciturn man;" that "although witty in his remarks when he condescended to unbend himself, which he sometimes did," and when addressing himself to those whom he well knew, he never was coarse or vulgar, and never exhibited "the slightest inclination to indulge in ill-natured remarks, swearing, slander, puns, scurrility, obscenity, or balderdash, for which some of his pupils originally, and his successors, were rather notorious. All these things," Mr. Clift continued, "were, I believe, foreign to the natural disposition and character of Mr. Hunter; so far as my private observation of him would enable me to judge. I was then eighteen years of age, and had daily and nightly opportunities, as one of the members of his family during the last eighteen months of his life, of carefully observing him." The writer added that "he was mild and kind in his manner, and most courteous to everybody;" that he "made no distinction between high and low, great and small;" that "he spoke as kindly and familiarly to his old gardener and himself (the writer) as to his equals and superiors;" and that "he was easily pleased when anybody showed an inclination to please him." He added, that similar testimony was borne by "Mr. William Bell, who resided a good many years with Hunter, and knew him familiarly." Although no man was "a hero to his valet," yet "he absolutely idolized Hunter," and believed him to be so extraordinary a man, that he stood only "next to God Almighty for knowledge."

In the biographical works I have alluded to, mention is made of some very strange piece of incivility shown by Mr.

Hunter to Mrs. Hunter's friends, on which Mr. Clift remarks—"Nor can I believe him to have been capable of such treatment. I have been at Mrs. Hunter's parties, and I do not believe it a fact, that Mrs. Hunter's visitors ever interfered or could interfere with his studies. He always went up stairs to shake their mutual friends by the hand, and returned to me full of labour and thought, and without further interruption remained during the evening till we parted at night."

That Mr. Hunter had advanced far in anatomy and physiology beyond other professors will appear clear by comparing his views and doctrines with the state of physiology as set forth in the great work of Haller, or in the many publications since that period. His originality is equally conspicuous in surgery, which he revolutionized. It was the boast of Augustus, that he found Rome built of brick, and left it built of marble. So Hunter found surgery a mere mechanical art, hardly emancipated from its connexion with the barbers; but he left it a beautiful science, inferior to none in rank and interest, or in the capability of alleviating human sufferings. Surgery, did I say?—the whole of medicine has felt the vivifying influence of the principles emanating from the bold inventive genius of Hunter. Cheselden, Pott, and Glisson, were some of the greatest English names in that department. Cheselden is now only known, as an operator, for his skill in lithotomy; and low indeed must the condition of the art have been at that time, when Cheselden was the only man in England who could perform that operation, or to whom it could be safely confided. Under Mr. Pott the character of English surgery advanced. He had received a good education, and was a respectable scholar. He had strong natural talent, judgment, and good sense, and was acquainted with all that had been done by those who had preceded him. He added patient observation to quickness of perception and happiness of expression. We read still with pleasure and instruction his excellent delineation of fistula, enriched by the result of his own observations. He discarded the rough and cruel practice of an ignorant age, and the complicated methods of his contemporaries, and he substituted a milder and more efficacious mode of treatment. Thus, he has always been regarded as an honour to the profession, and as an improver of surgery. Jean Louis Petit and Richter were surgeons to be classed in the same rank with Cheselden and Pott. Richter, professor of surgery, and highly thought of by his own countrymen, published a large work on surgery, in several volumes, containing some good descriptions, but not enlightened in any degree by physiology, according to the state of that science as it is expounded in the learned pages of this work, and it is disfigured with absurdities and puerilities hardly credible. Dupuytren carried the subject further, and with such improvements as had arisen from a more correct knowledge of anatomy, and more extended opportunities of observation, but in their writings there is no trace whatever of the Hunterian physiology. Indeed Hunter is never mentioned by the French writers, except for the single purpose of refuting his claim to the discovery of a new method of operating for aneurism, but which, I must observe, is called the Hunterian method everywhere excepting in France. We could well spare the writings of any surgeon excepting Hunter; they would hardly be missed; but if his researches and writings were obliterated, and their influence withdrawn, the very heart's blood of surgery would be lost. It would be a body from which the vital principle was departed.

It was the grand characteristic of Hunter to aim at perfection in all he undertook. He was not even impelled by that feeling which has animated so many noble minds, and led to so many useful labours, and so many great exploits, the love of fame. He did not even want the spur:—

"That the clear spirit doth raise,
That last infirmity of noble minds,
To scorn delights, and live laborious days."

Instead of standing before the public to gain his meed of reputation, he kept back his researches in order to render them perfect in every point, and if left to himself, he would never have published anything at all. He had it in his mind to publish a work, the time for which unfortunately never came before his death. Much of what he published during his life was produced by the solicitation of friends, at whose request he did that which no personal interest would have induced him to undertake. Thus the sole actuating motive with Hunter was the pure and simple love of truth, and here we see the strongest evidence of a superior mind, raised, by the conception of a grand idea, above the interest and cares of the moment, and occupied solely with the design of realizing a

great scientific labour for the benefit of after ages. His ruling passion was a desire to benefit his fellow creatures, and to unveil all the mysteries of organization and life, to develop and explain, for the advancement of medical science, and for the instruction and benefit of mankind. We can fancy him meditating intensely upon the subjects of his constant researches, and directing his ardent glance into all parts of the animal economy, struck with admiration and delight at the wonders thus revealed—determined, if possible, to find out the great secret of life, and convinced in his own mind that the beauty and harmony thus unfolded must be regulated by some great power, analogous to that animating principle supposed by the poet to direct the mighty order and movement of the universe described in those noble lines in which he ventures to deduce animal life from the same great source.

"In the midst of life we are in death." On the 16th of October, 1793, Mr. Hunter rose at break of day, as was his custom, and repaired to his dissecting room, where he was soon joined by some of those zealous and industrious students whom he liked to have about him. Having succeeded to his satisfaction in accomplishing a most difficult piece of minute dissection, he was in high spirits, and as he went down to breakfast, gaily repeated some lines of a Scotch song, a thing very unusual—"It was," says my informant, his faithful friend, whose eyes filled with tears as he mentioned it, "the song of the dying swan." Mr. Hunter left his house in perfect health, and, after making some professional visits, repaired to a meeting of the governors of St. George's, where he was seized in the board-room of the hospital, and being conveyed to an adjoining apartment, fell dead in the arms of one of his friends. It was on the same day, and nearly at the same hour, that the unfortunate Queen of France was murdered on the scaffold. The lovers of science were struck with consternation and dismay at the discovery of their unexpected loss. The loss seemed to them irreparable. But the bright genius lives again, in the ample stores of knowledge he has left behind him, in his numerous writings, and in the great monument of his labour, which is the pride and ornament of this College—published, explained, enlarged and illustrated since his death, and thus rendered far more useful than they had been during his life. The luminary of Anatomy and Physiology was not extinct. It had descended below the horizon, but rises again with greater brilliance to shed its bright influence over ages yet unborn.

"So sinks the day star in his ocean bed,
And yet anon repairs his drooping head,
Then tricks his beams, and with new spangled ore
Flames in the forehead of the morning sky."

(Great confusion mixed with applause and hisses.)

SOME EXPERIMENTAL RESEARCHES

TENDING TO

DISPROVE THE EXISTENCE OF PROTEIN.

By BARON LIEBIG,

PROFESSOR OF CHEMISTRY, GIESSEN.

ON THE SUPPOSED BINOXIDE OF PROTEIN.

ACCORDING to Bouchardat, if moist fibrine be immersed in water acidulated with a two-thousandth part of hydrochloric acid, the fibrine speedily becomes gelatinous, and on continuing the action of the dilute hydrochloric acid, a solution is obtained, which is turbid. This turbidity appears to arise from a slight admixture of a fatty substance. That portion of the fibrine which is thus soluble in hydrochloric acid, Bouchardat designates by the term ALBUMINOSE, the insoluble part by that of EPIDERMOSE.

Mulder states that this experiment was repeated by Herrn Von Baumhauer. The solution of fibrine in dilute hydrochloric acid Baumhauer precipitated by means of carbonate of ammonia, and treated the precipitate with alcohol. After drying, the precipitate yielded on analysis,—

1	2
Carbon. . . 53.64	. . . 55.62
Hydrogen. . . 6.88	. . . 6.73
Nitrogen . . 15.88	. . . —
Oxygen . . . 23.64	. . . —

M. Mulder concludes, from these experiments, that "the albuminose is a product of the oxidation of protein, which, no doubt, is formed by the action of the atmospheric oxygen upon the matter formed and dissolved by the hydrochloric acid. It is binoxide of protein = $C_{10}H_{12}N_2O_{14}$ "

We have of late been so overwhelmed with descriptions of substances, which, although greatly differing in their properties, yet, according to their analyses, must be considered as oxides of protein, that I was very desirous of convincing myself, by experiment, of the existence of at least one of them.

I have found, that if we are to understand by the designation, *binoxide of protein*, a substance which contains no sulphur, the substance investigated by Baumhauer cannot belong to such a class of bodies as oxides of protein, since the whole amount of sulphur present in fibrine exists unaltered in this new substance.

In the first place, I have observed that the atmosphere and its oxygen have no share in the solution of fibrine in hydrochloric acid. If moist fibrine is allowed to become gelatinous in dilute hydrochloric acid, and the mixture copiously diluted with water, and immediately afterwards filtered, before the solution has taken place, the presence of lime and potass may be detected in the filtered fluid. If the fluid be exposed to the protracted action of a higher degree of heat so as to effect the solution, and a portion of this heated to boiling, with an excess of potass, the subsequent neutralization with acetic acid gives rise to a copious evolution of sulphuretted hydrogen, and a drop of acetate of lead produces in it a black precipitate. Upon solution of fibrine in dilute hydrochloric acid of the above given strength, therefore, the sulphur remains combined with the other elements of the fibrine. If this solution of fibrine in hydrochloric acid (the albuminose of Bouchardat) is mixed with a solution of common salt, sulphate of soda, or nitrate of potass, the mixture coagulates, forming a caseous or albuminous mass, which may be washed with a solution of common salt, the fluid which runs off, containing common salt, contains no longer any perceptible traces of lime or phosphoric acid: these two substances are, however, contained in the precipitate. The fluid contains no oxygen compound of sulphur, and gives no reaction of sulphuret of potassium when boiled with potass ley. But, according to Mulder, the albuminose of Bouchardat is binoxide of protein; were it so, the precipitate ought to contain neither phosphate of lime nor sulphur; but on dissolving it in potass ley, and boiling, and adding, subsequently, salts of lead, a black precipitate of sulphuret of lead is produced, and the action of acid produces an evolution of sulphuretted hydrogen.

This substance is, therefore, not a binoxide of protein.

ON THE PRESENCE OF SULPHUR IN THE NITROGENOUS CONSTITUENTS OF PEAS.

Mulder says, p. 307 of his "Physiological Chemistry"—"According to Rochleder, legumine and caseine stand in close affinity to one another, and differ only in their respective reactions with acetic acid. Rochleder made his analysis, however, not with legumine, but with proteine prepared from legumine. He dissolved legumine in concentrated potass ley, filtered the solution, and precipitated the filtrate subsequently with acetic acid. This is no longer legumine, but proteine, free from sulphur, and contaminated with an extraneous substance, the admixture of which lowers the proportion of nitrogen and carbon by about one per cent. The composition of legumine, therefore, is unknown. Rochleder states legumine to contain a certain proportion of a substance insoluble in potass and in ammonia, and, moreover, an admixture of sulphur. The latter statement is incorrect with regard to legumine obtained from almonds and peas, since this contains free sulphur."

If, with MM. Dumas and Cahours we call legumine the nitrogenous substance which these chemists prepared from almonds, this legumine differs from the body prepared from the beans which Rochleder analyzed, not simply in as much as the former is soluble in acetic acid, whilst the latter is insoluble in this menstruum, but, moreover, in this, that the legumine prepared from almonds contains eighteen per cent. of nitrogen, whilst that prepared from beans and peas contains only 15.78 per cent. of this element. If fibrine, albumine, or caseine, are dissolved, as Mulder states, in moderately concentrated potass ley, and the solution is subsequently neutralized with acetic acid, the precipitate produced is not proteine free from sulphur, as Mulder believes. I, myself, have examined a solution of this kind, and I found that it does not turn black when mixed with solution of sugar of lead, and consequently contains no sulphuret of potassium, and also that acetic acid evolves no sulphuretted hydrogen from it. If the white precipitate produced by the addition of acetic acid to the solution is washed and subsequently dissolved in potass, and the solution is then boiled, the addition of a drop of solution of sugar of lead im-

parts an inky tint to the fluid, owing to the formation of sulphuret of lead. The precipitate, consequently, is *not* proteine. This department, therefore, does not warrant the conclusion that the substance which Rochleder analyzed was sulphate of proteine.

If soaked and finely-bruised peas, stirred into a thin paste with ammoniated water, be passed through a filter, and the filtrate be precipitated with acetic acid, the precipitate produced subsequently dissolved in potass ley, and the solution boiled, supersaturation with an acid will give rise to a copious evolution of sulphuretted hydrogen, and the addition of salts of lead will produce a precipitate of sulphuret of lead.

The nitrogenous constituent of the pea, to which I assigned the name of vegetable caseine, is, therefore, not free from sulphur, as Mulder maintains. That this substance does not differ in composition from other nitrogenous and sulphuretted vegetable substances is sufficiently proved by the simple fact that peas contain everything requisite for the formation of the blood, and consequently for the sustenance of life. If the nitrogenous constituent of the pea were free from sulphur, how could it form blood, fibrine, and albumine? It is my opinion, moreover, that the mode of formation of proteine requires a new and more searching investigation. I have not succeeded as yet in producing a non-sulphuretted substance possessing the composition and properties of the so-styled proteine, according to the data and instructions given by Mulder.

Might it please M. Mulder to give a minute and circumstantial description of his process.*

LECTURES

ON

PLETHORA AND ANÆMIA,

AND ON

SOME FUNCTIONAL DISORDERS DEPENDENT UPON THE STATE OF THE BLOOD.

DELIVERED AT THE LIVERPOOL NORTHERN HOSPITAL, SESSION 1845-46.

BY JAMES TURNBULL, M.D.

PHYSICIAN TO THE HOSPITAL.

Varieties of plethora and anæmia in relation to vascular fulness and quantity of globules.—Researches of Andral and Gavarret; of Becquerel and Rodier.—Excess of globules the fundamental character of plethora.—Symptoms of the sthenic and asthenic forms.—Treatment.—Composition of the blood in anæmia.—Structure of the red globules.—Effects of diminished excretion upon them, &c.

THE variations which the blood undergoes in quantity when the balance between the processes of assimilation and excretion is disturbed, exercise upon the health an influence scarcely less powerful and important than the increase or diminution of some of the constituents of this fluid. From these causes arise many of the functional disorders which we so commonly meet with, such as palpitation of the heart, some forms of indigestion, giddiness, and various nervous affections. The terms plethora and anæmia have been in use from the earliest times; the former, to denote increase of the quantity of blood above the ordinary standard—the latter, its diminution below this point. More recently, Andral has made use of these terms in a different sense; and instead of applying them to mere increase or diminution of the volume of blood in the system, he has employed them to signify rather the elevation or fall of the quantity of globules in this fluid above or below the standard of health.

Though physiologists have estimated the weight of blood in the vascular system at twenty-five or thirty pounds on an average, there is no way by which we can ascertain the

* Dr. Laskowski, who is at present engaged in the Giessen laboratory, in investigating the supposed products of the desulphuration of caseine, albumine, and fibrine, by caustic potass, has made a series of experiments with the precipitates produced by neutralizing the potass solution of caseine, albumine, or fibrine, with acetic acid: he dissolved these precipitates in solution of potass and kept the fluid in ebullition for several hours, and yet the subsequent neutralization with an acid gave rise to the evolution of sulphuretted hydrogen; the same was the case when the precipitate had been fused with dry caustic potass, and even with precipitate, which, upon ebullition with potass ley, and addition of a drop of solution of sugar of lead, yield no precipitate of sulphuret of lead. It may not be without interest to remark here, that the oxide of caseine of Prout (not the leucine of Mulder) contains sulphur. I have convinced myself of this by actual experiments made with a small portion of this substance, for which I was indebted to the kindness of Mr. Walter Crum.—J. LIEBIG.

variations which it undergoes in weight or in quantity. We know, however, that the total quantity, as well as the relative proportions of its solid and fluid parts, are constantly varying slightly; but that as long as such variations are within the limits of health they are only trifling, as a constant reciprocal action is maintained between absorption and excretion; so that if a large quantity of fluid be quickly introduced into the blood through the medium of the digestive organs, an almost immediate effect is produced upon the skin, the lungs, the intestines, the liver, or the kidneys, which organs thus become the safety-valves of the circulation, (as they have been termed by Dr. Copland,) and relieve the system from the injurious, and otherwise not unfrequently fatal, effects of excessive vascular fulness. Continued disturbance of the balance between absorption and excretion produces more permanent effects upon the constitution and quantity of the blood, subjects which have been very fully investigated analytically by Andral and Gavarret, and still more recently by Becquerel and Rodier. Previous to the researches of Andral it was believed that in plethora the blood was rich in fibrin and globules, and the correctness of this view as regards the increase of the globules seems to have been sufficiently proved by his observations, though Becquerel and Rodier are opposed to the opinion of their quantity being augmented. Believing, therefore, that Andral is correct in regarding the increase or diminution of the quantity of globules as more the fundamental conditions of the blood in plethora and anæmia than the simple increase or diminution of its whole amount, I shall make use of these terms in reference to the proportion of globules more than to the quantity of blood. We should, however, observe, that the increase of the amount of blood which occurs in vigorous persons, in the sthenic form of plethora, is generally accompanied with increase of the globules, while diminution of the quantity of blood is for the most part attended with diminution of the globules, most causes which diminish the quantity of blood having also the effect of lessening the proportion of globules. From this it is evident that the amount of the circulating fluid and the proportion of globules are so connected that they could scarcely be considered apart from each other. If, however, we regard the rise or fall of the globules above or below the average of health as constituting the fundamental conditions in plethora and anæmia, we may have two varieties of each rising out of the increased or diminished amount of fluid in the vascular system. Thus we may have plethora with increase of the globules relative to the other constituents, and plethora without relative but with absolute increase. Again, we may have anæmia—that is, diminution of the globules—along with diminution of the quantity of blood in the vascular system; and we may have anæmia with vascular fulness. This last variety would constitute a form of plethora if we were to use the term in reference to vascular fulness only; and, indeed, this variety so nearly resembles asthenic plethora, that the diagnosis cannot always be easily made. We shall also have occasion to observe, that in the early stage of chlorosis there is sometimes vascular fulness from retention of the fluid part of the blood, and that this has a tendency to induce anæmia by interfering with the interchanges which take place between the fluid of the globules and the liquor sanguinis. The impossibility of estimating the quantity of blood in the vascular system, and of fixing in individual cases the healthy proportion of globules, prevents us from being able to prove the existence of each of these varieties from examination of the blood, but their presence may be sufficiently ascertained from observation of the degree of redness or pallor of the surface, in conjunction with the degree of turgidity of the tissues and the fulness of the vessels, and from physical examination, by the stethoscope, of the veins and arteries. We can also conceive the possibility of another form of anæmia besides these existing—viz., where the proportion of globules to the other constituents of the blood remains natural, but where the total quantity in the system is diminished. It is probable, however, that such a state scarcely if ever occurs, as most of the causes which permanently reduce the quantity of blood have also the effect of lessening the proportion of globules.

Composition of the blood in plethora.—Andral examined the blood in thirty-one individuals, who had well-marked symptoms of plethora. The quantity of fibrin was within the limits of the healthy proportion, though somewhat below what he has adopted as the average, the quantity being 2.7 in the cases of plethora, and in health varying between 2.5 and 3.5 in 1000 parts of blood. The organic matters of the serum did not vary materially from the ordinary proportion. He

discovered, however, that the quantity of globules was considerably above 127 in 1000 parts, the proportion which he has regarded as the average of health. The medium quantity of globules in the thirty-one cases was 141.1; the minimum, 131, and the maximum, 154. From analysis, he came therefore to the conclusion, that increase of the globules constitutes the essential character of plethora. Becquerel and Rodier, however, who dispute the correctness of this conclusion, contend that Andral has fixed the average proportion of the globules too low; that the medium of the thirty-one cases is that of health; and that in plethora the blood does not alter in composition, but is merely increased in quantity. This they have set forth in their third law as follows:—"The plethoric condition, and the symptoms which accompany it, result probably from an increase in the quantity of blood naturally contained in the system, but not from any change in the composition of this liquid, and in particular, not from any increase of the proportion of the globules."^{*}

They seem to have been led to adopt this opinion as to the state of the blood in plethora, from having analyzed it in eleven healthy men, in whom they found the average quantity of globules, 141.1, and in eight healthy women, in whom it was much lower, being only 127. They have found, therefore, that sex has a great modifying effect upon the quantity of the globules, and think that, from having neglected to make this distinction, Andral and others have fixed the average too low. While, however, we would agree, with Becquerel and Rodier, that plethora may exist, independent of increase of the globules, we cannot overlook the fact, that in vascular plethora the proportion is generally high, and often far above the average. In a case of icterus examined by Becquerel and Rodier, the proportion of globules was as high as 164.

Denis and Simon found that the solid constituents of the blood, especially the corpuscles, varied with the strength of the constitution, and Lecanu's observations proved, that in men of sanguineous temperament the blood contained 136 of globules, while that of lymphatic men contained only 116; and, again, that the blood of sanguineous women contained 126 of globules, while that of lymphatic women contained 117.† Andral, too, in fixing 140 as the maximum of the healthy state, and 110 as the minimum, makes these observations:—"This maximum, 140, is allied to the state of plethora, the development of which constitutes a morbid state. Strength of constitution is the condition of the economy which contributes most to elevate the globules towards their maximum, whilst weakness, congenital or acquired, is that which lowers them towards their minimum. Looking, then, to these facts, to the varieties in the proportion of globules in individuals of different constitution and temperament, as well as to the considerable increase or diminution which takes place in the same individual, under the operation of causes which are known to have these effects, we can see no reason to think that there is a fixed point, beyond which the quantity of globules does not increase. And when to this we add the fact of their having been found by Andral above the average of health in plethora, there seems sufficient reason to adopt his view as to the increase of the globules, constituting the fundamental character of plethora, in preference to that of Becquerel and Rodier, which would regard it as solely an increase of the quantity of blood.

Sthenic and asthenic plethora.—Plethora has been divided, in relation to the tone of the vascular and muscular systems, and of the tissues generally, into two varieties,—the active or sthenic, where tonicity is unimpaired, and passive or asthenic, where there is loss of tone. Both of these varieties result either from assimilation being over active, so that too much blood is formed, or from excretion being defective, so that too little is expended, or from these causes being variously combined. The former cause has the greatest tendency to produce the sthenic form, by increasing the quantity of globules; the latter, the asthenic; and when diminished excretion ceases to be accompanied with increased assimilation, or predominates, we shall have augmented quantity of blood, but without corresponding increase of globules. Hence we see that asthenic plethora may, in some cases, form a sort of intermediate state between true plethora and anæmia; and this will be still further shown when we come to consider the effects of diminished excretion in preventing the nutrition of the globules.

Symptoms of plethora.—In plethora the capillary vessels are injected, and the complexion is florid, from the abundance of the red globules. There is fullness of the tissues generally,

the vascular system is distended, and the pulse is full and tense. When this condition has not proceeded so far as to constitute a state of disease, all the functions are active, there is superabundance of life, and the mental and bodily powers are vigorous. Beyond a certain point, however, this state tends to produce various functional disorders, and even structural diseases, such as apoplexy. Dr. Williams observes, that "it is well if a great secreting organ is first excited under the high pressure, and relieves the system through free discharge, as by mucous or bilious diarrhoea; or one of these secreting organs may fail in its proper function, as the liver or the kidneys; and a bilious attack, jaundice, or a fit of gout, or gravel, is the consequence. Any of these, by establishing a perceptible ailment, disturbs the dangerous ease of the plethoric, and, by rendering necessary a temporary discipline, saves him from the worse results of plethora—apoplexy, structural disease of the heart, great vessels, kidneys, or liver."^{**}

There is often determination of blood to some particular organ. When it is towards the head we have heat in this part and flushing of the face, which may be accompanied with giddiness, noises in the ears, or heaviness and disposition to sleep, when there is congestion of the brain. At other times, there is palpitation of the heart, and oppression on walking fast or ascending; or there may be dyspnoea, from congestion of the lungs. The brain, the lungs, and the heart, are not the only organs thus liable to suffer from congestion and over excitement, for we sometimes have congestion of the mucous membranes, and this may cause irritative dyspepsia, or epistaxis, or hæmatemesis, or bleeding from piles, and, in females, menorrhagia.

In asthenic plethora there is more oppression of the functions, and greater tendency to torpor of the secreting organs, than in the sthenic form; and Dr. Williams has observed, that it tends to produce congestions, and passive hæmorrhages, and fluxes, or dropsies; and if continued, structural changes in some organs, as dilatation of the heart, enlarged liver, varicose veins, &c.

It not unfrequently happens that plethora produces a state of febrile excitement of the whole system, attended with thirst, heat of skin, and quick pulse.

Treatment of plethora.—The treatment of sthenic plethora is very simple. Bloodletting constitutes the most direct means of lessening both the quantity of the blood and the proportion of the globules. Abstinence and regular exercise should also be enforced, and they should be combined with the employment of saline aperients and antimonials. Two teaspoonfuls of sulphate of magnesia, with an eighth of a grain of tartar emetic, may be taken as an aperient every morning, and along with this some mercurial medicine may be given occasionally at night. The same means are to be used in asthenic plethora, but bloodletting will more rarely be found necessary; and, along with mercurials and saline aperients and diuretics, to promote the secretions, it will be necessary to combine tonics, in order not only to increase them, but also to restore the tone of the secreting organs. When there is much palpitation of the heart, digitalis may be given, along with hydrocyanic acid, as a sedative. Attention to diet, which should consist chiefly of solids, moderation in the quantity of food taken, and regular exercise, will constitute the remainder of the treatment.

Composition of the blood in anæmia.—Pathologists were puzzled to account for the presence of the buffy coat on the surface of the clot in the chlorotic form of anæmia, until Andral's researches solved this difficulty. It seemed inexplicable that the same condition of the blood should exist in active inflammatory diseases, and in one where all the functions are in a state of torpor. Andral has shown that the buffy coat may be present in two different states of the blood, which may exist separately, or in combination. The most common is an absolute increase of the quantity of fibrin. This occurs in all the phlegmasious or inflammatory diseases, and is so considerable, that in some cases of pneumonia and acute rheumatism the quantity of fibrin has been found as high as 10, or even a little above this. The other state which may cause the appearance of the buffy coat is a diminution of the proportion of globules. This often occurs to a remarkable extent in chlorosis, which has been regarded as the type of anæmia, and there is, consequently, excess of the fibrin in this disease in relation to the quantity of the globules. The buffy coat may, then, be occasioned by two very different states of the blood, by an increase of the quantity of fibrin, or by diminution of the quantity of globules, and both have the effect of causing the fibrin of the crassamentum to be in excess

* Recherches sur la Composition du Sang.

† Simon's Animal Chemistry, vol. i. p. 236.

* Principles of Medicine, p. 133.

Becquerel and Rodier found the mean composition of the blood in thirty-one cases of anæmia as follows:—

Density of the defibrinated blood	1047.4
Water " " serum	1027.1
Globules	824.
Albumen	94.7
Fibrin	68.
Extractive matters and free salts	3.5
Fatty matters	8.
Serolin	1.806
Phosphorized fat	variable
Cholesterin	0.663
Saponified fat	0.110
One thousand parts of calcined blood contained,—	0.992
Chloride of sodium	3.5
Soluble salts	2.4
Phosphates	0.545
Iron	0.366

Physical structure and relations of the red globules to the liquor sanguinis.—The interesting experiments of Dr. G. O. Rees upon the blood have shown that the red globules have a very complicated structure, that they consist of a central nucleus around which there is a vesicle or membrane of a white colour, and that, between the nucleus and membrane, there is a space, which contains the red-coloured fluid, called hæmotosin. Dr. Rees has also shown, that important interchanges take place between the serum of the blood and the fluid contained within the envelop by the process of exosmose and

The hæmatosin of the fluid contained within the vesicle is the only part of the blood which contains iron. There is none found in the serum of the blood, but it exists in considerable quantity in the serum of the chyle, and it is from this source that the globules obtain their supply of iron, and by the process of endosmose, for the carrying on of which the relative conditions of the globules and of the chyle are admirably adapted. Whilst the liquor sanguinis has the same specific gravity with that of the fluid of the corpuscles, and has therefore little tendency to act upon them, the chyle is of much lower specific gravity, and has, in accordance with the laws of exsmose and endosmose, a tendency to enter the globules, and thus to supply them with iron to form the red colouring matter. From this physiological law we can easily see the importance of the specific gravity of the fluid of the globules being much higher than that of the chyle, and the possibility that diminished transpiration, by causing distention of the globules, may lower the specific gravity of the coloured fluid, and thus become one of the causes of spontaneous anæmia.

Reciprocal effects of increased and diminished quantity of fluid and of globules.—It has been observed that the balance between absorption and excretion has, in general, the effect of preventing injurious consequences from too free ingurgitation, and the same regulating power tends to prevent bad effects from excessive expenditure. It would seem that sudden increase of the quantity of fluid in the blood may prove injurious, not only by interfering with the functions of some organ, such as the heart, but also by the direct effect which dilution of the blood produces upon the globules. I have seen very serious effects caused by large quantities of fluid being taken where there was disease of the heart. Dr. Williams observes, too, that temporary plethora, with palpitation, feeling of oppression or dyspnoea, often results from the too free ingurgitation of liquids, and is not removed until perspiration or a free flow of urine relieves the vessels, and that these symptoms are most distinctly observed where some permanent disease of the organs of circulation or respiration incapacitates them for the increased task. In such cases the injurious effects would seem to result entirely from vascular fulness; but there are

others where they are probably the effect of sudden distention of the globules; and Dr. Williams has drawn attention to the possibility, that the serious symptoms, and even sudden deaths which sometimes take place from the drinking of large quantities of fluids after great exertion, may be owing to the too rapid addition of water to the blood causing distention of the globules, which had previously been collapsed. As we have temporary increase of the water in the blood in these ways, so we may also have temporary diminution, by excessive discharges, such as diarrhoea; but here, as in cases of excessive loss of blood, the thirst and the increase of absorption which are produced soon restore the quantity of blood, when the cause ceases to be in operation. The causes which more permanently affect the quantity of water in the blood are those which increase or diminish the proportion of its solid matters, more especially of the globules. In plethora the density of the blood is in relation to their quantity, being high in proportion as they are abundant, while the water is correspondingly small in quantity. M. Denis found, that in children, in very aged persons, in pale, delicate individuals, and in phthisical and chlorotic patients, the density of the blood ranged from 1045 to 1049; that in adults of good constitution, and enjoying perfect health, it ranged from 1050 to 1059; whilst in very vigorous subjects of sanguine temperament, it was, for the most part, from 1060 to 1069. Such varieties in the density are the effect of the varying proportion of globules, and it is much more to increase or diminution of these bodies, than of the other constituents, that the more permanent fluctuations in the quantity of water are owing. In six cases of chlorosis, where the mean quantity of globules was eighty-six, Becquerel and Rodier found the mean density of the blood, 1045.8, whilst in thirty-one cases of anæmia, the density was 1047.4, the quantity of globules being 94.7. Again, on the other hand, where the quantity was 152, the density was 1062.

FOREIGN DEPARTMENT.

M. DELPECH ON THE NATURE AND SYMPTOMS OF VARICELLA.

The Journal de Médecine for January and February contains an elaborate article by M. A. Delpech on an epidemic of Varicella, observed at the Hôpital Necker, to which he was then interne (house physician) in the year 1844. The epidemic lasted three or four months, and was confined to the patients of one ward, peopled by infants and very young children. The results at which M. Delpech has arrived, after a careful and minute analysis of the phenomena presented by the disease during this epidemic, are similar to those which have been generally adopted in this country of late years. His researches, however, are valuable as corroborative evidence. The following analysis of the more important parts of M. Delpech's essay will convey a correct idea of the Necker epidemic, as also of the pathological views which M. Delpech so ably advocates.

There were no prodromes, properly speaking; the appearance of the vesicular eruption being merely accompanied, or slightly preceded, by a little fever, heat of skin, nausea, or vomiting. During the course of the disease fresh eruptions would take place, each being accompanied by a renewal of the same general symptoms. The fluid of the vesicles first became lactescent, and then dried, passing through these periods in from three to seven days. The disease itself, however, often lasted much longer, owing to successive eruptions taking place. On many of the patients, instead of vesicles, there were pemphigoid bullæ, or the latter appeared simultaneously with the former. Not unfrequently, when the vesicles had arrived at the period of desiccation, the crusts remained moist, and the skin continued to secrete pus. The pemphigoid varicellæ were those which most frequently gave rise to the unfavourable occurrence. The presence of the bullæ seemed to indicate a deeper and more chronic inflammation of the skin; the pus secreted was generally serous. The suppurative diathesis which seemed to exist in these cases can scarcely, however, be considered the legitimate sequela of varicella.

The prognosis of varicella may be always favourable, as it is always a very benign disease; indeed, it has perhaps never been fatal of itself. It may, however, be associated with variolous eruptions, and then the state of the patient sometimes proves alarming. On the other hand, a child, whilst labouring under varicella, may be attacked with other severe disease, and thus be placed in a critical position. Thus, M. Delpech mentions having seen a child subject to convulsions die from

an attack which occurred whilst it was affected with simple varicella. In so mild a disease, there is, of course, but little treatment required. In the great majority of cases, hygienic means alone are necessary to treat it, or rather, to prevent its progress from being intempestively arrested. Nearly the only medicinal agent indicated is a mild purgative at the end of the treatment. It modifies favourably the purulent predisposition when the latter exists, by revulsive and secretive depuration. When the suppurative diathesis exists, in addition to the use of mild purgatives, topical remedies will be found of use, such as an ointment composed of calomel, one part; lard, ten parts; or sulphur or corrosive sublimate baths.

M. Delpech appears to think that the Necker epidemic of varicella originated spontaneously at the hospital, but that it extended itself in the ward by contagion; for other and adjoining wards were completely free. Nevertheless, he was not able to propagate it by inoculation. Two children, in a ward where there was no eruptive disease, were inoculated with varicella fluid taken from a patient out of the hospital, but without success. This result is confirmatory of various recent experiments, and seems to establish a marked and total difference between varicella on the one hand, and cowpox and variolous diseases on the other. M. Delpech is the more inclined to attribute the propagation of the disease in the Necker ward to contagion, from the circumstance of the children being attacked in groups, as if they had been exposed to the cause of the disease at the same epoch, although the length of their residence in the hospital was varied. After a careful and elaborate comparative analysis of the epochs at which the attacks occurred, and of all the data of these attacks, M. Delpech thinks he is warranted in concluding that the disease is transmitted anteriorly to the fifth day of invasion, and probably between the third and fifth. He also thinks that the incubation of varicella may be fixed at about twelve days. M. Delpech's analysis of his cases is so minute, that it sometimes requires a strong effort of attention to follow him. His deductions, however, appear legitimately drawn, and the process by which he arrives at them may be offered as a model for the followers of the numerical system.

M. Delpech concludes his essay by a parallel between varicella and variola. He shows that the origin of varicella is much more recent than that of variola, and reminds his readers that, as long as variola was observed in its primitive intensity, unmodified by inoculation or vaccination, no author thought of confounding the two diseases. Vidus Vidius, the first who gave a good account of varicella, expressly states that it is a different disease to variola or rubella, as the following sentence testifies:—*Quam obrem non videntur tanquam tertia species morbillis et variolis hæc pustulæ adjiciendæ, sed satis est si ad phlyctenas referantur.* Varicella has been erroneously confounded with variola by some modern authors, owing principally to the circumstance of the two diseases being occasionally met with at the same time, on the same individual, the one not excluding the other. The separate individuality of varicella, however, is proved,—by its existing in an isolated state, free from all variolous complication, both sporadically and epidemically—by the age of those whom it attacks, nearly exclusively children—by the perfect indifference with which it attacks all individuals, whether vaccinated or not, whether they have had variola or not, even when labouring under varioloid disease, or when recently convalescent from it—the complete absence of all modification in the manifestations of the affection in those who are or have been under the influence of variolous affections—the absence of all immunity conferred by varicella from variola or cowpox—the possible combination, and simultaneous development of varicella and variola—the impossibility of variola transmitting or giving rise to varicella, or of varicella transmitting or giving rise to variola—the doubtful possibility of transmitting varicella by inoculation, notwithstanding the experiments of Willan, which have been disproved by all subsequent experimentalists—and, lastly, the decided and constant difference in the form and symptoms of the two diseases.

This elaborate essay certainly does M. Delpech great credit. It has been rewarded by the Monthyon prize—a yearly prize, given by the Faculty of Medicine of Paris, for the best memoir on the diseases of the past year, as observed in the Paris hospitals.

M. BRICHETEAU ON THE ANTAGONISM OF AGUE AND OF PULMONARY CONSUMPTION.

This question has been much discussed of late by French medical practitioners, as our readers are well aware. M. Bricheteau, physician to the "Hôpital Necker," analyzes the

various communications that have appeared on the subject, including documents from different parts of Algeria, from Bourdeaux, Strasbourg, Lyons, the department of the Ain, Rochefort, Rome, &c.,—all localities in which intermittent fever is rife,—and appears to come to the conclusion that there cannot be said to be antagonism between the two diseases—that is, exclusion of the one by the other; although the circumstances which favour the development of intermittents may be, and in all probability are, unfavourable to the development of phthisis. M. Brichteau thus concludes his remarks:—

“Although, on examining the etiology of these diseases, we do not find incompatibility between the causes of phthisis and intermittent fevers, it is impossible not to recognise, either in the climate of marshy districts, or in the influence of marshy miasmata over the economy, conditions favourable to tubercular patients. Our knowledge of this fact is to be referred to the authors of the labours which we have enumerated. But instead of calling to our assistance some obscure antagonizing tendencies, would it not be possible to account for this kind of prophylaxy, by attributing it to the moist uniform heat which reigns in some marshy districts, and which, by favouring the development of fever, may impede that of pulmonary tubercularization. Does not this appear proved by what takes place at Strasbourg, where the climate being both damp and cold, the town is ravaged by intermittent fever and by phthisis; whereas the more southern departments of L’Ain, La Nièvre, Le Var, &c., are decimated by intermittent fevers, but offer very few phthisical patients! We may also add, that it is impossible to deny that in all countries intermittent fevers preserve from other affections. The Dutch appear to be aware of this fact, as Boerhaave informs us, that they are in the habit of congratulating themselves on the return of their fevers. The same Boerhaave, along with Hoffmann, Lancisi, and Sydenham, thought that intermittent fevers freed us from various diseases, and even predisposed to longevity: ‘Febres intermittentes, nisi malignæ, ad longevitatem disponent, et de purant ab inveteratis malis.’ Some recent writers think that typhus fever is rarely met with in countries ravaged by endemic intermittents.”

THE SYDENHAM SOCIETY AND PAULUS ÆGINETA.

To the Editor of THE LANCET.

SIR,—In a few days I will send you my promised remarks on the prostitution of the funds of the Sydenham Society, in the publication of the anile work of Paulus Ægineta. On the present occasion I forward you a specimen or two of the trash thus published, as a whet to your readers’ appetite:—

On affections of the breasts.—“After childbirth, the milk frequently, being converted into cheese in the breasts, produces inflammations. Wherefore, at first we may use these applications:—Having squeezed a soft sponge out of tepid oxyerate, apply it to the breasts, and bind it on in the proper form; or use dates triturated in oxyerate with bread, or a whole egg with rose oil and some cerate; or alum, fleawort, with coriander and parslain, may be applied in the form of a cataplasm; or apply the firestone triturated with cerate, and bind it on.”

Uterine suffocation and hysterical convulsion.—“Things of a strongly fetid smell are to be applied to the nose, such as an extinguished lamp, castor, liquid pitch, gum vernix, burnt wool and rags. Some have even brought close to the nose a chamber-pot containing stale urine or fæces.”

Nor is the commentary less ridiculous.

But, Sir, I will withdraw all I have said, and withdraw all I propose saying, if any member of the Council of the Sydenham Society will copy and transmit to you any one page of the 800 in question to which you will give a place in THE LANCET. Can anything be fairer?

But no such page, I will affirm, can or will be found. The whole affair is a dereliction of duty on the part of the Council of the Society, and a degradation to our science and literature.

I should not have exposed this matter as I intend to do, had I not observed that the thing is to be extended to three volumes—three volumes of arrant and intolerable nonsense. This must—this shall not be! I rather advise the Council of the Sydenham Society to adopt the resolution of Macbeth—

“We will proceed no farther in this matter.”

Feb. 1946.

CENSOR.

ON THE CAUSES, PATHOLOGY, AND TREATMENT OF DEFORMITIES IN THE HUMAN BODY.

(WITH CASES AND ENGRAVINGS.)

BY JOHN BISHOP, ESQ., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, SURGEON TO THE NORTHERN DISPENSARY, LATE SENIOR SURGEON TO THE ISLINGTON DISPENSARY, ETC.

NO. II.

Sketch of the vertebral column.—The vertebræ levers of the first order; the whole column a lever of the third order.—Normal figure of the vertebral column, how ascertained.—Strength due to figure estimated.—Influence of weight acting vertically estimated.—Ordinates and abscissæ of the spinal curves computed.—Figure of the bodies of the vertebræ.—Articulations and motions of the vertebræ.—Intervertebral cartilages.—Curvature of the spine due to the cartilages principally.—Tables of vertebræ and cartilages.—Flexibility of the spine due to the elasticity of the intervertebral cartilages.—Flexibility of the three regions of the spine compared and estimated; mistaken views of authors on this subject.—Ligaments of the spine.—Effects of equal and unequal pressure on the intervertebral cartilages; loss of height during their compression estimated.—Elasticity of intervertebral cartilages different from that of inorganic matter.—Effects of equal and unequal pressure on the vertebræ.—Injurious effects of neglecting unequal pressure illustrated.

THE VERTEBRAL COLUMN.

It will be quite unnecessary to encumber these papers with such details of the vertebral column as may be found in any elementary anatomical work. Such erroneous statements respecting distortions of the spine have, however, been made, and so many extraordinary and empirical methods have been employed for relieving the various abnormal states of this organ, that a closer examination into its physical constitution will here be instituted, in order to establish the principles on which its diseases and distortions should be treated.

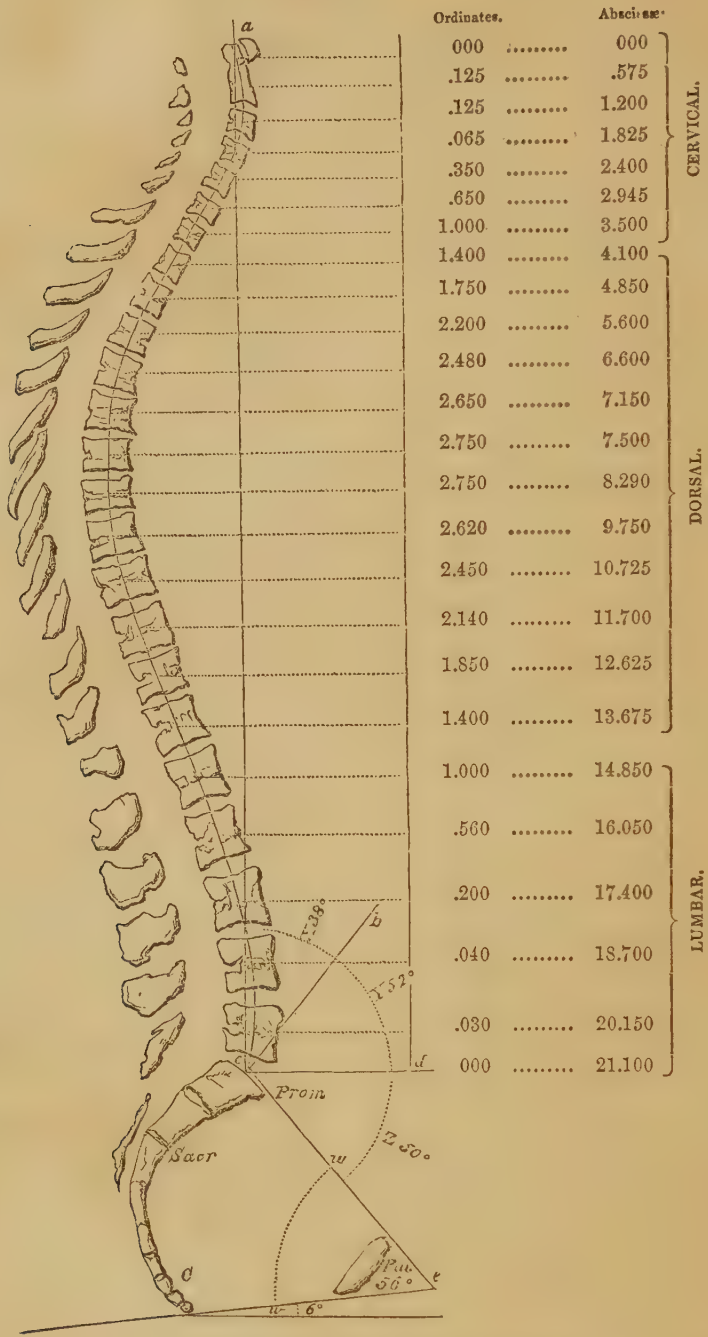
The human spine, whether considered anatomically or mechanically, is an organ of wonderful construction. Its figure is pyramidal, and with reference to the mesial plane of the body, it is curved in opposite directions. It consists of twenty-four bones, and twenty-three intervertebral cartilages. Each bone is a lever of the first order, the power being the force of the muscles acting forwards and backwards, and the fulcrum a variable line in the subjacent intervertebral cartilage. The whole spine, when considered as a rigid body, is a lever of the third order, its axis of rotation being in the sacro-lumbar articulation, the power being the force of the muscles that draw the trunk backwards and forwards, and the weight being the head and upper extremities, which are more distant from the fulcrum than the power.

The vertebral column is thus capable of acting either as one, or as many levers, for moving and supporting the numerous organs with which it is connected. The bones confer on it strength and rigidity, whilst the intervertebral substance gives it pliability and elasticity. The manner in which the vertebræ are connected together by osseous and ligamentary matter restricts within definite limits their movements upon each other, so that the integrity and security of the spinal cord are preserved; and although each joint admits of only a limited range of motion, yet, as the number of these joints is considerable, a great degree of mobility is conferred on the entire column.

When a mesial section of the body is made, without any plan being adopted to restrict the movements of the spine, the elasticity of the intervertebral cartilages and ligaments will cause the several parts to be distorted from their normal position, and the whole figure of the spine will, in consequence, be deranged. In order to avoid this, MM. Weber* removed from the trunk of a dead body the intestines, and such of the muscles only as they found necessary, without disturbing the ligaments of the spine and thorax. They then poured into the cavities of the abdomen and chest a sufficient quantity of plaster of Paris, by which means they obtained a perfect cast of the vertebral column, with all its inflexions. The parts having been thus fixed in their normal positions, the whole was bisected in the mesial plane, and a drawing of this section of the spinal column was taken. This drawing has been

* Mechanik der Menschlichen Gehwerkzeuge. Göttingen. 1836.

FIG. 1.



Scale:—One-quarter of the size of the adult male.

reduced, and adapted to our present purpose. MM. Weber have thus furnished us with the only true outline of the figure of the spine, including the relative positions and proportions of its several bones and cartilages, which has hitherto been obtained. The figure of the spine is an irregular curve, the superior and inferior portions of which, viewed in front, are convex, and the central portion is concave. By this triple curvature, the spine is said, by Rollin and Majendie, to be sixteen times stronger than if it were straight.* It will be observed, that

* This must surely be altogether a mistake. It is true, that if a force acting vertically on the upper edge of a straight, thin, elastic lamina, placed upright on the ground, produce (n) curvatures in it, the resistance of the lamina, when in a state of equilibrium, is rather more than $(n+1)^2$ times the weight which it would bear in its vertical position without bending. (See *Penny Cycl.*, Art. "Spring.") But this case is very different from that

the vertical line *ac* passes nearly through the axes of the occipito-atlantic and sacro-lumbar joints, and that the three lower cervical vertebrae, the whole of the dorsal, and the first, and nearly the whole of the second lumbar, lie out of this line. The line drawn through the centre of the bodies of the vertebrae gives the figure of their curvature; the horizontal lines drawn from the line *ac* to the curved line, show the distance of this line from the centre of each vertebra. When the body is in the erect posture, the line *ac* marks the direction

of the spine, which is not only *not* a thin lamina greatly elastic throughout, but its curvatures are its natural and proper figure, and therefore there can be no tendency in the spine when pressed upon by a vertical force to restore itself to a state of straightness, whereas the great resistance which the lamina opposes to the force of pressure is entirely owing to this tendency; so far, then, from being stronger in consequence of being originally bent

of the force arising from the weight of the head, and, consequently, of any heavy body placed upon it, and the horizontal lines show the distances at which the force acts on each vertebra. The same weight also acts upon any vertebra in curving the spine with a force proportional to the length of the horizontal line at that vertebra. Those vertebrae which lie anteriorly to the line ac are thus acted on in an opposite direction to those which lie posteriorly to it.

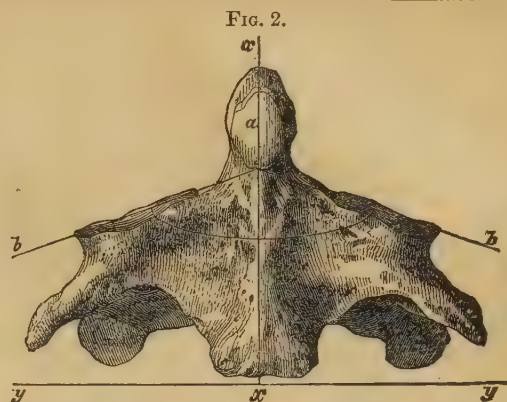
From what has just been stated, it appears that in the erect posture of the spinal column, the vertebrae traversed by the line ac must resist a weight placed on the head with the greatest mechanical advantage; and the sixth and seventh dorsal vertebrae, which are the most remote from the line ac , must resist it with the least. Hence we may readily understand why it is that when the spine is mechanically incurved in the mesial plane, it is so most commonly at this part. The line bc , perpendicular to the plane of the sacro-lumbar articulation, makes the angle X with the vertical equal to 38° ; and Y with the horizontal equal to 52° ; the sacrum with the pelvis, 56° ; the lower margin of the pelvis with the horizon, 6° ; and the promontory dce with the pubis Z , equal to 50° ; and with these data the angle which the pelvis makes with the spine is found. The numbers in the column of ordinates represent the distances, measured in inches, of the centre of each vertebra in the adult man from the line ac , of which those lying in front of the line are marked with the negative sign. The numbers in the column of abscissæ denote the distances of each ordinate from the point a , the origin of the curve. By help of these two columns, it will be easy to describe with accuracy the figure of the spine in its normal state, and in an adult person.

The transverse section of the bodies of the vertebrae is an oval, of which the length is to the breadth, in some of them, nearly as 1.4 to 1. The greater axis is directed transversely, or perpendicularly, to the mesial plane of the body in which the minor axis lies. The advantage of this figure over a circular body of equal area is, that it projects less into the cavities of the thorax and abdomen, and affords more space for the passage of the spinal cord. The spongy structure of the body diminishes its specific weight; and though less strong than solid bone, it is less susceptible of fracture. The areas of the articulating surfaces of the bodies increase from the second cervical to the last lumbar vertebra, so that the surfaces of the bones increase as the weight they have to sustain augments—an arrangement by which the stability of the vertebral column is secured. In order to give the spongy parts of the bodies of the vertebrae greater power to resist the action of the spinous and transverse processes, they are furnished with a band of hard, elastic, lamellated structure: the same kind of material also enters into the composition of the processes. In consequence of the curved figure of the spine, the articulating surfaces of the bodies of the vertebrae are nearly all oblique to the horizon; some are directed downwards, such as the last lumbar and lower cervical; others, as the lower dorsal, are directed upwards. In some, the posterior portion of the body is thicker than the anterior, as in the middle dorsal vertebrae. All these variations are necessary to the formation of the proper curve, as will be readily seen by inspecting the preceding figure.

The atlas is destitute of a body and intervertebral cartilage, and composed of laminated structure. It is articulated to the condyles of the occiput by a ball-and-socket joint, in such a manner that the head cannot turn laterally without the atlas, nor the atlas without the head. The atlas, however, is articulated to the dentata in such a manner that it can rotate freely upon it through the large arc of a circle. This arises from the articulating surfaces of the latter being portions of a conical surface, ($b\ b$, fig. 2,) whose axis, xx , passing through the odontoid process a , coincides with the axis of motion of the corresponding oblique surfaces of the atlas—an arrangement which is dissimilar to that of any succeeding vertebra. By means of the articulations of the atlas with the occiput and dentata, the head can move backwards and forwards in

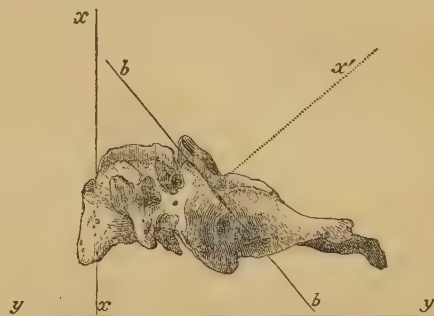
into several curves, the spine is, in fact, much weaker, and the greater the radius of curvature at any point of the axis, the less will be the strength. In confirmation of this statement, Dr. Young says—"The curvature of the axis from any point will always be proportional to its distance from the line of direction of the force, not only while the column remains nearly straight, but also when it is bent in any degree that the nature of the substance will allow; if the column was originally bent, any force, however small, applied to the extremities of the axis, will increase the curvature according to the same law."* The advantage of the curved form is, that the shocks and jars applied at either end of the spine tend to bend the axis, which would, if straight, crush some of the vertebrae, in consequence of the force acting on them in a perpendicular direction.

* Nat. Phil., vol. i. pp. 138, 139.



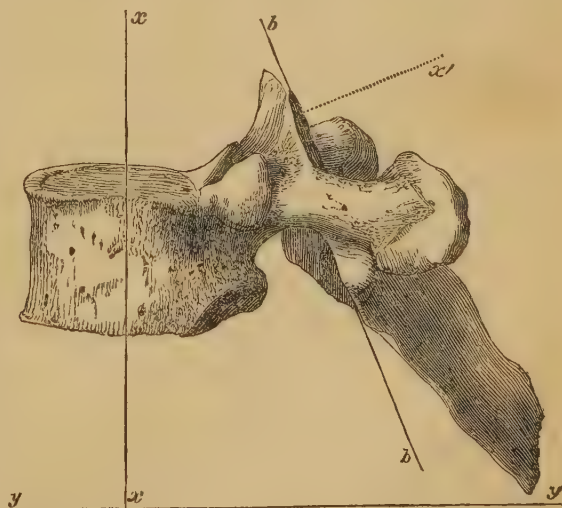
vertical planes through a large horizontal range. The dentata cannot revolve on the succeeding vertebra, (fig. 3,) in conse-

FIG. 3.



quence of the oblique articulating surface, $b\ b$, of the latter lying in one and the same plane, to which xx is perpendicular, which line is inclined to the axis of revolution, xx . In the dorsal vertebrae, the oblique surfaces, (fig. 4,) $b\ b$, do not lie

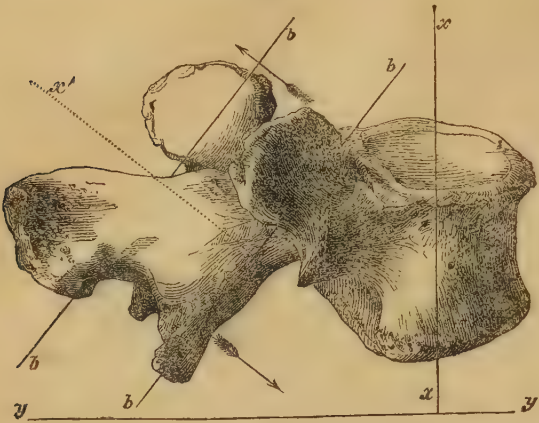
FIG. 4.



in the same plane, but are directed so as to form portions of a conical surface about the axis of the body, xx , and therefore they are allowed a certain amount of twisting action. In the lumbar vertebrae, (fig. 5,) the oblique processes, $b\ b$, are large, and their surfaces are excavated, and almost perpendicular to the upper surface of the body, so as to prevent any twisting or spiral motion whatever of the trunk about the axis, xx .

We have seen why the vertebrae cannot revolve about the axis of their bodies except in a limited degree, and we have now to consider whether they have any sliding motion, and also what takes place in bending the body either backwards, forwards, or laterally. The vertebrae cannot slide forwards, on account of the oblique process of the next lower vertebra,

Fig. 5.



nor backwards, owing to the inferior oblique process of the next superior, unless these processes slide from off each other, which cannot occur in any natural posture of the spine, as is evident from this consideration, that if such an extent of motion of the processes took place, not only would dislocation be the result, but the trunk would have a degree of flexion far greater than that of which it is known to be capable in the healthy subject. With respect to sliding laterally. In the five lower cervical vertebrae there is very little opposition to a lateral sliding at right angles to the mesial plane, from the circumstance that the surfaces of the oblique processes on both sides are very nearly in the same plane, and therefore they are chiefly prevented from slipping off each other in that direction by the several ligaments by which they are bound. In the dorsal, the surfaces of the oblique processes are rather inclined to each other, and therefore offer a greater obstacle to such a lateral sliding; whilst in the lumbar, the inclination of these surfaces is so considerable, that the vertebrae are firmly locked one within the other. It will be observed, that the situation of both the superior and inferior oblique processes precludes the possibility of their sliding diagonally. In bending the body either laterally, backwards, or forwards, the figures of the vertebra present no impediment to the rotation of one about the other, the centres of motion being, in the first case, the base of the superior oblique process of the next lower vertebra; in the second, the superior process of the next lower; and, in the third, the compressed anterior portion of the subjacent intervertebral cartilage. These motions, however, are reduced within very narrow limits by means of the ligaments and muscles.

In order to give the spine the requisite flexibility and elasticity, there is interposed between each contiguous vertebra, except the first and second cervical, a highly elastic fibrous substance, the intervertebral cartilage. The twenty-four vertebrae are consequently furnished with twenty-three cartilages. These yellow fibrous tissues have been minutely examined by E. H. Weber, by whom they have been described and figured in Meckel's Archives for the year 1827. It appears that each cartilage is composed of a bundle of fibres which are parallel to the axes of the bodies of the vertebrae, and bound together by the membrane in which the spine is enclosed. When the body is inclined forwards, these fibres are bent at the anterior, and straightened at the posterior margin of the articulating surfaces of the vertebrae; the reverse takes place on bending the body backwards. With a view to estimate the curvature and flexibility of the spine, the Messrs. Weber have measured the osseous and cartilaginous portions of it. The curved figure of the spine depends principally on the unequal heights of the anterior and posterior portions of the intervertebral cartilages; and what is due to the bones, and what to the cartilages, is exhibited in the following table, wherein the unit is a millimetre = 0.03937 inch. The first column contains the number of each vertebra reckoned from above downwards; the second, the mean altitudes of the bodies of the vertebrae; the third, the mean heights of the intervertebral cartilages; the fourth, the difference between the heights of the anterior and posterior portions of each vertebra; the fifth, the difference between the height of the anterior and posterior faces of the intervertebral cartilages; the sixth, the mean diameters of the cartilages. The signs + and - denote the excess or defect of the anterior in relation to the posterior portion.

	1.	2.	3.	4.	5.	6.
CERVICAL.	1	0.00	0.00	0.0	0.0	0.0
	2	31.50	2.70	+ 3.0	+ 0.6	14.7
	3	18.20	3.55	+ 0.8	+ 0.1	14.9
	4	13.05	2.65	- 0.1	+ 1.3	14.2
	5	13.10	3.75	- 0.6	+ 1.5	15.1
	6	12.00	4.60	- 1.0	+ 1.2	15.9
	7	13.00	3.45	- 0.8	+ 0.1	15.2
		95.85	20.70	+ 1.3	+ 7.8	
DORSAL.	1	16.80	3.40	- 1.0	+ 0.8	17.0
	2	18.60	3.15	- 0.2	- 1.3	19.3
	3	18.50	2.40	- 2.0	- 1.2	21.3
	4	19.20	1.90	- 1.9	- 1.8	21.9
	5	19.85	2.15	- 2.0	- 0.7	26.4
	6	19.40	3.10	- 2.4	- 1.4	27.5
	7	19.50	3.15	- 1.5	- 1.3	28.5
	8	20.45	4.30	+ 0.3	- 1.2	27.8
	9	20.45	3.20	- 0.6	- 1.2	28.0
	10	23.20	2.50	- 1.4	- 0.6	28.8
	11	23.20	5.65		+ 0.7	
	12	23.80		- 1.0		
		242.95	34.90	-13.3	- 9.2	
LUMBAR.	1	26.60	4.70		+ 2.0	27.9
	2	28.15	4.85	- 0.8	+ 2.1	29.1
	3	23.15	6.90	- 1.1	+ 2.2	29.1
	4	26.75	6.85	+ 0.7	+ 2.2	29.3
	5	26.30	8.65	+ 1.7	+ 3.3	29.5
			10.90	+ 6.2	+ 2.3	27.7
		135.95	42.85	+ 6.7	+21.1	

By comparing the several amounts in this table, we see that in columns 4 and 5, the heights of the anterior and posterior sections of the bones and cartilages in the cervical, dorsal, and lumbar regions are unequal, the aggregate differences being as follows:—

	Heights of Vertebrae.	Heights of Cartilages.	Sum.
Cervical	+ 1.3	+ 7.8	+ 9.1
Dorsal	- 13.3	- 9.2	- 22.5
Lumbar	+ 6.7	+ 21.1	+ 27.8

From this estimate it is quite apparent that the spine can never become a straight column, that the cervical and lumbar curves are occasioned principally by the intervertebral cartilages, and the dorsal curve chiefly by the wedge-like figure of the bodies of the vertebrae; although, as appears from the table, the cartilages, as well as the bones, are thicker at the posterior part in the dorsal region. As the bodies of the vertebrae are inflexible, the flexibility of the vertebral column is derived entirely from the compressibility and elasticity of the intervertebral cartilages, and a knowledge of their three dimensions—namely, their length, breadth, and thickness—is necessary in order to enable us to estimate the

relative flexibility of the cervical, lumbar, and dorsal regions. In the first column of the table, we see that the height of

	M. M.
The cervical cartilages is	= 20.7
The dorsal ditto	= 34.9
The lumbar ditto	= 42.85

and the mean diameter of the

Cervical	= 15.0
Dorsal	= 25.3
Lumbar	= 28.0

therefore, if we assume the breadth of the cervical, dorsal and lumbar cartilages to be equal to their length, the surface of their horizontal sections in millimeters will be nearly as—

Cervical.	Dorsal.	Lumbar.
225	640	784

so that when the cervical, dorsal, and lumbar portions of the vertebral column are curved with equal force, their angles of flexion due to the elasticity of their cartilages will be nearly as—

$$\frac{20.7}{225} : \frac{34.9}{640} : \frac{42.8}{784} = 846 : 297 : 298$$

By this, we perceive, that under an equal force the dorsal and lumbar portions of the spine possess very nearly an equal degree of flexibility, and that the cervical portion has nearly three times the flexibility of either the dorsal or the lumbar. The force exerted on the cartilages of the lower portions of the spine must, however, be often, if not generally, greater than that on the upper, and this will cause the lower dorsal and lumbar cartilages to yield more in proportion to the cervical than is exhibited in the above calculations of MM. Weber; but the increase of flexion from this cause cannot be very great.

Mr. Skey appears to have entirely mistaken the relative degree of flexion of which the spine is susceptible; he observes, that—"nature has given to the region of the loins the greater freedom of motion, because that portion of the body is midway between the head and feet;"*—and, in certain positions, this tends, as he supposes, to give the body greater stability. Now, not only has the lumbar region the least power of motion of the whole column, but a greater mobility would have tended to render the movements of the superincumbent part unstable, and a person in such a predicament would be what is vulgarly termed *top-heavy*.

Mr. Harrison, on the contrary, has stated that motion is more limited in the dorsal than in either the cervical or the lumbar vertebrae. We find, however, from the above calculations, that the flexibility of the lumbar and of the dorsal vertebrae is very nearly equal. The intervertebral cartilages would permit the bones to move freely upon them, but the quantity, as well as the direction, of the movements of the several vertebrae, is limited by the oblique processes, and by ligaments of the vertebrae placed obliquely.

Ligaments of the spine.—The ligaments of the spine perform very important functions. It is well known that they serve to keep the vertebrae linked together in a continuous chain, and they also determine the limits of their motions upon each other. Amongst the ligaments of the spinal column, the functions of those which connect the head with the atlas and dentata are of a more active kind than those of the succeeding vertebrae. The ligaments of the spine possess great strength, and in robust persons are endowed with considerable elasticity. On the other hand, in persons of weak and relaxed constitution, their strength as well as their elasticity is often much impaired, for they admit of being stretched with much less force, and do not contract again with so much energy as in a healthy state.

In the erect position of the body, the ligaments of the spine are in the state of least action, as are also the muscles, because in that position no stretching force is exerted either on the oblique articulating processes, or on the bodies of the vertebrae, and therefore the ligaments must be in a state of repose. The crucial ligaments being, as their name implies, attached to the bodies, prevent their too great motion on the intervertebral cartilages, and also the too great horizontal or spiral movement of several of the vertebrae on each other—a movement which would endanger the integrity of the capsular ligaments of the oblique articulating processes. The anterior and posterior spinal ligaments, like the cervical, con-

nect the bodies of the vertebrae with each other, and limit the bending of the spine backwards. These ligaments are of great strength, which is the more requisite, because there are no bony processes which serve immediately to keep the bodies of the vertebrae from rotating on each other.

Effects of equal and unequal pressure on the intervertebral substance.—When the trunk has been kept in the erect posture during the day, an adult man, of middle stature, loses about one inch of his height, which he does not regain until after having remained some hours in a recumbent position. Six or eight hours will accomplish this effect, according to ordinary observation; but how much less time will suffice, has not, at least to my knowledge, been accurately ascertained. As the united thickness of the intervertebral substances in an adult man is about 3.875 inches, it must lose nearly one-fourth during the day, and regain it during the night, and if each intervertebral cartilage gained or lost an equal portion, the variation in each would be equivalent to $\frac{3.875}{23} = 0.168$ of an

inch. In consequence, however, of the unequal thickness of these cartilages, this is not an exact estimate. That the intervertebral substance is incompressible, and that it does not return to its former state immediately after any long-continued compression, are well-established facts. It differs, therefore, not only in structure, but also in function, from inorganic elastic matter, which returns after long compression to its primitive state, when the compressing force is removed.

It has been shown that the normal curves of the vertebral column are due to the unequal heights of the vertebrae and cartilages, and, consequently, every abnormal state of the figure of the spine must result from some change in one or both of these parts. Owing to the special adaptation of the figure and disposition of the articulating surfaces of the bodies of the vertebrae to those of the intervertebral cartilages, the latter are compressed equally in the erect position only, and it is in that position only that they can sustain the greatest amount of pressure, because the entire force is then distributed over their whole surface, and each part of the cartilage sustains its proper share of the load; but in every other attitude of the trunk the cartilages are unequally compressed. For example: when any two vertebrae move freely on each other in any direction, forwards, backwards, or laterally, the articulating surfaces of the bodies of the vertebrae, on that side to which the trunk inclines, approach each other, whilst those on the opposite side recede from each other. Hence it is obvious that, whenever the spine is curved in any one direction, some portion of the intervertebral substance bears a larger proportion of the whole compressing force of the superincumbent organs than the rest; and, if such unequal distribution of the force be long maintained, it must tend to derange the functions. We have seen that when the intervertebral cartilages have been subjected to continued pressure, they do not instantaneously recover their primitive condition. From this it may readily be inferred that, if the surface of the cartilage has been unequally acted on by a force applied day after day for some time, it will become so much compressed in one part, and expanded in the opposite, as to assume a new figure, adapted to the abnormal attitude which gave rise to its unequal compression. In fact, it may become diseased by the influence of simple mechanical compression, independently of other causes. The intervertebral cartilages having thus been made to assume a new figure, occasion deformity of the spine, and are indeed, in all probability, the usual seat of lateral distortion, when it is merely of a mechanical character.

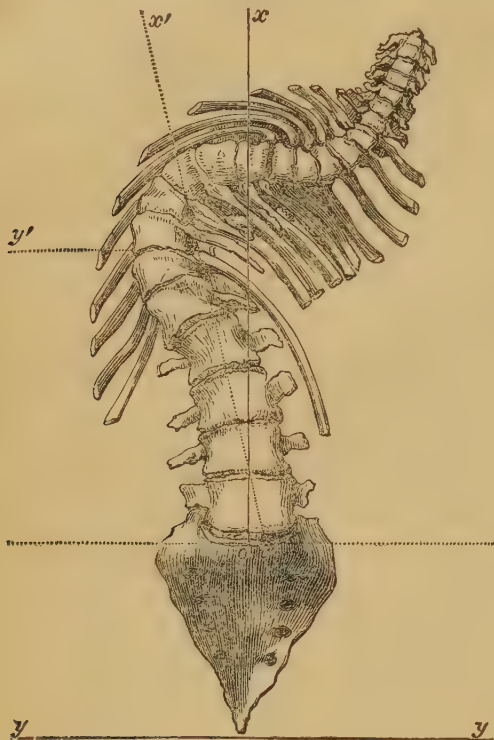
Effects of equal and unequal pressure on the vertebrae.—The bodies of the vertebrae being chiefly composed of reticulated structure, are more yielding, more vascular, and less elastic, than those bones which contain a greater proportion of the earthy constituents common to bone in general. It has been shown that the elasticity of bone varies with the greater or less proportion of the earthy to the animal matter, and that when the latter greatly predominates, the bones lose their elasticity altogether. The persons who are most prone to suffer from distortions of the spine, are those in whom the whole osseous system has the least proportion of earthy matter, consistent with a healthy though delicate state of constitution. Now, as in such persons the long bones of the legs are scarcely capable of supporting the frame, it naturally follows that the bodies of the vertebrae, having a smaller quantity of earthy matter in their composition than the former, and being consequently weaker, must suffer from the effects of pressure in a still greater degree. In many such persons, whilst young, and growing rapidly, the bodies of the vertebrae, having only a very low degree of elasticity, become compressible, like the

* Skey on a New Operation for Lateral Curvature.—p. 6.

intervertebral cartilages, and, like those bodies when unequally compressed, do not readily regain the normal state. Such persons may therefore become deformed from purely mechanical causes, and this may take place by an alteration in the figure either of the cartilages, or of the bodies of the vertebrae, or of both. That distortions actually do arise from the causes here assigned we have abundant opportunities of verifying, by inspecting the condition of the cartilages and bones of many preparations of the vertebral column in anatomical museums.

The annexed figure, for example, is a specimen of lateral curvature of the spine, selected for the purpose from the Hunterian Museum, and in this case, the whole column participates in the distortion. In this figure it will be observed

FIG. 6.



that the articulating surfaces of all the vertebrae, from the last lumbar to the first cervical, except that of *y'*, instead of being perpendicular to the mesial plane, are oblique. It is obvious that depression of the articulating surface of the third and fourth lumbar vertebrae towards the right side would throw the head into the line *x' c*, and that a similar depression of the articulating surfaces of any of the superior vertebrae would increase the inclination of the head in the same direction; so that without great muscular effort this person must have been unable to stand with the head in either of these several positions, even if he could stand at all. To prevent this waste of force, the muscles on the left side were called into increased action, by which the trunk was drawn towards that side, in order that its centre of gravity might be restored to the vertical line *x c*, and thus preserve the equilibrium of the body. During this period of unequal action, the bones and cartilages were unequally compressed, certain portions of them on the left side were absorbed, and the bodies of the vertebrae themselves took a wedge-like form, in order to allow the spine to assume that figure which, according to mechanical laws, it ought in such a case to present. In consequence of the magnitude of the dorsal curvature, the ribs on the right side are brought very nearly into juxtaposition with the spine; they must, therefore, have pressed on the respiratory organ, and impeded the inflation of the right lung. In this case there are no traces of serious disease in the spinal column, and the distortion appears to have arisen from the neglect of proper treatment in the early stages of the complaint. It is a case compounded of unequal pressure on the intervertebral cartilages, softening of the bodies of the vertebrae, and, consequently, of unequal muscular action, all arising from a disturbed condition of the mechanical and chemical forces which act on the body in its normal state.

ON THE RADICAL CURE OF HERNIA BY "INVA-GINATION," WITH SUGGESTIONS FOR SIMPLIFYING AND IMPROVING THAT OPERATION.

By JOHN CROUCH CHRISTOPHERS, Esq., M.R.C.S. London.

HERETOFORE, it appears to have been the fate, or the misfortune, of certain diseases, almost exclusively to fall under the treatment of non-professional mechanists, itinerants, impostors, and quacks; and not one among them, perhaps, has enjoyed so large a share of this patronage as Hernia, in its various forms. Not content with treating the disease after a simple and self-evident method, they arrogated to themselves the privilege of effecting its radical cure, and that, for the most part, by means as repulsive to science as to humanity. Protected by the ignorance of their victims, and enveloped in that mystery they were ever so anxious to cultivate, they dared, under the plea of affording relief, to perpetrate mutilations and cruelties of the most atrocious kinds. Scarcely one of the older writers on surgery fails to notice, or to describe, some or other of these methods, some merely to chronicle, others only to deprecate them.

In the works of Albucasis, Paulus Aegineta, Fabricius ab Aquapendente, Scultetus, Hildanus, Heister, Parey, &c., &c., the practice of our forefathers in this matter may be found recorded; and the following is a brief enumeration of the methods employed and described:—

1st.—The operation now performed for strangulated hernia, strangulation being absent.

2nd.—The "punctum aureum." This was performed by laying open the sac, and passing a gold wire round its upper end, including in its grasp the spermatic cord, the ligature being twisted to a degree of tightness, to prevent the descent of the intestine, but not to interrupt the circulation through the cord.

3rd.—Celotomy; castration; destroying the sac, and the testicle.

4th.—Scarifying the neck of the sac.

5th.—Cutting away the body of the sac, after having tied its neck.

6th.—Cutting away the body of the sac only.

7th.—Littlejohn's method by the oil of vitriol and caustics, for which he received 5000*l.* from George I.

8th.—The actual cautery; the royal stitch.

9th.—Sermecius' method; passing a ligature round the neck of the sac only, without including the spermatic cord.

10th.—Ointments; plasters; medicines administered internally; charms, and incantations.

11th.—The application of divers trusses, bandages, and a mechanical apparatus.

Such is the catalogue of means used, and of operations performed, in times when art was supposed to do everything, and nature allowed to do little. Some were upheld, others repudiated; but all were (more or less) practised: the more lenient and scientific by the surgeon—the more rude and barbarous by the itinerant and impostor.

In more modern times, three other suggestions, with their modifications, have arisen to effect the radical cure of hernia—1st, that of M. Belmas, (1829); 2ndly, that by injection; 3rdly, that by "invagination," the subject of the present paper.

Taking in review the foregoing methods, that by "invagination," as proposed and successfully performed by M. Gerdy, appears to me to be based on principles the safest and most rational; and though claiming, both on account of its simplicity and novelty, the highest commendation, and holding out the brightest hopes of benefit, to be derived both in a scientific and in a benevolent point of view, it does appear somewhat extraordinary (save any publicity it may have gained through the beautiful plates of M. Bourguery, a work, unfortunately that all are not able to possess) that it is very generally unknown, and where known, not unfrequently misconceived. I am not aware that it has been described or tested by any English operator, yet I do feel the following narrative claims for it the serious attention of all surgeons. I am led to describe it—first, because I think it merits a publicity it has not attained; and secondly, that I think I have devised a means of aiding its performance, and of ensuring its safety and success.

The following description is the abbreviated translation of a pamphlet, entitled, "A Memoir on the Radical Cure of Hernia, by the Method of M. Gerdy, jun.;" or, "by the Method of Invagination;" by M. Gerdy, junior, Interne of the Hospital of St. Louis, dated July 1st, 1835.

The writer prefaces his paper by stating that, to reply to some objections that have been advanced against the value and practicability of M. Gerdy's suggestion for an operation to effect the radical cure of hernia, that M. Gerdy exhibited at the Academy of Science and Medicine, two patients, formerly labouring under that disease, who, by submitting to this operation, were and still remained perfectly cured. Before giving a detail of their cases, he recalls the plan and principle of M. Gerdy's operation.

1st.—With the finger, thrust the skin into the canal of a reduced hernia, in such a manner as to form a "cul de sac," open externally, and which may be well represented by the finger of a glove, filling the canal of the reduced hernia, whereby the internal surface of the skin is brought in contact with the margins of the ring, and with the internal surface of the canal.

2ndly.—Fix the skin in the position indicated, by means of sutures, so passed as to traverse the bottom of the invaginated "cul de sac," together with the anterior wall of the canal, terminating at the external part of the same, so that the portion of skin thrust in be maintained in that position, and by the inflammation produced by the sutures, the surfaces brought in contact be caused to adhere.

3rdly.—By applying an irritant to the invaginated skin, and producing suppuration and consecutive adhesion of its walls, form a solid plug of it, and so oppose the return of the hernia.

Lastly.—Should greater solidity be sought, the external margins of the orifice of the "cul de sac" being vivified by incising the skin, may be brought together by sutures, and thus the cavity may be closed externally, and the skin forming the plug will be the more firmly fixed in the canal through which the hernia protruded.

Such, observes the writer, is the apparently complex, though easily performed operation, devised by M. Gerdy, for closing the passage through which a hernia protrudes.

He then asks—Would the operation described be likely to succeed? *A priori*, it is reasonable to hope that the inflammation produced would be sufficient to cause adhesion between the invaginated skin and the canal of the hernia, and by that means to close the opening. There are too many well-known facts in pathology pointing to similar results from inflammation to render this a question.

But may not this operation be perilous?—May not the peritonæum, certain important vessels, or organs, be wounded in its performance? To answer these objections, M. Gerdy performed the operation, as proposed, on the dead subject, for inguinal and crural hernia, and though, in these experiments, the skin was thrust in as far as possible, and the needles were made to penetrate as deeply as might be, in no one instance was the peritonæum interfered with, or the epigastric or obturator arteries wounded, although, in one case, the latter was given off by the epigastric, and encircled the ring. A little reflection on the mode of performing this operation will show the impossibility of wounding any important artery.

The skin is thrust in by the finger, that it covers like a cap, and pushes the peritonæum before it, and thus removes it some distance from the walls of the canal. Then a curved needle (with or without a handle) is introduced, and passed along the palmar surface of the finger in the "cul de sac," to its termination behind the ring, when, by depressing the handle, the point of the needle is directed from behind forwards, traversing the invaginated skin, and the anterior wall of the canal. It follows, therefore, that the needle does not pierce the skin of the "cul de sac" from before backwards, nor from below upwards; but, on the contrary, from behind forwards, because its point is thrust in that direction by depressing the handle, while those parts the finger pushes before it, beyond the prolongation, are necessarily removed from its reach. So far the operation does not appear to be dangerous, nor is it extremely painful, yet it holds out reasonable hope of success. When it is considered this operation is to remedy a disease which is a constant source of inconvenience, pain, and peril, ever exacting incessant precaution, and oftentimes penible restraint, and despite them both, not unfrequently leading to fatal results—when its misery is doubly felt by those labouring in the lower ranks of life, and therefore in the worst position to guard against its consequences—it must be admitted to be one of the most afflicting maladies human nature is subject to, whether we regard its frequency or the danger attending it; therefore, any operation based on reasoning, and borne out by fact, and thereby holding out a fair chance of radical cure, must, I think, be hailed as a great boon by the large number suffering its pains and penalties.

CASE 1.—N. C—, a shoemaker, and church singer, (cho-

rist,) aged sixty-two years, of a bilious temperament, and of strong constitution, became a patient in the hospital of St. Louis, the 26th of March, 1835. He had been afflicted with two inguinal herniæ, of nine years standing, one on the left side, about the size of the fist, another on the right side, about the size of a nut. He entered the hospital for the purpose of getting them cured. He was put on low diet, and ordered to have a lavement early in the morning following the day fixed for the operation; the ring on the right side not being large enough to admit the point of the little finger, M. Gerdy delayed the operation on that side, till he should procure an instrument smaller than the finger, and capable of replacing it. The operation on the left side was proceeded with, the canal there being sufficiently dilated. The spermatic cord was behind, and on the inside of the hernia. The apparatus for the operation was arranged as follows: some waxed double ligatures with a common curved needle attached to each end, the needles and the ligatures being greased; a pair of dissecting forceps to pull the needles through; small cylinders of cloth to place between the ligatures, and on which the knots of the sutures were to repose; some liquor ammonia, and a brush wherewith to cauterize the interior of the "invagination."

The patient being placed as for the operation for strangulated hernia, the surgeon, standing on the side to be operated on, having anointed the index finger of his left hand, thrusts the skin about an inch deep into the inguinal canal, parallel with, and in front of, the spermatic cord; he then passes a curved needle, resting it sideways on the palmar surface of the same finger, to the bottom of the cavity, and turns the point, directing it forwards, and pushing it on "by a movement of depression" he makes it traverse the anterior wall of the inguinal canal, an inch above the orifice of the "cul de sac." The second needle, attached at the other end of the same double ligature, is passed in a similar manner, traversing the anterior wall of the canal, a few lines on the outside of the former. An assistant then ties the two ends of this ligature together, which now forms a loop at the bottom of the "invaginated" prolongation, and keeps it intimately applied against the walls of the inguinal canal. The two other ligatures are arranged similarly, and tied over a roll of cloth. The interior of the "cul de sac" is then cauterized, and the patient is conveyed to his bed, his head and thighs being raised with pillows, in order to relax the abdominal muscles. In this manner, and with these precautions, the operation was performed.

Inasmuch as this man's calling entailed on him the necessity of using considerable exertion, M. Gerdy determined to close the orifice of the invagination, which was done as follows:—Two parallel incisions were made along the superior and inferior margins. He then formed two very short flaps, by dissecting the skin back about one line and a half the whole length of the same, and with sutures brought them into exact contact. The patient was put on low diet, and ordered to have compresses, dipped in cold lotion, applied over the part, with a bladder of cold water, to be renewed as it became warm.

On the fourth day after the operation, no untoward symptom had arisen, and there was but little inflammatory action; but on the following day phlegmonous inflammation attacked the parts embraced by the sutures, accompanied with fever. The patient suffered from colic, which was relieved by lavements, followed by copious stools. The cold bladders and lotion were continued, with low diet. On the seventh day, the patient was calm, free from fever; the local inflammation was moderate. The last ligature was removed on the fifth day. Adhesion between the "cul de sac" and the ring appeared to be well established, and already tolerably firm. On the fifteenth day all was cicatrized, and there only remained a small opening, large enough to admit a probe, in front of the external orifice of the "cul de sac." Since the operation the patient had resumed, for some time, his duties in the choir, occasionally wearing a bandage to give the parts time to consolidate firmly, and to prevent the risk of a return of his malady.

CASE 2.—C—R, aged sixty-one years, afflicted with asthma and chronic catarrh, with a recently fractured thigh, requiring him to go about on crutches; had been afflicted with inguinal hernia on the right side for many years past, which, despite of bandage and truss, frequently escaped, and formed a tumour in the scrotum, as large as his fist. The ring easily admitted two fingers to be introduced into the canal. The operation was performed on the 4th of April. The sutures were arranged, as in the first case, and the interior of the "cul de sac" was cauterized; but the external suture was omitted. The cold applications were ordered, but here they

appeared to do mischief, by aggravating the cough, which became very distressing. On the third day, all the sutures but two were removed, and the two remaining were loosed, on account of the inflammatory action already set up; and on the night of the fourth, these, in some way, were interfered with, and the "cul de sac" being no longer supported, was thrust out by the effort of coughing. The operation now appeared to have failed; but M. Gerdy wishing to turn the inflammatory action that still existed to good account, returned the skin within the orifice of the canal, and retained it there by a suture that pierced the margins of the same. The margins did not adhere; they suppurated, as did the interior of the "cul de sac;" but the end was thus kept in contact with the ring, adhered to its orifice, and the hernia was no longer to be seen, and, therefore, thought to be cured. On the 10th of May, during a violent paroxysm of coughing, the hernia reappeared; the patient was not able to reduce it, and waited the arrival of M. Gerdy, who, though succeeding, experienced no little difficulty. The canal was considerably diminished, so much so, that it would not admit the extremity of the little finger. From this circumstance, M. Gerdy hoped the simple application of a bandage might alone suffice to perfect the cure. A spica bandage was kept constantly applied, and the canal was soon completely and solidly obliterated. Standing, sitting, and lying, the bandage being removed, the patient has frequently made considerable and continued efforts by coughing, yet the hernia has not evinced the slightest tendency to reappear.

In this patient, a linear cicatrice may be seen, indicating the orifice of the invagination, and under this, at the ring, a solid uniform induration felt, that entirely prevents the return of the hernia; nor at that point is any impulse felt when the patient coughs violently, whilst in the neighbouring parts (the abdominal walls being but feeble) the impulse is felt very readily, without, however, any actual displacement occurring.

Such is M. Gerdy's account of the result of this operation in two cases. He then goes on to combat at some length the several objections that have been urged against it; the first he notices is to the effect that "the cure, though accomplished, may not last; that the hernia may force its way through the obliterated ring, or may form in another place, because, with persons who have long been suffering this malady, the abdominal walls are weak, and easily allow the viscera to escape. To one part of the objection the two cases cited furnish the reply; to the remainder he remarks, that in some cases, (as in Case 2) the abdominal walls are weakened; but this is by no means universal, and therefore some patients may be certainly and permanently cured, being in the same position as those who have received a cure by constantly wearing a truss, &c.

With regard to those in whom the abdominal walls are weakened, it is by no means certain even in them, in every case, that the malady shall return, seeing that the viscera escape with difficulty, even though the walls be thin, when there does not exist a direct channel, of which there are frequent examples in the neighbourhood of the linea alba after repeated gestation. Admitting, however, that this class of persons is subject to a reproduction of the malady if due precaution be not taken, does that circumstance negative the operation? It merely indicates the necessity of making them wear an appropriate bandage, which need not be so strong, or so irksome, as a truss, yet sufficient to prevent a return. They will then be in the same position with those who, though not having a hernia, are by nature or accident predisposed thereto, and who, by some means analogous to those set forth, guard against it. They will be in a state of perfect health, requiring some precaution on their part to maintain, while those who are actually ruptured, even with every precaution, cannot look on themselves as perfect or safe, seeing that many circumstances may be to them sources of danger, more or less serious. Other objections are answered—viz., the danger of wounding the spermatic cord, the epigastric artery, and the peritonæum. The analogy that has been tried to be established between this operation and that of castration and the golden suture, and, lastly, the fear that some have manifested lest this thrusting the skin into the inguinal canal should cause atrophy of the testicle,—to this he deigns no other observation than that he does not think it worth a reply. "*Car je ne veux pas combattre des moulins-à-vent.*" With this sentence M. Gerdy concludes his memoir.

In both the foregoing cases, in which this operation was performed, it will be observed, certain accidents, as they are termed, though they appear more like consequences, supervened, and some anxiety is betrayed to attribute them to

causes that do not appear the most likely to produce them. As in the first case "the phlegmonous inflammation that attacked the space embraced by the sutures" with the fever accompanying it, is laid to the patient's "taking too much food," to leaving off the cold applications, or to the surmise that such excessive action "was unavoidable." The constriction and irritation produced by the sutures themselves of course had nothing to do with it! yet, previously to testing the operation on the living, the said sutures had evidently caused M. Gerdy no little consideration, anxiety, and fear, inasmuch as he labours to show that the particular suture he adopted would avoid the chance of producing the identical mischief that arose. In the second case, on the third day, the sutures excited so much action, that some were necessarily removed, and those allowed to remain were obliged to be loosed, so that in the night following, they were in some way interfered with by the patient, and the effort of coughing forced the "cul de sac," which was no longer supported, out of the inguinal canal; nevertheless, the cure was effected, as we have seen. Further, in remarking on the consequences of the operation, M. Gerdy observes, "there is always an amount of inflammation set up, more or less intense, in the parts embraced by the sutures, and this it is desirable to obtain, to perfect the cure, though it is necessary it should be kept within certain limits;" for this purpose he had recourse to cold applications &c.; but he thinks now, that general or local bloodletting would be more expedient, should the inflammation be sufficient to warrant the same. Therefore, it appears, in both cases, the very means that M. Gerdy relies on for the cure, proved the source of the mischiefs he had to combat; the constriction produced by the sutures evidently caused the inflammation and distress, inasmuch as it was necessary to remove them to control it. The question, then, naturally presents itself—Could not the operation be so modified as to dispense with their use? The object in employing them is twofold:—

1st. To maintain the invaginated skin in position till adhesion secures it.

2ndly. To set up that amount of action between the internal surface of the invaginated skin, and the walls of the canal, to cause them to adhere.

Both these offices, I conceive, can be accomplished without their aid. It is true, the suture efficiently effects both, but in so doing, I fear it entails an amount of risk not quite warrantable; in fact, it does too much; for though we rely on the inflammation for the cure, yet we want to confine it to those parts only that we wish to adhere; in using the suture, the whole of the tissues within its grasp must suffer more or less from constriction, arrange it as you may, and a considerable degree of constriction must be employed too, or the parts would not remain in the position it is required to confine them.

In order, then, to supersede the use of sutures, two things are necessary—1st, the power of keeping the invaginated skin in position till adhesion is perfected; 2ndly, the means of producing sufficient action to cause the internal surface of the invaginated skin to adhere to the walls of the canal. The means by which I purpose to accomplish this may be stated in a few words. I follow M. Gerdy through the different stages of his ingenious operation to the point where we differ.

1st.—With the finger thrust the skin into the canal of a reduced hernia.

2ndly.—Take a curved needle, pass it sideways along the palmar aspect of the finger, till it reach the bottom of the "invagination;" turn its point forwards, depressing the other end, and cause it to come out, traversing the skin, and the anterior wall of the inguinal canal. Pass another needle in the same way, a few lines distant from the first. From this, I conceive, there will result an amount of action, provided the contact be maintained sufficient to produce the adhesion required, without using the ligature; and as it is fair to argue from analogy, I would instance the practice of attaching loose cartilages in joints to a given spot, by puncture, to bear me out in this view. Yet, remove the finger, and the parts no longer held in contact resume their natural situation, and cannot adhere in the position required. To obviate this, I have an instrument capable of adjusting itself to the size of the invaginated cavity it is destined to fill, and may be well represented by the double finger of a glove, composed of a material capable of containing air, at the same time that it will resist heat and the animal secretions; in fact, a short sac, with air or fluid confined within its walls, the centre being open, like a small finger-stall, for the purpose of admitting a plug, to give it firmness and support. This plug is attached to a wooden disc, on which five small knobs are fixed,

giving attachment to the four tongues of a belt that goes round the back and hips, and to a strap that passes under the buttock, to be attached to a button fixed in the belt behind. Any degree of pressure, tightness, or support, may be obtained, as the tongues or straps are regulated for any period, without the possibility of slackening or shifting position; and as this is accomplished by a means that does not admit undue pressure, no pain or inconvenience can arise from that cause, be it necessary to wear the instrument as long as may be.

By this means the invaginated skin may be maintained in exact contact with the parietes of the inguinal canal for any period, and, I conceive, without risk or annoyance. I think, moreover, that the action set up by passing the needles would be sufficient, after adhesion takes place, to hold the invagination in position without further interference. I do not think it impossible that this instrument, if worn for a lengthened period, would alone effect a cure, as it might induce that amount of action between the skin and the walls of the canal as to cause them to adhere. I much question the necessity of making the needles penetrate the parts so extensively and so deeply as M. Gerdy directs, in operating with sutures. Mere punctures, five or six in number, might, perhaps, be sufficient to produce the amount of action required, the parts being held in intimate contact by the means described. When adhesion has taken place, the instrument may be dispensed with, and the further directions of M. Gerdy carried out or not, as the case may seem to demand. The instrument I have described is, I am told, easily made, by no means costly, very simple, and very readily applied, and can be regulated at will by the wearer.

I do not wish to attach any undue importance to this modification; but I do wish to attach credit and importance to an operation, characterized by so high an aim, and based on principles at once sound, simple, and scientific.

Upper Montagu-street, Montagu-square, Jan., 1846.

REVIEWS.

On Famine and Fever, as Cause and Effect in Ireland; with Observations on Hospital Location, and the Dispensation in Out-door Relief of Food and Medicine. By D. J. CORRIGAN, M.D. Dublin: Fannin and Co. 1845. pp. 33.

The views here set forth of the relation existing between famine and fever in Ireland were first promulgated by Dr. Corrigan in *THE LANCET* many years ago. On the present occasion he has recorded the principal phenomena which have presented themselves in the chief epidemic fevers of the sister island in the century commencing with 1728, and ending with 1829. In this period, six of these fearful visitations are included. From the facts it is observable that a constant relation has existed in these epidemics between the supply of food and the existence of fever. In every instance the fever commenced after a single bad harvest, or a succession of them; continued to increase in violence as long as the scarcity of food remained, and as speedily and certainly passed away on the coming of an abundant harvest. In five out of the six epidemics it is distinctly evident that the disease either disappeared altogether, or commenced its decline in the first autumn which brought a plentiful harvest. There can be no mistaking these facts. Want and fever, want and fever, precede and succeed as cause and effect on every occasion. The epidemic fever of Ireland, produced in the first instance by want, becomes contagious, extends among high and low, affecting all classes, so that rich and poor are alike interested in its prevention, from the lowest motives of self-interest alone, independently of the higher movings of philanthropy. Dr. Corrigan dwells upon the failure of the present potato crop, upon the want now commencing, and so almost certain to increase in severity during the present year; and points to the pestilence so sure to follow in its track, except it be relieved. Sir Robert Peel says, from the data in his possession, it is more than probable that four millions of people will be without food in May, unless energetic measures are adopted in the interim.

Dr. Corrigan's facts and reasonings go to combat the opinion

of Mr. Chadwick, that fever is caused pre-eminently by defective drainage, locality, atmospheric conditions, and so forth, and tend strongly to prove that want is the prime element in its production. That want being present, fever arises in certain localities, and under certain conditions, with greater frequency than others, he would allow. He also controverts, and we think successfully, a dogma intimately connected with the above, and supported by the *Edinburgh Review*—namely, that fever is more fatal when it exists in the contagious form among the rich and well fed, than among the poor. He asserts, that "the error lies in supposing, that the greater fatality in disease in a certain class necessarily involves a greater frequency of disease. There is not only no connexion whatever between the two, but they even bear an inverse ratio to one another. The poor are the more liable to fever, but recover easily and quickly from it, comparatively. The rich are the less liable, but, when attacked, fever with them seems higher and quicker, and the disease is more severe and more fatal. * * * If twenty rich persons and twenty poor be attacked with fever at the same time, that a greater number of rich than of poor will be carried off, I do not deny, but if an equal number of rich and poor be exposed to the same contagion, that the liability to catch the disease will be as great with the rich as the poor, I do deny." Considerable attention is given to the best mode of distributing relief in food among the poor by means of hospitals, societies, and the new poor-law apparatus. Dr. Corrigan concludes with the following positions, of the establishment of which we think there can be little doubt:—

"1st. That famine (including deficient or unwholesome food) is the paramount cause of the epidemic fevers of Ireland.

"2ndly. That epidemic fever, originate as it may, soon acquires a contagious power, a power of generating and propagating itself, and thus involving all, rich and poor, in the country, in one common danger; and

"3rdly. As a corollary from these two, that employment and wholesome food will be the best prevention, aided, should the necessity arise, by hospitals to extinguish contagion."

The following passage is also worthy of great attention:—

"I cannot conclude without noting a warning circumstance that has had some influence with me, in bringing out these observations at the present time. It has been remarked by all the observers of the epidemic fevers of Ireland, by Rogers, O'Connell, Ratty, Barker, and Cheyne, that small-pox has invariably prevailed, either immediately before, or with each visitation of it. The same connexion between small-pox and the bad fevers which ravaged England in the sixteenth and seventeenth centuries, has been observed by medical writers. Sydenham has gone so far as to say, that from their intimate connexion, he doubts that the plague and small-pox may not be of the same nature, only with different forms of development. It seems as if the human constitution, under whatever influences have acted injuriously on vegetable organization, or have predisposed to epidemic fever, had lost so much of its energy as to render it less able to resist infection. Small-pox has been of late very prevalent in Ireland. * * * This visitation should put us on our guard."

This pamphlet is most germane to the present critical posture of affairs, when scarcity of no ordinary kind has commenced, and when the attention of government and the country is given to its relief and removal.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

FEBRUARY 11, 1846.—DR. CHAMBERS, PRESIDENT.

ON THE GANGLIONIC CHARACTER OF THE ARACHNOID MEMBRANE OF THE BRAIN AND SPINAL MARROW. By G. RAINEY, M.R.C.S., late Microscopist to St. Thomas's Hospital.

The author commences his paper by observing that, as it has never been supposed by physiologists that there exists within the cavity of the cranium an especial provision of organic nerves for the cerebral vessels corresponding to those which in the abdomen go from the celiac plexuses to the vessels of the viscera, the arachnoid serving as a membranous

plexus, in which they ramify, the announcement of this view can scarcely fail to be received by physiologists with extreme doubt, and therefore, under this conviction, he considered it admissible, at the commencement of his paper, to state that the views therein set forth are based entirely upon anatomical facts. The first idea which the author conceived of the sympathetic character of the arachnoid was from observing a number of cords situated between the arachnoid and pia mater, one of the extremities of which ramified upon the coats of the arteries, the other in the arachnoid membrane; the latter ramifications, after becoming very minute, were lost among a quantity of minute corpuscles, of which many parts of the membrane appeared to be made up. From the connexion and mode of ramification of these chords, they were inferred to be nerves, and on being compared with nerves decidedly sympathetic, they were found to have precisely the same characters. The microscopic characters of these fibres, and also those of nerves undoubtedly sympathetic, taken from different parts of the sympathetic system, were very minutely described. The result of the author's dissections showed that the presence of the under fibre, as described by Henlé, was by means common in the minute filaments of the sympathetic, and those most remote from the ganglia. The nervous character of these cords being established, the fact of their springing by numerous branches from the arachnoid, uniting to form trunks, and going to be lost by ramifying on the cerebral arteries, led the author to conclude that the arachnoid stood in the same relation to these nerves, and the vessels which they supply, as the various plexuses and ganglia in the abdomen do to the nerves proceeding from them to the vessels of the viscera, and therefore ought to be regarded as the sympathetic origin of these nerves, or at least as the plexus connecting them together; more especially as cerebral nerves could be traced into the plexuses of the arachnoid, and their connexion with the carotid plexus demonstrated.

Besides the corpuscular character of the arachnoid, he describes in some parts of it ganglionic bodies of a very simple kind, also on its dura matral surface some laminated ones, with a clear fibre terminating in them, resembling very much the corpuscles of Pacchini. He has also found other laminated bodies, which he regarded as the product of disease, and which he believed had not been before observed in the arachnoid. Dr. E. Harless had given a minute description of similar structures on the pia mater and choroid plexuses, in a late number of Müller's archives; but this author regarded them as connected with the vessels, and allied to ossification.

The author alleges that Valentin's notion of the epithelial character of the choroid plexuses is incorrect, and that the corpuscles situated upon it are globular, if examined without pressure being made upon them, and instead of resembling a tessellated epithelium, are very similar to ganglionic corpuscles occurring in the ganglia of the sympathetic, having a spherical form and vesicular character, and containing molecular matter with a nucleus. The vessels supplying them are also accompanied abundantly with the fibres going from the arachnoid. From these resemblances to the vesicles clustered upon the ganglia of the sympathetic, the author infers that there is probably something common in their function. The author does not consider the whole of the arachnoid to be nervous, but that this property resides chiefly in those parts which are made up of soft corpuscular matter, and the ramification of the arachnoid cords. He admits that the external layer is continued upon the dura mater, and covered by a tessellated epithelium; but that the opposite surface, being made up of plexuses, which are connected with the vessels of the pia mater, cannot be reflected upon the dura mater. The author mentions many circumstances in which the arachnoid differs from serous membranes in the parts, and he contends that, as no *gliding* motion can take place between the parts contained in the cavity of the cranium, there can be no friction; and, therefore, a membrane like the arachnoid, were its office only to prevent friction, would be unnecessary. He observes that a membrane so soft and tender as are many parts of the arachnoid, so as scarcely to allow of being raised with the forceps without laceration, is ill adapted for preventing friction or for performing any other function merely mechanical. From this circumstance he argued that the fibres of which these parts are composed resemble in their consistency soft-nerve fibre, more than fibro-cellular or elastic tissue, and that it would be paradoxical that there should be such an abundance of mere fibro-cellular tissue—a mechanical organ—in a part almost without mechanical properties, or of elastic tissue, in a membrane destitute of elasticity. The author argues, that unless the fibres going from the

arachnoid to the vessels of the pia mater be organic nerves, the brain, compared with other organs supplied by the sympathetic, would not have a supply of nervous influence proportional to the activity of its function, and the quantity of blood it receives, and therefore, in this respect, would present an anomaly. Still, the brain would not, even in this respect, be an anomaly, if it be true, as it is generally supposed to be, that "the sympathetic is limited to the trunk and head, and that it has no connexion, or at least, a very limited one, with the extremities." (See Todd and Bowman's Physiological Anatomy.) The author observes that Mr. Swan has described branches of nerves, with ganglionic enlargements upon them going to the joints, (one being particularised proceeding from the musculo-spiral to the wrist-joint;) from which he (the author) concludes that, as these parts have neither sensation nor motion, these nerves must be for secretion, and consequently sympathetic nerves. Connecting the fact, and the deduction from it, with the following one, noticed by Todd and Bowman, (that two distinct fascicles connect the sympathetic with the spinal nerves, near to the spine, one consisting of white, the other of grey or sympathetic fibres; though of the precise object of the latter bundle, they express themselves incapable of forming a precise idea,) he infers that the fasciculi of grey fibres which join the spinal nerves in this situation afterwards follow them through their various plexuses, accompany their branches to all parts of the body, and ultimately leave them to be distributed to the various organs of secretion situated in the extremities, such as to those secreting the sweat, sebaceous matter, synovia, &c. He states that these have hitherto been considered as branches of the spinal nerves, from which they appear to proceed, whilst, in reality, they are sympathetic nerves, taking their origin from the spinal ganglia, by the grey fasciculi above referred to. In a postscript, the author states that he has dissected this branch of the spinal nerves, examined it with the microscope, and found it to be composed of organic nerve-fibre.

Mr. SOLLY protested against the view taken by the author of the paper, that a serous membrane was not required to envelop the brain because that organ was motionless. The motion observed in the fontanelle of the infant showed the incorrectness of this opinion, as did the fact, that in old age inflammation of the brain might result from a blow without fracture of the skull, in consequence of the brain being too small to fill up the cranium. The remaining space was filled with serum.

Dr. HODGKIN spoke of the history of Mr. Rainey's researches, which he had witnessed. The fact of the arachnoid being freely supplied by filaments from the sympathetic did not preclude it from being classed amongst serous membranes, as the peritonæum and pleura were supplied by the same nerve. He then briefly enumerated all the important points which he considered Mr. Rainey's researches to have established.

Mr. HOLMES COOTE had examined the arachnoid of animals under the microscope, and had detected nervous fibres which appeared to arise from the sympathetic. He had not found this to be the case in the arachnoid of the human being, though the pia mater contained filaments of that nerve. He thought, with Mr. Solly, that the arachnoid was really a serous membrane; but he doubted whether the membrane was continued into the ventricles, or pressed over the choroid plexus. These he thought were lined by the pia mater.

Mr. TOYNBEE thought that the researches of Mr. Rainey had thrown great light on the mode in which the sympathetic communicated with the cerebro-spinal nervous system; and he believed that Mr. Rainey was the first to show the mode in which the sympathetic fibres pass into the branches of cerebro-spinal nerves, and from thence to their distribution.

Mr. PAGET expressed his surprise at the statement of the last speaker, that the paper just read contained the first published account of the true mode of communication between the sympathetic and cerebro-spinal nervous systems, and the first explanation of the mode in which the sympathetic fibres pass into the branches of cerebro-spinal nerves, and proceed with them to their distribution; inasmuch as it had been for the last four or five years, through the observations of Bidder and Volkmann, notorious that, except the nerves of special sense, all, or the great majority of the cerebro-spinal nerves, contain, mingled with their own filaments, a proportion of sympathetic filaments; and the mode in which the two kinds of filaments become mingled had been not less accurately determined. He thought it was to be regretted, that by dis-

cussing this matter, the author had distracted the attention of the Society from the better part of his essay, in which he described the nerves of the arachnoid. Having been favoured with an opportunity of examining Mr. Rainey's preparations, he could, in nearly every respect, confirm his description of them. Nothing could be more evident than the existence of an abundant plexiform distribution of nerves of the sympathetic system in the arachnoid. As represented in the diagrams suspended in the room, these nerves could be plainly traced proceeding from the cerebral and spinal vessels, and ramifying and communicating in the arachnoid and the filaments connecting it with the pia mater. Moreover, in several instances, where three or more bundles of nerve-filaments converged and met, there was seen, in the middle of their conflux, a single large corpuscle, which could only be compared to a ganglion corpuscle. And if it were so, the author had herein made a very interesting discovery; for though Purkinje described the nerves of the arachnoid, he made no mention of corpuscles such as these; nor was there any other instance known in which to constitute a ganglion, only one corpuscle was imbedded among the nerve fibres. The bodies, somewhat like Pacinian corpuscles, were also distinctly to be seen; but these might be products of disease. But a doubt must still exist, whether the fine filaments which formed the greater part of the substance of the arachnoid were nerve-filaments or not. There certainly was an appearance often seen and shown in the diagrams: one of the nerves suddenly broke up into minute filaments, which were then so interwoven as to constitute almost or really the whole substance of the tissues; but these did not themselves look like nerve-filaments—they might be a variety of fibro-cellular tissue. And till this question could be decided, the author's idea of the ganglionic nature of the arachnoid could not be at once accepted. For if these fine filaments, which nearly composed the arachnoid tissue, were not nerve-filaments,—and on the whole it appeared more probable that they were not,—then, as to the nature of the arachnoid, it is proved only that it receives a far more abundant supply of nerves than any other serous membrane, and that with these nerves are peculiar, probably ganglionic, corpuscles situated at their points of conflux. Yet if only this portion of the author's observations were admitted, a very large share of credit would be due to him for both the accuracy and the importance of his research.

Mr. TOYNBEE explained that he wished to limit his observations to the mode in which the sympathetic was distributed to the extremities, as instanced in the ganglion of the wrist-joint mentioned by the author.

Mr. PAGET explained that he had no doubt the author had really discovered the sympathetic filaments in the ganglion at the back of the wrist; but that he still maintained that the existence of sympathetic filaments, mixed in with those of the cerebro-spinal nerves, and distributed to the extremities and other parts with them, was a fact which had been long and completely ascertained.

Dr. COPLAND said, that the connexion between the sympathetic and the true spinal system was known at least twenty-five years ago, the branches of the sympathetic having been then traced to the extremities; and more recently, the correctness of these researches had been confirmed. Even Winslow had traced the sympathetic as low as the femoral artery. What the author said respecting his discovery of the difference between the sympathetic and sero-spinal nerve was not just, as the distinction between them was evident to the naked eye: corpuscles were found in the ganglionic nerves, under the microscope, which were not to be found in the tubular nerves. He thought the chief point of interest in the paper was the new and important fact established by the author, of the free distribution of filaments of the sympathetic to the arachnoid, for the supply of the brain.

Mr. RAINEY said that "he was well aware that sympathetic nerves had recently been described upon different structures in the extremities, as, for instance, on the periosteum of the tibia by Purkinje, and that they had long been supposed to exist in these parts, but that it was his belief that anatomists had not supposed them to be given off from the spinal nerves existing in the extremities, nor did he believe that the idea had ever occurred to any one, that the grey fasciculi described by Todd and Bowman, were the origin of these nerves, and that they afterwards followed the nerves of the extremities, as in the abdomen they follow the arteries, which serve to conduct them to their destination, these nerves appearing to be branches of the spinal nerves, whilst in reality they were from the sympathetic. In proof of the correctness of this supposition, he had only to state, that in all books on descriptive anatomy, the

branch, to which he alluded in his paper, going to the wrist-joint, was described as a branch of the radio-spinal nerve, and not the sympathetic. Besides, when he told some anatomists that the branch in question was a sympathetic nerve, they were astonished, and would not believe it; and he did not doubt but that if he had made the same remark to Mr. Paget before he entered this room, he would have expressed the same surprise as others had done."

CHEMISTRY, PHARMACY, AND MATERIA MEDICA.

SOME RESEARCHES ON ANILINE. By A. W. HOFMANN, Ph. D.

In my former papers upon aniline I had repeated opportunities of pointing out the remarkable analogy which exists between this body and ammonia, and at the conclusion of my memoir on chloranilin and bromanilin, I announced the existence of a compound which may be considered as urea, in which ammonia is replaced by aniline.

The discovery of this substance opened a new field for research, inasmuch as it was to be expected, that all the relations exhibited by ammonia, and the metamorphoses it undergoes, might be realized with aniline.

A short time after this communication, M. Gerhardt, in proceeding in this direction, prepared some products belonging to the same series, which are formed when oxalate of aniline is subjected to dry distillation, or when chloride of benzoyl is acted on by aniline. I have also prepared these bodies, but shall not enter into details upon them in this preliminary note, in which I intend to describe some further results at which I arrived.

The action of the vapours of cyanic acid upon aniline is rather complicated. Anormal cyanate of aniline (urea of aniline) is best prepared by mixing a solution of sulphate of aniline with cyanate of potassa. The liquid, after the lapse of a few moments, becomes turbid, and in an hour the whole solidifies into a crystalline mass. By simple recrystallization from water the new compound is obtained in a state of perfect purity.

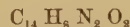
The combustion of this substance furnished results corresponding to the formula—



i.e., urea, in which the ammonia is substituted by an equivalent quantity of aniline.

From the properties of this compound, it is evident that the elements of aniline and cyanic acid undergo a similar transposition to that of the same acid and ammonia, when forming urea.

The body,



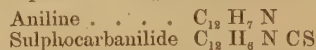
is not the ordinary cyanate of aniline; it crystallizes, without change, from a concentrated solution in potassa, and acids disengage neither cyanic acid nor carbonic acid.

The comportment of aniline with cyanic acid induced me to subject it to the action of cyanogen, and chloride of cyanogen. In these reactions a series of new crystalline compounds is obtained, which are still under examination.

Not less remarkable is the action of sulphide of carbon upon aniline. When left in contact for some time with this compound, aniline, with evolution of hydrosulphuric acid, is converted into a white crystalline mass, which is difficultly soluble in alcohol, and may be purified with great facility. The analysis of this new compound yielded numbers corresponding with the following formula—



i.e., aniline, which has lost one equivalent of hydrogen, and has assumed in its place a compound of carbon and sulphur, CS, which corresponds in composition to carbonic oxide.



This peculiar compound, which is neither acid nor base, is likewise obtained in a most interesting transformation—i.e., the decomposition of sulphocyanate of aniline by destructive distillation.

The sulphocarbonilide, as we may provisionally term this new compound, is only slowly changed by re-agents. The continued action of an alcoholic solution of potassa, however, decomposes it. After boiling three or four times, the solution contains a large proportion of sulphide of potassium, and on

cooling, deposits a substance crystallizing in large brilliant needles, which is a new compound.

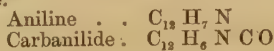
By analysis, the numbers obtained gave the following formula—



which shows that these crystals are formed simply by an exchange of the sulphur of the former compound with the oxygen of the potassa.

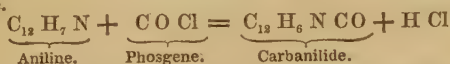
Other oxides produce the same effect as potassa. On boiling sulphocarbaniide with oxide of mercury, the red colour soon disappears, black sulphide of mercury being formed.

According to the above formula, this new substance, which is also an indifferent body, may be considered as aniline which has lost one equivalent of hydrogen, and assumed the elements of carbonic oxide.



and this view suggested to me at once another experiment, which was successful.

If the above given formula expresses the true composition of this substance, if it be indeed carbaniide, it was extremely probable, if not certain, that it might be produced by the direct action of chlorocarbonic acid (phosgene gas) upon aniline.



On introducing aniline into a balloon filled with chlorocarbonic acid, the glass became so hot that it burst. On cooling, the liquid solidified into a white crystalline mass, which, by the action of water, was resolved into hydrochlorate of aniline and carbaniide.

This is, indeed, a far easier way of obtaining this substance in the state of purity.

On mixing aniline with oil of mustard, at first no change was observed. After the lapse of some months, however, the solution had deposited splendid four-sided tables, constituting evidently the compound corresponding to thios-innamine.

When brought in contact with tritochloride of phosphorus, or chloride of silicon, aniline is likewise converted into crystalline compounds.

* * Aniline, our readers will probably recollect, is a basic body obtained from coal. Formed, as it evidently is, in the transformations which the constituents of vegetables have undergone, it is very probable that the study of its relations and properties may throw some light upon the constitution of vegetable alkaloids, and the changes they undergo in the living economy.—Ed.

BRITISH AND AMERICAN MEDICAL JOURNALS.

GUNSHOT WOUND OF THE HEART, WITHOUT PERFORATION OF THE PERICARDIUM.

Professor HOLMES records, in the *British American Journal*, a case which seems to show the possibility of such an occurrence. An individual had received a gun-shot wound of the left side of the chest, and died soon after. On removing the anterior walls of this cavity,

"The appearances presented were, a bloody ecchymosed condition of the anterior part of the left lung, as it laps over the pericardium, a bloody and infiltrated state of the cellular substance lying on the pericardium, and an ecchymosis of the extent of about an inch and a half, filling the anterior edge of the right lung, where it lies in contact with the pericardium. The pericardium evidently contained a large quantity of fluid, the nature of which was denoted by the colour of the membrane."

The lead which had caused the injury was found in the right pleural cavity, but its course could not be traced. No perforation of the pericardium, which was filled with blood and serum, could be found; but on its being laid open,

"There was seen on the anterior wall of the heart, penetrating the right ventricle, a transverse linear opening without laceration at the margins, which were smooth, and rather turned inwards, and sufficiently large to admit the finger."

The difficulty of explaining this occurrence is considered by the writer; and he first argues that this injury was not likely to be the result of a spontaneous rupture. He refers to cases recorded by writers on military surgery, which show that pieces of linen and other clothes have been sometimes driven without being torn, into wounds; and thus that balls have been withdrawn inclosed in a kind of purse. Somewhat similar is the author's explanation of the present occurrence:—

"Entertaining," he says, "no doubt that the wound was caused by the direct contact of the ball, driving the pericardium before it, I think the manner of its formation may be more readily understood by supposing that at the instant of being struck, the heart was in the act of contraction, its fibres hard and rigid from their muscular action. In this state the ball suddenly impinging produced an effect similar to what happens to an over-braced harp-string when struck. The fibres snapped across.

ABSCESSSES IN THE LIVER; ULCERATION OF THE INTESTINES.

Mr. R. W. SMITH presented a specimen of abscesses of the liver, which were not indicated by symptoms during life, at least so far as the history of the case was known. The subject was a man who had been a patient at the Talbot Dispensary, was afterwards in Jervis-street Hospital, and lastly in the Whitworth Hospital. During the last three months he was constantly suffering from gastritis and gastro-enteritis. He had incontrollable dysentery, but voided no blood; frequent vomiting, pain in the epigastrium, but never complained of pain in the hypochondrium, nor in the shoulder; had no jaundice, no rigors, nothing which could lead to the belief that hepatic disease existed. The dysentery resisted all remedial means. He gradually became worse; singultus came on, and death took place. On examining the abdominal viscera it was found that the great intestine was ulcerated extensively. The ulcers were of various sizes, and occupied the mucous coat in the whole extent of the periphery of the canal. Some had an erysipelatous aspect, some an ash-coloured surface. In the stomach there were signs of chronic gastritis. The mucous membrane was vascular and softened. The liver was full of abscesses; a very large one was in the right lobe. This was lined with a strong dense membrane, forming the sac of the abscess. In the left lobe were three abscesses. The first of these that was cut into had no sac, but was surrounded by the substance of the liver, with which the purulent matter was in contact. The second also was without a distinct sac. The third, which might be termed a dissecting abscess, was bounded by the diaphragm anteriorly, and by the stomach posteriorly, and had separated the peritoneal from the other coats of the stomach. The formation of abscesses in the liver, without symptoms of hepatic disease, has been lately noticed in cases of dysentery."—*Dublin Pathological Society, April, 1844.*

A VETERINARIAN'S IDEAS OF EXCLUSIVE KNOWLEDGE.

The *Veterinarian* has for some time contained interesting monthly reports from Professor DICK of the Edinburgh Veterinary College. We regret, at the conclusion of one of the latest, to find the following observations:—

"I have observed the letter from Mr. Fisher in your last number, with reference to some cases of broken wind, mentioned as cured in the monthly report of the cases which have been sent you; but I regret that I do not feel myself at liberty to comply with his request to communicate to the public the treatment necessary for the cure of that disease. From the position I occupy, it is my duty to communicate all the knowledge I possess to the students who have placed themselves under my tuition. I have for some years taught them both the principles and practice by which they might cure that disease, and I have the satisfaction of knowing that some of them have been as successful in curing it as I have been; but my knowledge being, as I conceive, in some measure the property of my pupils, I feel that I am compelled, even at the risk (which I believe is a small one) of being charged with quackery, to refuse so reasonable a request as that of Mr. Fisher."

This language, and the practice which it indicates, are unprofessional, and quite unworthy the position of Professor DICK. He undervalues the risk of a quackish designation in not complying with a request so just—so reasonable.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 21, 1846.

JUST as we were going to press, and subsequently, therefore, to the period when the following article was written, we ascertained, on undoubted authority, that the insults offered to the MEMBERS of the College, on Saturday last, by that renegade LAWRENCE, were exclusively his own premeditated acts, the Oration not having been seen or heard by the Council previous to its delivery in the Theatre of the College. This announcement cannot be otherwise than satisfactory to the Profession. If it could have been imagined for a moment that Sir BENJAMIN BRODIE, Mr. LISTON, Mr. GREEN, Mr. TRAVERS, Mr. KEY, and other honourable members of the Council, had concurred in bestowing the Satanic vituperation which the speaker directed against the Members of the College, inexpressibly painful would have been the feelings produced amongst all classes of the Profession.

The many thousands of MEMBERS of the College, injured and insulted as they were by the Charter of 1843, unjustly displaced, as they have been, from the station they previously occupied, are now audaciously insulted by their once "brother reformer," LAWRENCE, and are stigmatized by him as "Geese," because they are discontented with the treatment they have received,—because they are dissatisfied with the manner in which the College has been governed. In his conduct on Saturday last, in addition to the disgusting want of principle which he has for many years exhibited, Mr. LAWRENCE displayed a species of ruffianism towards his brethren, which the bitterest of his enemies did not expect from him. His audacity was actually astounding. But he will find that his presence in the profession can be no longer tolerated.

As is the customary practice after the delivery of the ORATION, the Council and their *friends* dined together at the Freemasons' Tavern. Amongst the auditors at the Oration was Mr. BACOT, of the Society of Apothecaries, and one of the "Joint Deputation" from that society and the "Committee" in Regent-street. In the hall of the College Mr. BACOT declared that he had never before been so "grossly insulted" as by the Orator, and yet this insulted "Plenipotentiary" then went to "dine" with the unprincipled reviler of himself and his professional brethren.

What a Plenipotentiary! What a champion of professional dignity!

REFORM in the laws and regulations affecting medicine and surgery is a new thing, according to Mr. LAWRENCE. Apostate as he is, he feigns an innocent and virtuous surprise that it should be demanded by the general voice of the profession. He paints the profession as having been in a state of prosperity, attending to their duties, and reaping their reward, in wealth and public respect, until this demon came to disturb their peace. To those who demand it most loudly, he gives it as his gratuitous opinion, that the only reform really needed is, that they should mend their manners, and not trouble the Council of the College of Surgeons. In the case of Whitehall-place and Ealing Park, he has no care for the struggle for

common maintenance, in which the mass of the profession are engaged at fearful odds, unrepresented as they are in their own Colleges, undefended by those in medical authority, and surrounded on all sides by a quackery more daring and locust-like than the world has ever before seen. For the troubles of his professional brethren he has nothing to offer, save a mock or a sneer of unbelief.

His definition of the relation in which the members stand to the College is unique, fit for the times of NERO or DOMITIAN rather than the reign of VICTORIA. In effect, he says to them—"The College did not ask you to come to it. No law makes it imperative that you should do so. Your coming is a voluntary tender of your allegiance; you make an oath of submission, and you are perjured if you do not submit implicitly to the regulations of the Council, the sole embodiment of the "power of the College." We answer to this shallow and most miserable casuistry, that where there is power, there also is responsibility. Power in a free country can have no existence but for the general weal. The College received its charter and constitution for the advancement of the science and practice of surgery. The Council are intrusted with power to admit properly educated persons to the membership. It was for the good of these members, and to render them efficient to the public, that the charter was given. It belongs as much to the members as to the Council. Undoubtedly the Council has a duty towards the charter as representing the State *by* which its immunities were granted, but equally undoubted is the duty owed by the Council to each and every member *for* whom the charter was given. Morally and constitutionally, they are responsible to the meanest among its alumni. As respects the members, they, too, have duties towards their profession, themselves individually, and the public; and not the least of them is the prevention of mismanagement and inefficiency on the part of the Council. Away, then, with the disgraceful plea, so utterly absurd, that the Council have no duties towards the members. As well might a government say to a discontented people—"You have no right to complain; we did not ask for your birth; you may remove to other countries, but do not attempt to better the laws of your own."

Mr. LAWRENCE plumed himself and the Council not a little on the high reputation of the College diploma, and the increasing numbers which seek to procure it. This he paraded as irrefragable evidence of the wise administration of the Council. How stand the facts? In 1842, there were 669 diplomas granted; in 1843, 531; in 1844, only 376. This we take as good evidence of the want of confidence engendered in the profession by the conduct of the Council during these years. On the other hand, the College of Physicians and the Society of Apothecaries have each kept up their number. Was there any sinister meaning in Mr. LAWRENCE's sneer at the "low state of finance" in the College of Physicians? We know that very many of those recently admitted to the College of Physicians were members of the College of Surgeons, disgusted with their original Alma Mater. When it suits our orator, he can take his stand upon the original charter, and the charter alone! The Council can only perform the functions with which it is endowed! The Council is a limited number; they cannot even find talent enough in it for an annual oration, so that it must be biennial, or

triennial, according to the mental condition of the Council-orators! This they cannot help; the oration must be by a councillor, and the charter has only given so many! They have no idea of change; they can see no difference in the state of the profession now and formerly, when the members of the College were counted by fewer hundreds than they now reckon thousands! Of course, to their omnipotent wisdom, there is no need of a corresponding enlargement of the Council! Their orator was emphatic upon the original charter; but was there anything in the original providing for a second charter, by means of which nine-tenths of the members should be degraded and insulted?

Mr. LAWRENCE undertook the task of defining the medical faculty as it at present exists. His definition admits only of physicians, surgeons, and apothecaries. He will have nothing else. He denies the existence of surgeons in general practice. To him the body of general practitioners are apothecaries and nothing more. This brand he distinctly, and again and again, placed upon the majority of the members of his own College, though afterwards forced, by the disgust of his hearers, to attempt something like a retraction. There is an inconceivable fatuity about this man. He confounds the thousands banded together to redress the wrongs put upon them by the College, with the shreds from Apothecaries Hall, who by a grave misfortune assumed the irresponsible leadership. Why, every sane man knows that the pure race of apothecaries have well nigh died out. Were it not for the absurd court title of "apothecary to the person," the name would be now extinct, as applied to men in actual practice. There are not half-a-dozen pure apothecaries, merely practising and dispensing under the control of physicians and surgeons, in London; and in any other part of England such a being must indeed be a *rara avis*. However the "purists" may disguise the matter from themselves, the surgeons in general practice, men holding the double qualification, to whom Mr. LAWRENCE would deny the title of surgeon, constitute the great body of the profession, and have the great mass of all kinds of practice in their hands. These men cannot be put down by a sneer or a sophism. The ridicule cast by Mr. LAWRENCE on this body, for entertaining the idea of a separate college, was peculiarly unhappy. We strongly opposed the establishment of an *inferior* College, because we knew and felt that they were entitled to an *equal* one; and because they had an inalienable right to justice, and a proper status, within their own College. "Where," he asks, "be their credentials?—where their illustrious names?—that these men of inferior caste should persevere "to ask for equality of rights with us who have monopolized "all the virtues, all the talents?" To this miserable cavilling we reply, that JENNER, unjustly claimed by the purists, was engaged in general practice in a humble village at the time of his priceless discovery. In our day, too, the mantle of JENNER has fitly fallen upon another general practitioner, Mr. CEELY, of Aylesbury, who has completed his work by the brilliant demonstration of the identity between vaccination and variola. If physicians claim HARVEY, and surgeons HUNTER, the men in general practice have an undoubted right to place JENNER at their head, and this great trio is too eminent in the fame of its several names, to make sneers allowable between the different branches of the common professional stock whence they rose. Let heaped-up infamy rest on the head

of him who attempted it! But we have not yet done. CULLEN was in general practice at Hamilton when he directed WILLIAM HUNTER's attention to medicine, and to him we must look as the professional parent of WILLIAM HUNTER, of JOHN HUNTER, and of MATTHEW BAILLIE.

But Mr. LAWRENCE did deign to attempt the justification of the Council towards the members, in a minute account of their proceedings in reference to the Hunterian Museum. And really, as we listened to his words, he seemed possessed by the idea that the sweeping, cleansing, preserving, enlarging, and cataloguing the museum, were the great functions and objects of the Council and the College. It would seem as if these great matters had so absorbed their faculties as to exclude every other idea. They claim the merit of having expended seventy thousand pounds! on this department in all! Three thousand a year they regularly disburse in this manner, and yet, forsooth, they have no duties towards the members who supply them with the funds! The members ask for their rights, and Mr. LAWRENCE gives them the tomes of Professor OWEN and Dr. WILLIS. If the money of the members has purchased more than one half of the present museum, are they not admitted four days a week instead of two, as provided for in the deed of gift? If the members of the Council have befouled their own reputation by their corporate proceedings, have they not kept the preparations from dirt and tarnish with housewife industry? If thousands of living men have been ill treated and degraded, have not the Council given immense sums for rare animals and fossil bones? If the Council have not conserved the respectability of the profession, but have allowed men of any character, or of no character at all, to enter and maintain their place in the College, have they not engaged first-rate men as conservator and assistant-conservator of the museum? Do they not keep their pictures from injury in darkened rooms, and carefully preserve their collection of statuary in napkins?

Two important questions require to be answered. Is Mr. LAWRENCE, in the vile atrocities he uttered on Saturday last, in the theatre of the College, the exponent simply of his own views? If so, the profession should not rest till they have driven him ignominiously from the Council. Any man outraging the law or divinity in this fashion would be ousted by these faculties *statim*. Or is Mr. LAWRENCE to be considered the expositor of the views of the Council? The President should, doubtless, have better understood the dignity belonging to his office than to have suffered such a scene to proceed. It must be remembered, however, that political heat and wrangling have been introduced on an occasion properly sacred to science, without let or hindrance from those in authority. It will not end here; it must not; it *shall* not. If such be the spirit animating the Council, and if it be perpetuated, we may safely proclaim that the ICHABOD of the Royal College of Surgeons of England has been written!

Of the merits of the Oration we leave our readers to decide. No one ever suspected its author of the want of ability, however he may want the higher qualities. In its references to the social and political condition of the profession it was lower in professional tone, lower in the estimate of his professional brethren, than anything we have ever heard within the walls of the College. The condemnation, given

most unequivocally by the majority of the audience, more than once made the brazen face of the orator quail. Several times it was observable that he was nerving himself for his insulting task, by fixing his teeth, nodding his head, and other movements of those who nerve the inner by nerving the outer man, who clench their fists to imbue themselves with courage. One piece of his conduct teemed with the most unmitigated vulgarity. "When the geese have done I'll go on." Now, allusions to geese and serpents have, time out of mind, been the resort of unpopular people undergoing the disagreeable process of hissing. The idea is so low and stale, that a man to use it now-a-days must have more of the goose than the serpent in his composition, a thing not hitherto suspected of Mr. LAWRENCE. During his oration, Sir B. BRODIE sat lynx-eyed in a corner, listening with impassable countenance: if an expression did occasionally creep into his face, it was one of profound annoyance and contempt. The President sat in his usual seat, immediately in front of the table, with his back rudely turned upon the audience, having only the members of the Council and a few of the "fellows" within the range of his vision—not a bad emblem of the *morale* of the corporation towards the members of the College. The Council have never seen any one but themselves. We observed some of the office-bearers of the Worshipful Society of Apothecaries present; invited, probably, to hear the insults poured upon them so unmercifully. It might have been supposed that the apothecaries society would have resented such conduct. We were not a little surprised to see that, after all the snubbing and insolent satire directed against the "city guild," as he jeeringly termed it, they were still meek and unruffled. It was, indeed, said, in the Hall of the College, immediately after the Oration, that Mr. BACOT had been seen to tear his invitation to pieces, and express the most unmeasured indignation at the ill-mannered affront that had been put upon him. The dinner took place in the evening, at the Freemasons' Tavern, and among other toasts, according to the *Standard* of Wednesday, "The Society of Apothecaries" was given, and actually responded to by Mr. BACOT, "The Master." If this gentleman really did attend, he must have swallowed something more than his dinner on this occasion. There must have been a mixture of the *alluvial* with the *convivial*!

BESIDES the quackery in actual medicines, there is another form of the pest—namely, the dietetic quackery of the day. Though the one is certainly more harmless than the other, an equal, or even a greater amount of contempt must be felt for the meaner spirit which would not administer poison in medicine, but which proclaims infallible panaceas at the costs of mere eating and drinking. The same audacity and universality which mark their darker congener, the quack in active or dangerous medicines, marks this variety also, and the evidently flourishing condition of many of its establishments shows that, at all events, the system pays well. The public are so baited with dietetic breads, medicinal ales, and prepared waters, that for common disorders a vast number of people never think of applying to the regular doctor till they have tried the efficacy of half a dozen dietary nostrums warranted to relieve or prevent almost every evil under the sun. The ordinary rule is, in chronic ailments, to try

dietetic quackery first, then to take a short spell at legitimate medicine, and, if the cure be not wrought forthwith, the poison-quack is then resorted to. Thus, quackery is to orthodox medicine as two to one. The best or the worst of it is, that the first form of quackery depends for its very existence on the medical profession itself. This arm we propose to lop off and cauterize, or at least to do something towards it. Not one of the dietetic nostrums but professes to rest its chief claim to public support on the general approbation given to it by the medical faculty, and on the direct testimonial of some particular physicians or surgeons. The public cannot drink bitter ale without having it invested with the eclat of a physician's prescription; delicate people cannot swallow a pudding but it must be made from arrowroot or *tout le mois*, similarly sanctioned; they cannot eat a biscuit without the medicinal mark. Captain PIDDING and HOWQUA plead the faculty, and the Piqua plant must appeal to the doctors or die. SOLOMON'S spectacles, too, must have the virtues of Mr. PETTIGREW'S experience in their lenses; and GRIMSTONE'S snuff acquires additional pungency, and gives the breath an extra aromatic flavour, from Mr. GUTHRIE'S certificate, given or forged. Even BETTS' brandy places its equal trust in metallic capsules and Dr. TURNER'S testimonial. Really the thing is ridiculous, and might remain untouched, but that dietetic quackery merges so gradually in dangerous quack medicines that the line cannot easily be drawn, and certainly not by the public. Poisons are now wrapped up in a medical wafer or tablet, and the strongest opiate in a simple lozenge. The mischief is, that the testimonials given to harmless or foolish preparations afford by implication or inference a kind of support to the whole system of quackery, and for this reason we shall exhibit a few of these testimonials, not with a view to attack any particular medical man who may have sinned after this manner, but with a view to the correction of so vicious a system.

Take, for instance, "HARD'S farinaceous food." One might have thought that if a miller chose to give his attention to the preparation of baby diet, he might have advertised the fact, the nature of his preparation, and trusted to the experience of the public, who are tolerably quick at finding out anything to their advantage, or he might have sought the private support of medical men. But no, a mystery must be affected; the proprietor must be invested with public medical patronage, and Dr. PEREIRA writes him a short medical epic, which at once becomes a standing advertisement. Here it is, scientific and learned enough to take away the breath of any young mother, and make her idolize Dr. PEREIRA for ever.

"I have carefully examined and repeatedly prescribed 'HARD'S farinaceous food,' which is prepared from the most nutritious of cereal grains. It contains both nitrogenized and non-nitrogenized alimentary principles, and forms a very valuable food for children and invalids."

"JON. PEREIRA, M.D."

"47, Finsbury-square, July 1, 1843."

Take another—"BASS'S Pale Ale." The advertisement sets forth that—

"Dr. PROUT, who has analyzed this ale, in his work on diseases of the stomach, &c., after condemning common ales, especially recommends this to weakly persons; and Dr. MARSHALL HALL, in his paper on Consumption, published in THE LANCET of the 20th of April, 1844, speaks of Bass's pale ale as

* See Pereira's Treatise on Food and Diet.

the only stimulant admissible in the diet of persons threatened with symptoms of the incipient state of that disease."

With respect to Dr. MARSHALL HALL, it requires some stretch of imagination to dilate his opinion into this striking puff. All that he does say, in the paper referred to, is, that, speaking of diet, "a little of BASS's ale, *perhaps*, but otherwise without stimulus." No one could complain of this, but of the bad use made of it. It only shows how careful physicians should be to mention anything that may be turned to such uses by unprofessional persons. By referring to the various editions of Dr. PROUT's work, we find that he condemns ales in general for dyspeptic people, giving a strong preference to porter. All that we can find, relating in the most indirect manner to BASS, is the following:—"Some of the finer kinds of Burton ale" are, however, unobjectionable, particularly those prepared for "the Indian market, which are not only carefully fermented" so as to be quite dry, or free from saccharine matter; but "they also contain double the usual proportion of hops." For this Dr. PROUT has been displayed in advertisements, and gibbeted in beer-shops, ever since the taste for bitter ale became at all general. The true way for the profession to prevent and resent this sort of liberty, is forthwith to renounce BASS altogether, and resort to *infusum lupuli* in the treatment of their patients. The thing is become an intolerable nuisance, and its supposed good qualities often made the excuse for tipping.

The last stomachic nostrum which has appeared, and the last we shall mention, is the "Carrara Water." The pompous conception and birth of this *ridiculus mus* is in perfect keeping with the genuine spirit of empiricism.

"Mr. Maugham, during a long course of chemical investigation, having been forcibly struck by the very great imperfections and injurious effects of soda-water, ginger-beer, lemonade, and other such-like compounds, and seeing the almost absolute necessity which existed for the introduction of some beverage at once wholesome and grateful to the palate, devoted his serious attention to the subject of aerated waters in general, and after upwards of four years' research and a careful analysis of a vast variety of artificial and natural waters, succeeded in producing the article now presented, &c."

We go on to read how "a great and apparently insurmountable difficulty" presented itself in the bad taste of lime, and that, "undismayed, however, by this difficulty," the heroic chemist "pursued his experiments," which "ultimately led to a simple means, &c." (ought it not to run) of enabling the patentee to become a dietetic doctor?

We do not mean to lay the bombast and bad taste of all this directly to Mr. Maugham: but we question very much if anything so encomiastic would be said of the chemist who should at will transform inorganic into organic compounds—who should create quinine and morphia out of the simple elements, carbon, hydrogen, nitrogen, and oxygen.

Of course, such a gigantic product of the chemical intellect as the Carrara fluid is to supersede all other alkalines. "Acidity of the stomach, heartburn, thirst, flatulency, and many other forms of indigestion," are mentioned incidentally. It is to be "invaluable" in cases of "temporary indisposition arising from indulgences of the table," gouty subjects are to find great relief from its "checking the great tendency to acidity," but it is to be of "the greatest value and importance" in preventing "that terrible disease," calculus. The lamentable part of the affair is, that a respectable medical man should be the originator of such a production, and that other re-

spectable medical men should make themselves the zanies of such mountebank exhibitions, playing, with unconscious simplicity, the part of the fool and the monkey, with which the Bossy and Katterfelto tribe were wont to attract an audience. The mountebank spirit is strong as ever, only that puffs and advertisements have taken the place of the strings of teeth, the trumpet, the bottles of lizards, and the stuffed alligator, without which the old stages were not perfect.

After a flourish from Dr. L. H. PORTS, Dr. BASHAM is made to appear, with the following letter-testimonial; and we really think the *inference* and its *confirmation* as weak and easy in the way of medical evidence as may well be:—

"I have tried the Carrara Water in those cases of indigestion in which, from its composition, I *inferred* it would be beneficial. The satisfactory results observed in the cases in which it has been given medicinally, quite *confirm* the favourable opinion I have hazarded as to its probable efficacy. There are three forms of indigestion in which the patent Carrara Water has been remarkably effective.

"I. In the common form of indigestion, characterized by heartburn, thirst, foul tongue, and, more or less irregularity of the bowels; if drunk in small quantities, frequently repeated, it has afforded relief to the pain in the stomach and other unpleasant sensations, more effectually and quicker than any other antacid, not excepting the effervescing fluid magnesia.

"II. In a form of indigestion known by the pale, flabby, and ex-sanguineous tongue, indented laterally by the teeth, and coated with a white, slimy fur, with accumulation of mucus in the throat, dry and parched lips, distressing thirst, with flatulence: in such cases it has quickly relieved these symptoms.

"III. In those derangements of the stomach arising from a congested state of the mucous membrane of that organ, caused by free and convivial habits, intoxication, and other excesses of the table; the thirst, headach, clammy, foul state of the tongue and mouth, have been more quickly and effectually relieved by the Carrara Water than by soda water. The large amount of carbonic acid dissolved in this water imparts that amount of stimulus to the mucous membrane which restores its tone and renovates its secretions; and even when exposed to the air for some time, does not become nauseous, after the manner of soda water. "W. R. BASHAM, M.D."

No wish exists on our part to press the matter, as against Dr. BASHAM, of whose ability and integrity we entertain no doubt; he has only fallen into a very general error and torpidity respecting what is due from the regular physician towards the faculty of which he forms a part. We proclaim nothing of him but what is open to common observation. He gives, as a medical authority, a most unqualified opinion of the virtues, when "given medicinally," of a patent preparation, a quack medicine in fact; for this water has been dragged from its place as wholesome drink, as which it might perhaps have been very properly praised, to the rank of an undoubted medicine. But supposing it were a really valuable medicine and apart from its patency and impatency, in what capacity does Dr. BASHAM write? If he addresses the profession, it is not a little presumptuous to suffer himself to be placed forth as their teacher even in so small a matter: and if his words are to the public, he intrudes himself in a most improper manner betwixt medical men and their patients. Either way such a proceeding must be repudiated.

Of the class of preparations under consideration, we would say, either let them disappear altogether or fall back to their proper places. When necessary, medical men should recommend them, but it is preposterous that they should unblushingly recommend themselves to medical men as better than anything else he can resort to. Prospero's spirits must not be Prospero's masters. Medical men must refrain from giving testimonials of any kind, particularly to extra-professional

persons, and they must recal those already given where they are converted to improper uses. There is a very prevalent feeling among the profession, that physicians and surgeons sometimes give testimonials with a desire to see their names paraded and advertised as professional authorities. If such low inducements really exist, we can only compare such persons to a certain animal said to swim and cut his throat by one and the same process. In conclusion, for the present we would again declare that we intend no personality in our strictures on the professional names that have passed under our hands. But the honour of the profession stands before the dignity or respect of individual members; and our "wise saws" would be of little avail in removing the evils complained of, unless they were coupled with "modern instances."

HOSPITAL REPORTS.

UNIVERSITY COLLEGE HOSPITAL.

ON PERICARDITIS.—By JOHN TAYLOR, M.D., Professor of Clinical Medicine in University College, and Physician to University College Hospital, London.

CASE 25.—A female advanced in life, admitted with cough, dyspnoea, and palpitations of long duration; heart's impulse too extended, not too strong; new-leather creak, with both systole and diastole; friction sound over right lung behind, with dullness on percussion inferiorly on both sides; oedema of legs; death.—Post-mortem examination: recent lymph and serum in pericardium; effusion in both pleura, with lymph on the right one; sanguino-serous engorgement of part of right lung; dilated bronchi; calcareous deposit; congestion of stomach and liver, with atrophy of the latter organ: Bright's disease of the kidneys.—Remarks: pericarditis revealed only by physical signs; physical conditions producing the new-leather creak; causes of the hypertrophy of both ventricles; causes and signs of effusion into the pleura; co-existence of friction sound, and also of rhonchi of bronchitis with pleural effusion; signs of engorgement of the lung; tubercular cicatrix in left lung; diminution of dyspnoea an unfavourable symptom; Bright's disease the cause of the pericarditis, pleuritis, and partly only of the dropsy.

LOUISA P.—, aged 54, admitted March 3rd, 1840, of short stature, states that she was healthy until six weeks ago, when she lost her husband. She then caught cold, and had a violent cough. Her sister, however, says that she has been ill three or four years, complaining of pain in the left side, and palpitations of the heart. She had shortness of breathing, and a severe cough, especially in the winter season. Has been confined to bed during the last four months, and has vomited most of her food during that time. During the last fortnight has been unable to lie down; her feet have been swelled, and she has passed very little urine for two months past. Never had any dropsy before. She does not know that the patient ever had rheumatism. On admission, great dyspnoea, but not orthopnoea; respirations short and frequent; face rather livid; coughs a good deal; expectoration moderately abundant, greenish and puriform; legs oedematous; urine very scanty; intellect not affected; dull sound on percussion over the lower half of both sides of the chest, especially the left; friction sound at the back part of the right lung, and muco-crepitant rhonchus in the left, with little respiratory murmur; respiration bronchial, and increased resonance of the voice under the right clavicle; impulse of the heart too extended; a distinct and rather loud morbid sound, very closely resembling the creaking of a pair of new shoes in walking; it was heard between the apex of the heart and the left border of the sternum, accompanied by both systole and diastole, and continued when the respiration was suspended. Ordered by the physician, a blister to the sternum; calomel, four grains, with Dover's powder, five grains, at bed-time, and a dose of the house physic the next morning; also a draught three times a day, containing tincture of cantharides, ten minims; tincture of squills, fifteen minims; compound tincture of camphor, twenty minims; nitre, six grains; and camphor mixture, an ounce.

5th.—Great debility; cough somewhat easier; swelling of the legs less; bowels very open; no urine could be saved for the purpose of ascertaining whether it contained albumen; the new-leather creaking continues over a limited space; pulse 120, weak.

6th.—Weaker; died in the evening rather suddenly.

Inspection of the body seventeen hours after death.—Exterior: legs oedematous.—Chest: about a pint and a half of rather turbid serum in the cavity of the left pleura; no recent lymph on the pleura, nor increased vascularity; firm old adhesions over the upper half of the right pleura; the lower half of it was moderately filled with serum; on the pulmonary pleura posteriorly, a portion of the surface, of the size of a halfpenny, was rendered rough by the effusion of coagulable lymph. This effusion was moderately recent, and could be readily scraped off by a scalpel. Left lung much diminished in volume; colour uniformly dark red; substance dense, non-crepitant, fleshy, but not brittle, and contained very little blood or serum; portions cut off floated in water. There was a cicatrix at the apex, and a very little calcareous deposit in its interior. The bronchi contained a small quantity of mucus; mucous membrane transparent, and sub-mucous tissue pale in the small tubes. Right lung: upper lobe dark-coloured, dense, contained a large quantity of blood and frothy serum; the substance broke down too readily under the pressure of the fingers; lower lobe paler, firmer, and contained less blood and serum. Some of the bronchi were dilated, and the cartilages thickened; mucous membrane transparent, and sub-mucous tissue red. Weight of the left lung, ten and a half ounces, avoirdupoise; of the right, twenty and a half ounces, avoirdupoise.—Heart: external surface of the pericardium more than usually uncovered, and exhibiting numerous fine pink-coloured blood vessels; six or eight ounces of very turbid yellowish serum in its cavity, very few flakes of lymph floating in it; the whole serous surface of the pericardium, visceral and loose, was covered with a thin layer of perfectly soft coagulable lymph; the thickness of the lymph was more considerable about the root of the great vessels, and the sulci at the base of the heart than elsewhere, and was somewhat greater on the posterior than on the anterior surface of the heart. To the finger passed over the surface, a slight degree of roughness was perceptible, but this could barely be distinguished by the eye. Beneath the lymph, numerous fine pink-coloured blood-vessels were everywhere visible; no fat under the pericardium. Left ventricle: walls much too thick, also red and firm; cavity much too large; endocardium generally transparent, only a few spots of opacity; aortic valves of the natural thickness and transparency; some yellowish semi-calcareous deposit near their attachment; a few yellow spots in the commencement of the aorta; mitral valve of the natural thickness; a few yellow spots in its substance near the base; the orifice admits more than two fingers (and is consequently somewhat dilated); one of the cordæ tendinæ appeared larger than the rest, and perhaps less flexible.—Right ventricle: walls rather too thick; cavity a little dilated; endocardium more opaque than usual; sigmoid and tricuspid valves healthy; both auricles large.—Blood: very little coagulum in either ventricle; near the apex in the left there was some yellowish coagulum, rather firmly adherent and friable; much black blood in the right and a smaller quantity in the left auricle; weight of the heart, fourteen ounces avoirdupoise.—Abdomen: no fluid in the peritoneal cavity; no fat in the omentum. Liver: of small size; surface smooth; consistence natural; colour, deep bluish red, mottled with drab; the cut surface had the variegated aspect of a nutmeg, but was darker in colour; much dark-coloured blood flowed from it; weight, thirty-eight ounces avoirdupoise.—Spleen: Very small, and contained little blood; weight, two ounces avoirdupoise.—Kidneys: much smaller than common; surface uneven, granular, mottled, and paler than natural; capsule thick, easily removed, and carrying with it portions of the substance of the kidney; vertical portion much diminished in thickness, pale, studded with small yellowish opaque spots; some of the cones also were diminished in volume, but others were not so; weight of the two, seven and a quarter ounces avoirdupoise.—Bladder: much contracted, and contained no urine.—Stomach: size ordinary; mucous membrane universally of a deep-red colour, with spots of ecchymosis in many parts; a little soft and thin in the great cul de sac; the large veins in the sub-mucous tissue distended with dark-coloured blood; weight, five ounces avoirdupoise.—Brain: veins between the convolutions moderately distended; considerable subarachnoid serous effusion, separating the convolutions somewhat; no serum in the ventricles; consistence and colour of the cerebral substance natural; brain small;

weight of brain cerebellum and medulla oblongata, forty-two ounces avoirdupoise.

SUMMARY OF THE CASE, WITH REMARKS.

Symptoms and Diagnosis.—*Pericarditis.* 1. The pericarditis existed on the patient's admission, and was revealed by the physical signs alone. There was no pain or other symptom calculated to excite a suspicion of the existence of any acute disease in the heart.

2. The leather-creaking sound is here distinctly seen to be only a variety of the friction sound, and the physical conditions producing it are likewise exhibited. The serous surface of the pericardium was everywhere covered with soft lymph, and there was no point of adhesion. The roughness of this lymph was so trifling as to be barely visible, but it was distinctly appreciable by the finger passed over it. The morbid sound was double, but it is not stated which portion was the louder. It was not heard over the whole of the cardiac region: perhaps the lymph was not then effused over the whole surface of the membrane. It is not known whether serous effusion was present at this time, because percussion was not practised; but the fact of the friction sound being heard in the most depending part of the pericardium is, perhaps, but not necessarily, opposed to the supposition that fluid was present.

3. There was no intermission or irregularity of the pulse; no undue prominence in the cardiac region; no syncope.

4. It deserves also to be remarked, that although there was serous effusion both into the pericardium and pleura, together with enlargement of the heart, there was no orthopnoea. This is the more remarkable, as there had been orthopnoea at an earlier period of the case, and probably before the pericarditis appeared.

Enlargement of the heart.—1. This was indicated by the increased extent only of the impulse; no increased force is mentioned, and probably did not exist. This might be due either to serum in the pericardium, or to the feeble action of the heart at this late stage of life.

2. There was slight hypertrophy, with dilatation of the right ventricle, occasioned, no doubt, by the dyspnoea, which had existed for some time.

3. What was the cause of the enlargement of the left ventricle? This question cannot easily be answered: many of the remarks made upon the same question in the last case, (No. 24,) are equally applicable to the present one. There was no disease in the pericardium, or in the endocardium, or aorta, to explain the enlargement. No mention is made of any unusual muscular efforts or of palpitations of the heart, except such as may have been posterior to the hypertrophy. It is not stated whether the patient was accustomed to drink or not. There was well-marked renal disease, and in an advanced stage, but whether this began before or after the affection of the heart cannot be determined. There appears to have been no previous rheumatism, even if this were proved to be a cause of hypertrophy otherwise than by first inducing inflammation of the membranes of the heart. The firmness of the tissue and the amount of the hypertrophy forbid us to ascribe these changes to mere sanguineous engorgement produced by the existing pericarditis.

Lungs and Pleura.—1. The effusion into the pleurae was probably dropsical, for there was no sign of inflammation in the left, and but little in the right pleura.

2. The whole of the left lung, and, in a less degree, the lower part of the right, exhibited the appearances known to result from mechanical compression by serum. Although not crepitating, and apparently destitute of air, portions of them were found to float in water, and the texture was not brittle, as in hepatization, but tough and flexible. The upper part of the right lung had suffered differently: being the only portion which remained freely permeable, blood had accumulated there, and had been followed by an abundant serous effusion; the texture at the same time was unusually brittle.

3. The chronic bronchitis had led to the production of hypertrophy, with dilatation of some of the tubes, especially in the right lung.

4. There was some puckering of the apex of the left lung, with calcareous deposit, and this is called a "cicatriz" of a tuberculous cavity. More recent observations, however, have shown that it is necessary to re-examine this question, and to scrutinize such appearances more closely before we put them all down as cicatrized cavities. It seems to have been proved, that in many of these cases, at least, the disease has never extended beyond the pleura, and, consequently, that no cavity had ever existed.

5. Several of the appearances in the lungs and pleurae were accompanied by physical signs during life.

(a) The serous effusion gave rise to the dull sound on percussion, and this was greatest, therefore, on the left side. The rhonchi of bronchitis were transmitted freely through the fluid in the left pleura; the amount of the fluid, however, may not have been so great as at the period of death, which did not occur until three days after these signs were observed.

(b) The friction sound on the right side, behind, was explained by the lymph on the pleura; the dulness on percussion probably indicated the presence of fluid at the same time in the pleura; if so, this fluid did not prevent the production of a friction sound, as it sometimes, and perhaps generally, does.

(c) The increased resonance of the voice, and bronchial respiration under the right clavicle, were due to condensation of the upper lobe of the lung itself, occasioned by several causes—viz., adhesion, with more or less thickening, probably, of the pleurae, accumulation of blood and serum, and compression by the serous effusion.

6. There was orthopnoea before the patient's admission, but, as already stated, not after. This diminution of dyspnoea I have frequently observed in the advanced stages of extensive pulmonary disease, as emphysema. It is often to be regarded as a very unfavourable symptom, for it may occur without any amelioration of the disease which produced it, and appears then to indicate that the sensibility of the patient has so far diminished that he is no longer distressed by the disease. Patients who have been unable to lie down for weeks, will often, in these circumstances, lie in any position as freely as if there were no affection of the chest whatever.

Liver.—The liver contained a good deal of blood; but notwithstanding this, it weighed decidedly less than the average healthy liver; it was therefore atrophied. The nature of the disease was not further discoverable by the naked eye. It had not the characters of cirrhosis, and there was no effusion into the peritonæum, although general dropsy existed.

Kidneys.—1. The kidneys were affected with Bright's disease, in a well marked form, and in the advanced stage. The urine was not tested.

2. The history of the case is not sufficiently detailed to enable us to judge what was the cause of the disease.

3. Among the consequences of the renal disease are (a) the dropsy. This was not very great in amount; it had existed for two months. The disease of the kidneys, therefore, probably was present long before dropsy appeared. The latter affection seems to have supervened only after considerable dyspnoea was added to the renal disease. The reason of this is, probably, that which was more fully explained in the remarks on the last case. (b) The acute pericarditis and pleuritis are probably also to be ascribed to the disease of the kidneys; at least, there appears no other obvious cause; there had been no rheumatism and no exposure to cold.

THE COUNCIL OF THE COLLEGE OF SURGEONS.

THE following letter has been addressed by Sir BENJAMIN BRODIE to the editor of a morning paper:—

"To the Editor of the Morning Chronicle.

"SIR,—In one of your leading articles of this day, you congratulate the medical profession on my having resigned my office as an examiner of the Royal College of Surgeons of England. You claim credit to yourself for having suggested to me the propriety of my taking this step, and you add, that you conclude that I mean also to resign my seat as a member of the council of the College; and that you hope that my example will be followed by the other gentlemen of whom the present council consists.

"I have never yet thought it worth while to notice the various articles which have appeared from time to time in your journal, reflecting on my character and conduct, nor should I have addressed you on the present occasion, if the statement which you have put forth were not calculated to mislead the profession to which I belong.

"I succeeded to my office as one of the examiners of the College some years ago, not being elected to it by the council, but in consequence of my having received the appointment of Serjeant-Surgeon from his late Majesty. But I have little leisure for the laborious and responsible duties which that office entails on those who hold it, and it was long since, on that account, and on no other, that I have been anxious to resign it. Circumstances, into which it is unnecessary for me to enter, have prevented me from availing myself of her Majesty's permission that I should do so until the present time.

“I have not the smallest intention to resign my seat in the council of the College. I am quite aware that it can little matter to any one whether I resign it or not; but of this I am convinced, that if my present colleagues in the council, among whom are the best informed and most scientific surgeons of this metropolis, should act upon your suggestion and abandon their situations, from that moment, descending from the high place that it now occupies, the College will cease to be regarded as a scientific institution, and will be held in no estimation either by the profession or by the public.

I am, Sir, your obedient servant,

“14, Saville-row, Feb. 13, 1846.”

“B. C. BRODIE.”

BRISTOL MEDICAL SCHOOL.

To the Editor of THE LANCET.

SIR,—A letter signed J. G. Lansdowne, appeared in the number of your journal for February 7th, in which letter the writer charges the lecturers at the Bristol Medical School with uncourteous behaviour towards himself, and also with neglect of their duties as lecturers; to the latter charge I shall alone address myself. After referring to individual “omissions,” Mr. Lansdowne says, “All the lectures I had charged them with being omitted were found to be so, and in addition, others, making a total of 32 omissions from October 13th to December 16th, according to their register.”

As I discontinued my lectures from November 12th to November 27th, and am consequently the greatest delinquent, I feel myself bound, in justice to my colleagues, to avow the extent of my participation in the alleged neglect, and to explain the cause of it.

At the commencement of the session I acquainted the gentlemen who formed my class, that I should be obliged to leave Bristol for ten days or a fortnight, either in November or December, but that I should not curtail the number of my lectures. I left Bristol on the 13th of November, and returned on the 26th of the same month, thus causing the postponement of nine lectures; of the discontinuance and resumption of my duties I gave ample notice, and I am happy to say, that, with the exception of Mr. Lansdowne, who could not have been inconvenienced by my absence, as his pupil *does not attend* my lectures, I have not heard an expression of disapprobation at my arrangement.—I am, Sir, your obedient servant,

EDWD. JOS. STAPLES, M.D.

Lecturer on Materia Medica.

Bristol, February, 1846.

ON MR. TYTE'S CASE OF RUPTURED UTERUS.

To the Editor of THE LANCET.

SIR,—In No. VI. of THE LANCET for 1846, p. 153, my attention was directed to a case published by Mr. Tyte, of Harrow, which proved to be “Rupture of the Uterus” during labour. Mr. Tyte states that the patient was healthy and well-made, being twenty-four years of age, and in labour with her third child; and that the case in question was so far advanced, that the child's head was pressing on and dilating the perineum, and the external parts dilatable; when, all of a sudden, the uterine action ceased, and she complained of a pain in the lower part of the abdomen. Finding the pains not returning, he sent for his friend Mr. Hewlett, when, after a consultation, it was supposed that cessation of uterine action, and the pain complained of in the abdomen, was caused by an irregular acting of the uterus; and it was agreed upon to administer an enema containing forty-five drops of laudanum, which was done; and in a few hours the patient awoke with a slight recurrence of labour pains, causing the child's head to descend to a trifling degree. On examining her now, the finger could be passed quite round the head; the pains, however, ceased, and the pulse began to flag, and she vomited some gruel that she had taken. On these symptoms presenting themselves, it was thought that delivery was called for, which was attempted first by the vectis, but unsuccessfully—then with the forceps—and lastly, the head was perforated, and the business completed by eviscerating successfully the chest and abdomen.

Remarks.—This is certainly a very unusual case, as Mr. Tyte observes; but his treatment is still more unusual, and such as should not be left unnoticed, from the extraordinary manner in which it was conducted. He states that the person in question was well formed; in fact, on taking the dimensions of the pelvis, it was found rather more capacious than otherwise, and the external parts dilatable,

the child's head pressing on and dilating the perineum. He gives no reason why he could not deliver with the vectis, but that it was unsuccessful. He then used the forceps, and states, that although there was a slight return of pain, the head did not advance, (from which I infer, that he expected that more application of the forceps would expel the child;) and finding but slight pains, the head was perforated and extracted with the craniotomy forceps; and lastly, the chest and abdomen were successfully eviscerated. I should like to ascertain if any other symptoms presented themselves at this moment, and on what grounds he was justified in destroying the child. The reason he gives for thinking it necessary to deliver, is, that the pulse began to flag, and that she vomited some gruel that she had taken. Every practitioner ought to be aware that vomiting is a frequent occurrence during labour, and the sedative effect of the opium, in addition to the exhausted state in which the patient was in, might account for the state of the pulse and stomach. I should like to know why he could not deliver with the forceps? Who could wish for a more favourable case to use them?—the operation with which must have been accomplished, with any management, in one sixth of the time that was occupied by him—viz., four hours! and, in addition to giving the mother a better chance of recovering, the child, in all probability, would have been saved. Had there been any deformity of the pelvis, or impaction from enlargement of the head, then, craniotomy might have been adopted with advantage; but here there was no deformity or impaction whatever. I leave it to others to judge whether this case could not have been managed with greater success, leaving aside altogether the cause of the rupture. Inserting the above will oblige,

Your obedient servant,

High Holborn, February, 1846.

DAVID G. JONES.

ON THE USE OF THE TERM “ALLOPATHY.”

To the Editor of THE LANCET.

SIR,—I regret to see, in a late leading article, that you (unguardedly, as I believe) adopt the nickname “allopathy,” which the homœopaths have tried to impose on the profession; for there is nothing which would, in my opinion, tend so much to prolong the brief day of the fatal and extravagant system of homœopathy as an acquiescence in the term *allopathy*, so inapplicable to the science of medicine. Its adoption would greatly increase the importance of the framers of both terms, and would assist to hide from the public the fact that their practice is opposed by the accumulated experience of all nations, not only that of medical men, but of the people at large. A person knowing but little of medical science, (and this must ever be the case of the greater number of patients,) would say—allopathy—homœopathy—well, doctors disagree, I have tried one pathy, now I'll try the other.

Medical men do not endeavour to cure diseases by producing others of an opposite kind; they do not always oppose the actions which are going on in illness, or, as a general rule, adopt measures which would produce in a healthy person a state opposite to that which exists in the disease under treatment; consequently, I conclude that the word *allopathy* must be admitted to be a misnomer. An erroneous term is always injurious, even amongst the scientific, but the reception of this would be especially so to the public, who must be guided in the choice of medical men and medical systems by general impressions and mere report, and not by correct data on which they can reason; and I can conceive nothing that would more rejoice the homœopaths than the general adoption of a designation, which would imply, not that they were at variance with the accumulated knowledge of all the world on therapeutics, but merely with the opinions of an opposite party.

I remain, Sir, your obedient servant,

London, February, 1846.

JOHN SNOW, M.D.

“* * We cordially concur with the orthodox remarks of Dr. Snow, and feel with him that the less the term *allopathy* is used by professional men, the better.”—ED. L.

THE ROYAL PHARMACEUTICAL SOCIETY.

To the Editor of THE LANCET.

SIR,—When the chemists and druggists were first collected together in a body, a legislative measure had been brought forward which threatened to invade the privileges of their order, and encroach upon the freedom of their trade. This circumstance awakened a general, though purely commercial,

alarm among the members of the drug trade. A few of the more distinguished of the body considered (I believe with the best intention) that the excitement thus raised might be turned to a better account than the mere combination for trade-protection. The consequence of this was the formation of the Pharmaceutical Society. A society so generously begun was believed to be the dawning of a new and better era among the followers of the chemical art.

The Society which promised so much at the beginning has been frittered into little more than a nest of snug berths, or rather, a small corporation of private interests. The society, it is true, is endowed with a system of free representation—a species of almost universal suffrage—and so may the Turks, Chinese, or Russians, in an equal sense, be said to have a free representative system, for in either case the expression of opinion is perfectly and wilfully in abeyance—an irresponsible and self-constituted authority rules alike in each instance over a self-isolated and indifferent multitude. So long as the Pharmaceutical Society remained in the humble, though useful, capacity of a private institution, the mere detail of its government would not have been a subject for the interference of any party not within its pale. By steady and stealthy steps, however, it is now seeking to place itself on the high ground of public authority. It proposes to avail itself of every possible power that the chemists may be kindly disposed to impart to it, nor does it promise them how speedily or tyrannically it will employ it. All this, says the editor of the *Pharmaceutical Journal*, “may be comprised in a few words, simply a bill to oblige all those who assume the rank of pharmaceutical chemists, and dispense the prescriptions of medical men, to qualify themselves to pass an examination.” This must be done in a hurry too, for, says the editor, “the time has arrived when we must make a vigorous effort to complete the task which we have undertaken and in which we have made some progress.” The time has also arrived, Sir, in which we must instantly and earnestly inquire whether this Pharmaceutical Society is so constituted as to be fit for the high functions which its rulers are panting to invest it with. The chief pretension it makes to public favour is founded on the fact of its having a museum, a library, a laboratory, and, above all, a school. Men must be educated, of course, before they can be examined. But who will be so lost to equity, propriety, or decency, as to accord the privilege of examining candidates and educating students to one and the same body of men? A pretty monopoly this, indeed! A fine machinery for the advancement of science this! Cramming, stuffing, grinding, sifting, winnowing, rejecting—all carried on on the premises. Is there no such Institution as the College of Chemistry?—no Royal Institution? no splendid chemical school?—no laboratory, except at 17, Bloomsbury-square? And what is to become of those unfortunate students who have not been blessed with an education in the pharmaceutical school? How will they be able to get through their examination for the diploma? I libel not the motives of any man, or any body of men; but is it not to be expected, in the nature of things, that preference would be shown, and, like flowers turning to the sun, that pharmaceutical examiners should have a leaning towards a pharmaceutical school? The answers of THE LANCET upon such an institution as that of Blackfriars have been no less consistent than stringent; yet the most that Apothecaries’ Hall has done, was to traffic in rhubarb while it was conferring degrees. Here, however, is a society that proposes to traffic, not only in degrees, but also in the education necessary to obtain them!—taxing, as it were, both the manufacture and the raw material. If a trade is to be established by the education of chemists and druggists, they have a right to demand at least a free trade. But I emphatically pronounce, once for all, that as long as the Pharmaceutical Society shall be interested in the extension of their pharmaceutical school, they can have no fitness for the exercise of collegiate functions whose honours to their own students may be dispensed by favour rather than by merit, while they may prove to others only a mockery, a delusion, and a snare.

I remain, Sir, your obedient servant,

H. B., STUDENT IN CHEMISTRY.

February, 1846.

** Our correspondent has entirely misunderstood the proposal of the editor of the *Pharmaceutical Journal*, with respect to the “examination” of chemists and druggists, as the scheme evidently does not extend to persons who are now engaged in the business.—ED. L.

ON GRANULAR DEGENERATION OF THE KIDNEY.

To the Editor of THE LANCET.

SIR,—A paper was read one night some weeks back to the Medico-Chirurgical Society, announcing the existence of fatty accumulation in the kidney as the essential feature in the morbid anatomy of the so-called “granular degeneration” of that organ. The idea was put forward as one perfectly original and novel, and as such was it accepted by the assembled auditory. Now, waiving for the present the correctness of the idea, it may be as well to observe that I (and doubtless many others, though the initiated did not figure among the learned professors of the practice of physic, &c. in Berners Street on the night in question) have for upwards of four years been perfectly well acquainted with the circumstance, that unnatural fatty deposition in the renal substance constitutes the distinctive character of certain forms of the disease. And I came by my knowledge through a very simple process—that of reading. In the Second Part of Gluge’s “Untersuchungen” it is thus written:—

“Second form of Bright’s disease: Cirrhosis; deposition of fat globules in the cortical substance.

“First stage.—Deposition of free fat globules in the cortical substance, the vascular system of the kidney not being obviously affected.

“Second stage.—Deposition of yellow altered fat globules within the tubuli of the cortical substance. Bloodvessels unaffected. To this stage apparently belongs the case described by Valentin.

“Third stage.—Deposition of peculiar altered fat corpuscles in regular rows in the site of the tubuli of the cortical substance, the tubuli themselves having been destroyed.”

So much for the originality of the idea; now for its correctness as an exclusive doctrine. I apprehend that any one, who has examined many kidneys of persons cut off with the symptoms of “renal dropsy,” will have no difficulty in rejecting the notion of the fatty nature of the disease as invariably consonant with fact. The truth is, that the minute anatomy of the kidney, when diseased in the mode to cause discharge of albuminous urine, anasarca, and all the well-known train of evils, varies in different cases. Gluge clearly saw this, and describes two other distinct kinds of morbid change as being present in certain cases. These kinds of change (his first and third forms) are, “inflammation” and “induration of undetermined form.”

It is necessary to mention, that Gluge gives the details of numerous microscopical examinations, from which his general doctrine is derived.

I beg to subscribe myself,

ONE WHO READS BEFORE HE “DISCOVERS!”

Kensington, January, 1846.

ON THE EDUCATION OF DENTISTS.

To the Editor of THE LANCET.

SIR,—You regretted, in the leading article of THE LANCET of January 24, that circumstances have robbed the members of the Royal College of Surgeons of (according to your own estimate) the annual sum of 60,000*l.* in London alone. What are the reasons that this branch of science has been lost to the general practitioner? It is from their own ignorance in the department, arising from a general disinclination of the profession to study more than that to which the dread of being plucked compels them, together with the certainty that to this subject no allusion is ever made in their examinations; add to this, the tendency arising from the increase of knowledge to a division of labour.

You point to Nasmyth and Bell as being surgeons. True, they are surgeons, and ornaments to the profession; but Mr. Bell got his knowledge of the profession which he follows, not from the College of Surgeons, but, after he had taken his degree, from one who is not a member of the Royal College. And talented as Mr. Bell is, both in his profession and in general scientific knowledge, he has, (as a practical dentist,) in the opinion of the many, his equal in one who is not of the college; (I need not add that I mean Mr. Cartwright.) There are others, also M.R.C. surgeons, practising as dentists, who, from their knowledge of the latter art alone, gathered from sources independent of the College, are ornaments to that College which gave them their diploma. But

* Anat.-Mikroskop. Untersuchungen, von G. Gluge, Zereites Heft, p. 130, Tena, 1841.

for all this, still to be an M.R.C.S. is no criterion of capabilities to practise as a dentist; and there are many who (like myself) entered the profession first with the intention of being members of the Royal College, and to practise in that vocation, but who, when circumstances pointed out reasons for changing their profession, regretted that the College of Surgeons is no college for dentists.

The College of Surgeons is no college for dentists; but why can it not become so? The profession of the dentist is too far advanced, and too widely separated, ever again to become incorporated with the practice of the general practitioner: this is proved by the confidence which the professors of scientific diplomas have all over the country in the practice of the respectable dentist, who has nothing but his own abilities and experience to back him. But why, whilst now on the eve of the college legislation, cannot the profession of the dentist be collaterally allied with the College of Surgeons, and a school founded for the purpose? The dentists can support a school of their own; and surely the pen of *THE LANCET* will not be slow in aiding that which must so greatly benefit the general weal, and guide in a path where I have no greater abilities than to hint "there is a way."

With every apology which you may think that it is necessary I should make for begging so much room,

I remain, Sir, your obedient servant,
C. SPENCE BATE,
Practising as a surgeon-dentist without being M.R.C.S.

ON THE DIVISION OF FEES IN THE PRACTICE OF MIDWIFERY.

To the Editor of *THE LANCET*.

SIR,—Lately there have been several communications in your journal advocating the general adoption by the profession of a division of the midwifery fee in those cases where the gentleman engaged to attend happens to be absent at the birth of the child, and where another, being called in, is present. As I firmly believe that the adoption of such a regulation would be a positive injustice, and reflect great discredit on the profession, perhaps you will be good enough to find a place for a few reasons why it ought not to become general; why, indeed, such a practice ought to be at once discontinued; and why another mode of action, to my thinking much more just and honourable, ought to be substituted. In the first place, it must be recollected, that it is only in cases of great emergency that a stranger's attendance is required. Most of us have friends in our own neighbourhood generally ready and willing to lend a helping hand in time of need; and if there are any not so fortunate, or if friends are engaged, and a stranger must be sent for, how stands the case generally? Why, that the child is born, and the stranger liberated in half an hour. It very rarely falls to the lot of such men even as your suburban correspondent, to be under the necessity of remaining all night with a stranger's case. Moreover, midwifery fees are by no means uniform in amount; and they are often intended to include, not only the actual attendance at the labour, whether it be long or short, but visits made both before and after. Could a conscientious man, then, quietly pocket half his professional brother's fee, when he must well know how small a portion of the trouble of the case fell to his share? It might be, as often happens, that the practitioner in attendance had been watching the case for days, and just at the critical moment he is unavoidably absent; another practitioner is called in, and the portion of the duty considered so important may be finished in ten minutes; and then, according to this new-fashioned, cormorant-like doctrine, he is to be rewarded with half the other's hard-earned fee, whatever may be its amount. Would this be justice? Would the acceptance of such proffered bounty be proper professional conduct? On the other hand, if a gentleman, not the usual attendant, were called to such a case of emergency as this, or, indeed, to any other case of emergency—for I would not limit the application of this principle to attendance on midwifery cases—and to claim of the friends a fee, in amount according to the circumstances of the case, would he not be doing his duty, and acting as a professional man ought? He would charge what he considered his due; he would not take from his professional brother what was fairly his; and the friends of the patient could not complain at having to pay an additional fee for the services they required under such circumstances any more than they could in paying the fee of a consulting physician or surgeon. It may be said, there are many cases where the people are too

poor to pay a second fee of any kind. In such cases, supposing the medical stranger added this good and gratuitous deed to the many others he is now called on to perform, would he not be more satisfied with such conduct than if he had taken the expected rights of another? I would not have it thought that I encourage the additional working of our ill-remunerated body without their just and proper remuneration; indeed, in my opinion, the plan now suggested would tend to teach people what at present they appear very ignorant of—that in calling in the services of a medical man they contract a debt as much as if they sent for a pound of tea without the money; and I think a patient may as reasonably expect a general practitioner to pay the fees of a consultation out of his own pocket as to expect him to give up half his midwifery fee because certain circumstances have happened, over which he could have no control. If the friends of the patient thought the engaged attendant had neglected his duty, the proper punishment would lie in their hands, and they would not fail to inflict it; but I see neither justice nor honourable feeling in the wish to mulct a brother practitioner of half his fee when he has done all in his power to perform the contract for which it was agreed to be paid. Not wishing to conceal a name, however humble, I beg to subscribe myself,

Sir, your obedient servant,
WILLIAM ROBINS.

Upper Southwick-street, Hyde-park, January, 1846.

THE PREPARATION OF MEDICINES.

To the Editor of *THE LANCET*.

SIR,—I shall feel obliged if you will enlighten me on the following point:—

The last proposition in the heads of Mr. Wakley's proposed Medical Bill runs thus: "The separation of the practice of physic and surgery from the sale of drugs and medicines."

Am I to understand from this that general practitioners are to be precluded from compounding their own medicines, or from keeping medicines in their houses? Is it intended or meant that whatever medicines they may prescribe shall, of necessity, be compounded by a licensed chemist and druggist? These gentry are most baneful to legally-qualified medical men. We have sixteen of them in this town, quacking away without the slightest hesitation or hindrance; indeed, they seem to laugh all qualified men to scorn.

I am, Sir, your very obedient servant,

FREDERICK S. GARLICK.

5, Cheapside, Halifax, Feb. 1846.

* * It never can, in any Medical Bill, be seriously proposed to "preclude general practitioners from compounding medicines, or keeping medicines in their houses," nor "compel them to have their prescriptions compounded by licensed chemists and druggists." It would be a strong measure to prevent medical practitioners from recovering at law, charges for medicines which they may supply to their patients. Such an interdict even as this could not be sustained except on urgent grounds of professional and public necessity.—ED. L.

MERCURY AND IODINE IN SECONDARY SYPHILIS.

To the Editor of *THE LANCET*.

SIR,—From my experience in this country and in Paris, I am fully convinced of the truth of the four propositions enunciated by Mr. Acton on this question, at page 119 of your journal. I think the principle of alternation the only one to be relied upon—that is, if the primary symptoms have been mercurially treated, the secondary will require iodine, and a relapse of these, or tertiary if they occur, must again be visited with some form, generally a mild one, of mercury, and *vice versa*.

I have lately had three cases of secondary symptoms under my care, where the primary affection had been treated with mercury, and in all these cases this mineral had failed to procure any relief in the constitutional symptoms, though exhibited in every form, from that of mercury and chalk to that of the bichloride. All these cases yielded at once to the iodide of potassium.

With reference to the dose of this salt, I find six or eight grains in combination with half that weight of carbonate of potash, more effectual than twelve grains without that alkali.

Though M. Ricord's favourite, the protoiodide, acts well in France, in this country I have always found it produce distressing tenesmic symptoms, unless combined pretty largely with an opiate, and even then I know of no advantage it possesses above other mercurials.

I am, Sir, your obedient servant,
W. A. LEWIS.

Snow Hill House, Wolverhampton, Feb. 1846.

THE COUNCIL OF THE COLLEGE OF SURGEONS AND THEIR ORATOR.

WE entirely agree with those of our correspondents who consider that the Council of the College of Surgeons must openly and publicly repudiate the conduct of the "insulting" LAWRENCE, or that the Council itself must be denounced by the profession, and its immediate dissolution, as a governing body, be demanded as the result of a Parliamentary enactment. If the Council afford the slightest countenance or protection to a man who acted as did Mr. LAWRENCE in the theatre of the College of Surgeons, on Saturday last, medical reformers cannot hold any communication with such a body. The honour, the independence, the scientific character, the respectability, of the profession, peremptorily and imperiously forbid that any further "negotiation" should take place between the ASSOCIATED COMMITTEE OF SURGEONS and the COUNCIL, while the members of the last named body remain in the odious position in which they have been placed by the recent conduct of their ORATOR. The members of the Council, by their own acts, can alone extricate themselves from that position. The profession must not, for a moment, at such a juncture, be unmindful of the duty which a sense of honour calls upon them to discharge. Most grievously and scandalously have they been insulted by a man who was, and is, sworn to protect their interests. The dissensions which have hitherto existed amongst the MEDICAL REFORMERS must now cease. All past causes of quarrel or dispute sink into utter insignificance when we reflect on the insult which has been officially offered to the profession in the theatre of the College of Surgeons of England. If all past causes of dispute be now forgotten, and the many thousands of MEMBERS of the profession co-operate, in a friendly and determined spirit, to obtain a just system of government, that profession, at no distant day, will be united into a FACULTY OF MEDICINE, amongst the members of which there will not exist those contemptible distinctions, at law, that elevate into rank and station a few individuals, at the sacrifice of the scientific character and respectability of the great majority of their body.

NEWS OF THE WEEK.

LONDON FEVER HOSPITAL.—The annual meeting of the supporters of this hospital was lately held at the Freemasons' Tavern, Great Queen Street—the Earl of Devon, the president, in the chair. From the report, read by Dr. Southwood Smith, one of the medical officers, it appears that the number of patients remaining under treatment on the 31st of December, 1844, was 51, since which time 559 had been admitted, making a total of 610. Of that number, 451 had been discharged, and 77 had died. The total admitted since the establishment of the institution was 17,949. The subscriptions &c. in support of the hospital amounted during the year to £1264, and the expenses to £1610. The report having been adopted, and the Earl of Devon re-elected president, the meeting separated.—*Morning Chronicle*.

SIR,—An advertisement having appeared to the effect that the performances of a somnambulist would take

place at the house of a medical gentleman, in Bentinck-street, Manchester-square, I write to observe that the announcement contains a falsehood; no mesmerising parties reside at the address given in the advertisement.—Sir, your obedient Servant, A READER.

London, Feb. 17, 1846.

APOTHECARIES' HALL, LONDON.

Names of gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, 12th February, 1846:—William Home Popham, Cork; Thomas Atchison, Aylesbury; Charles John Farr, Saxmundham; William Bainbridge, Lincoln; Hector Helsham, London; Charles Shepherd Lenton, 33, Leicester-square.

CORRESPONDENTS.

Communications continue to crowd upon us from a great variety of places, complaining of the "disgusting mode" in which certain practitioners are puffed in some of the London weekly newspapers. We agree with our correspondents in all that they have said in condemnation of this odious practice. The quacks deny that they are the authors of the puffs. The editors of the papers assert that their recommendations are given from purely benevolent motives. Where the truth lies we cannot tell; but the practice is an infamous one, and the profession ought to combine heart and soul as one man, and determine to put down the nuisance by using their utmost influence, in all parts of the kingdom, against that of the newspapers in question. Such a just and virtuous combination amongst the profession would bring the proprietors of the obnoxious newspapers to their senses in less than twelve months.

A Surgeon Subscriber (Haverfordwest) has written to us as follows:—"Will you have the kindness to let me know, in the next number of THE LANCET, whether there are any Asylums for poor lunatics, not actually paupers, but who could only afford to pay a small sum, about 2s. or 2s. 6d. per week; and if there are, what means are to be adopted so as to gain admittance thereto?" Probably some of our readers are acquainted with an institution of the kind. We are not aware that any such establishment exists.

One of the Old School.—When masters or mistresses employ medical men to attend servants, they are bound by law to pay legal charges for such attendance.

The Hunterian Oration and the "disgraceful conduct" of the Orator.—We find it to be impossible to publish a twentieth part of the letters we have received on these subjects. Extracts from several of them shall appear in THE LANCET of next week. We would remind our correspondents that on such questions we ought not to be addressed anonymously.

Lithos.—The views of Mr. LISTON on Lithotomy shall be published next week. Two or three extracts from his Lectures and Surgical Works will exhibit them correctly. Mr. LISTON has shown that the operation in its former state was dangerous and difficult, in consequence of the then defective condition of the instruments employed. His condemnation referred to that period in consequence of the then imperfect state of the apparatus.

J. B. (Dorset).—He would not.

O.P.—It is illegal for such a person to practise as an apothecary. We advise our correspondent to address his questions (carefully framed) to the Society of Apothecaries, and if he should not obtain a satisfactory answer, to write to us again.

Mr. Harvey (Castle Hedingham).—Both communications were received, and both are worthy of attention. We apologize for the non-appearance of a previous acknowledgment.

A Country Subscriber is informed that such persons can "recover at law" charges made as "surgeons," but not as apothecaries. A good "Country Medical Directory" would be very valuable. There is one in preparation by the editor of the London Medical Directory.

The letter of Mr. Prichard (Bristol) next week.

Communications have been received from—William Bird Herepath, M.B., (Bristol.) H. Bell, M.D., A General Practitioner fond of his Order, A. M. C., Mr. S. J. Clarke, Mr. Alfred Bower, Curtain-road; M. D., (London University,) Mr. Samuel Beecroft, and Mr. Thomas C. Leah, (Hyde,) Edward Augustus Cory, M.D., T. L., Dr. J. Johnston, (Kelso, Lisburn,) J. L. M., (Strand,) Mr. Joseph Macclise, (Russell-place, Fitzroy-square,) Medicus, (Bristol, Leeds, Southwark,) Dr. Martin Sinclair, (Manchester,) Mr. J. G. Baston, Chirurgus, Mr. T. Stokes, (Nailsworth,) Mr. Stokes, (Bristol,) A Constant Reader, Manchester, Dr. H. J. Hinxman, (Bury,) Mr. R. Hindle, (Sadden, near Blackburn,) Scotus, Mr. L. Martin, Mr. H. Eden, One of the Old School, Argus, Dr. S. Price, Mr. Kirby, (accidentally omitted in the three previous numbers, for which we trust he will accept our apology,) Mr. G. L. Hutchinson, Mr. Thomas Mokip, Dr. Cheldon, Mr. J. Walker, T. B. B., and Mr. Eccles.

ERRATUM.—In the last number, page 198, line 12, read "special sense" instead of "spinal sense."

CLINICAL LECTURES

ON THE

PRINCIPAL FORMS OF INSANITY,

DELIVERED IN THE MIDDLESEX LUNATIC-ASYLUM
AT HANWELL.

BY JOHN CONOLLY, M.D.,

PHYSICIAN-TO THE ASYLUM.

LECTURE XI.

*Insanity complicated with general paralysis.—Description
of the complication.*

THE form of malady of which I have this morning shown you several examples in our wards, is one to which I am inclined to think your attention may not before have been directed. It is the complication of insanity with a peculiar kind of paralysis, not seen except in such complication. Although we are familiar with this form of disorder in asylums, and learn to recognise its earliest appearances, I frequently find its existence unrecognised or unknown when attending private cases; and as it is a complication of a very serious character, and the unfailing ground of an unfavourable prognosis, the opinion founded upon it, and expressed to the friends of patients so affected, is generally received with surprise, and sometimes with incredulity. This complication is for this reason, as well as for general reasons, deserving of your attentive observation.

Insanity may be complicated with partial or complete paralysis of one side, or any common form of paralysis; but no peculiar mental symptoms attend such complications: the insanity puts on a chronic character, and the paralysis is irremovable, and the bodily and mental malady continue the same for years. In the female ward No. 2, J. R—, aged sixty, and in the female infirmary, L—, aged seventy, have been thus affected for at least six years. In all that time I have seen little or no alteration in them: the affected arm and leg have neither become more nor less paralyzed; the mind has been neither more nor less disturbed; their actions, expressions, and appearance, have been uniformly the same. But the course of things is very different in that far more frequent form of paralysis which is found in association with insanity, and perhaps never except in such association, and to which the term general paralysis (*paralysie générale* of the French writers) has been frequently given, or that of the paralysis of the insane, which is more correct. This remarkable affection was probably called general paralysis, in consequence of its character not being to affect one side of the body, or one limb, or the lower limbs only, or the tongue only, or to distort the face, or to draw the tongue to one side; but gradually, especially, and almost always in a certain order, to invade the whole voluntary muscular system. If not previously unnoticed, it was certainly only first distinctly described in 1823, in the works of M.M. Bayle and Calmeil. The admirable monograph of M. Calmeil on this subject ought to have been translated; and deserves to be carefully perused by every practitioner interested in this class of cases. When I read it, immediately after its publication, I had never noticed the form of malady it described. Not long afterward, I saw several cases of it, with M. Calmeil, at Charenton; and we have always many illustrations of it here, in all its instructive stages.

The first symptoms of this complicated malady are often slight, and somewhat variable; and it is difficult in many cases to ascertain when or in what manner it really commenced. M. Calmeil thinks the paralytic state sometimes precedes the mental aberration; but of this I have never seen an example. When the patient comes to the asylum, or becomes sufficiently ill to cause his medical adviser to be consulted, it is usually, I think even invariably, the mental peculiarity that has excited anxiety, the bodily malady not having attracted notice. Something has been observed in the manners and habits of the patient, differing from his usual manners and habits; perhaps a striking change in some particulars, or only a kind of exaggeration of the natural character in others. In the higher ranks, these peculiarities may be, a disposition in the patient to take more exercise than usual, to drink more wine, to expose himself more heedlessly to cold; he is disposed to exaggerate the value of his property, or to think more about money; or to take an unwonted interest in trifles, talking with unaccustomed energy, or arguing with unusual vehemence. Men of business and tradesmen become sanguine, speculative, talk of large sums of money, and neglect a prudent

No. 1174.

attention to the means of acquiring moderate profits: they make foolish purchases, and sell inconsiderately, believing that they are making a fortune; and sometimes fancy the property of others to be their own, and pass to the asylum through the hands of the police. Perhaps none of these incipient symptoms are observed every day; but on some days only; and there are better days, in which the anxiety and fears of the relatives are allayed. Alternations of good and bad symptoms may continue long, and give rise to hopes which the physician alone knows to be delusive. Even the physician partakes of this hope often, because few physicians often see the malady. The patient perhaps looks well, and is extremely cheerful; but a peculiar tremor is observable about the angles of the mouth, and a slight tardiness of articulation. It may seem strange to you to be told that these few symptoms are, in such combination, ominous in their character, and indicate a hopeless and fatal malady.

Although you may be ever so positively assured, before you see a patient thus affected, that he has not the slightest symptom of paralysis, if you find these symptoms, you may as positively conclude that the worst form of paralysis has already commenced. To an ear practised in such sounds, the first few words uttered by the patient reveal the exact character of his malady. There is a little trembling, and a kind of imperfect obedience of the lips to the will; and the speech is rather hesitating than stammering, a kind of delay or lingering between the syllables being its chief characteristic. The intervals both between the syllables and the words are increased, and this imperfection is contrasted with an earnest, joyous manner, together with a slight expression of fatuity. If you ask the patient to let you see his tongue, you will find, that although it is not drawn to one side, or moved from side to side, it is protruded, and kept protruded, by small successive efforts, and, in old cases, with much difficulty and repeated attempts. At an early period, this sign may be wanting; although, if the patient, even then, tries to keep the tongue protruded for a few seconds, the tongue becomes tremulous, and you will see that continued protrusion is accomplished in the same way.

When there is an extension of the paralysis, it is usually next observed in the lower limbs. If you ask the patient if he can walk well, he answers, "Oh, yes; quite well;" and jumps up and sets off with great alacrity. But you may discern an imperfect movement of the legs, a certain appearance of awkwardness and heaviness, or, perhaps, a planting of the feet more apart in walking, as if there were some little difficulty in balancing the body successively on each knee. The hands are sometimes tremulous, and the patient is observed to lose his manual dexterity; or his handwriting has become much altered. As the hands are less often employed, the infirmity of the legs always attracts the most attention; but the hands are soon observed to tremble when exerted, and to have become feeble. Meantime, the patient makes no complaint of any kind; he even tells you that he is in particularly good health, and much stronger than he used to be. Perhaps he adds, that he has just been appointed to the command of the army, and is to have a million a year. The mental delusion may be very great, and the paralytic appearances slight. Or in those who have led regular lives, or have always been of a tranquil disposition, the mental malady has rather the character of loss of power which accompanies old age, but with the addition of delusions not always present in natural decline. The mental delusions may, in all cases, lead to occasional fits of irritability, or of extreme restlessness and excitement; the patient declaring that his presence is urgently required somewhere, and manifesting the greatest anger and violence when he finds his wishes opposed. He accuses those about him of injuring his prospects, and obstructing his advancement, and it is very difficult to pacify him, or to prevent his escape by the door or the window.

In our attempts to obtain correct histories of the cases presented at the asylum, we almost always hear from the friends that the patient became extravagant, sanguine, boastful, or intemperate, contrary to his usual habits; and on this state they often describe as having supervened some kind of convulsive fit, after which, the patient became evidently insane. In many cases, no convulsive fit has been observed, but the patients have now and then cried out suddenly, perhaps in the night-time, without known cause. The mental malady, and its paralytic complication, may rest in the early stages for a long period, particularly in persons previously healthy; the mind, with proper treatment, becoming calmer and even clearer than when treatment seemed first to be required; but the peculiar character of the mind, its exaltation and its

feebleness, and the significant speech, are never removed; and whatever fair prospect seems to arise is still delusive.

The progress of the malady is uncertain in all but its result. After a considerable truce, a rapid deterioration is perhaps perceived, preceded, probably, by an attack of giddiness, or by a flushed face, with some excitement, some confusion, and some additional tremor, such symptoms lasting a day or two, and leaving the poor patient evidently further damaged. In other instances, epileptiform attacks supervene, which I had never observed until I lived among the insane, although Esquirol notices the circumstance of such convulsions in connexion with paralysis; and his description nearly accords with the form of malady to which M. Calmeil gave the name of general paralysis. After such epileptiform seizures, the patient's state is always found to have undergone considerable deterioration. If these disturbing accidents do not occur, a very slow change for the worse takes place; the mind becomes weaker, and the body more helpless; but nutrition goes on well for a long time, and the effects of good food, and warmth, and care, and cleanliness, and kindness, are quite remarkable, prolonging life even for years, the patient becoming fat, and passing his days in a state of perfect mental satisfaction.

In a patient not long since admitted, P. L—, the power over the sphincters, which appeared to be lost, has been recovered since admission, affording a proof of what care will effect in apparently hopeless cases. He is only thirty-two years of age, and his physical and mental state has improved, but the result mentioned is probably to be ascribed to the improved condition of his mental faculties, for muscles truly paralyzed seldom recover their power. Intemperance was assigned as the cause of the malady in this case, and the patient was said to have been insane only three months.

All through the course of this malady, one of the most curious circumstances is the perfectly happy state of the patients. I have known very few exceptions. They speak of themselves as gaining strength, and as having had all their worldly business arranged quite comfortably. Reduced to poverty, their families in the workhouse, they observe that we shall be glad to hear that their affairs have wound up so well as to leave them a very good income. The placid happiness of some of them might even be envied by the healthy. Others are more excited: their houses are described as vast and magnificent; their carriages are the most elegant, their horses are matchless; they are people of royal lineage, and have hundreds of thousands in the bank of England. When unable, at length, to walk without help, or even to rise from a chair, they exult in their strength, and long to compete in the race with the swift, or to contend in the ring with the strong. Their accomplishments are equally great and various. Only a few weeks ago, J. P—, who is now lying in a padded room, unconscious and scarcely able to move, tottered up towards me by the fire-place, in the male infirmary, and with imperfect speech, but with the grave and deliberate air of one making an important communication, told me that he was the finest singer in the world; that he meant to marry an equally gifted lady, and after converting her to catholicism, to commence a public career. His own voice, he assured me, was precisely that of Braham—hers, that of Malibran; and that he should call on all the nobility, and give ten per cent. of all that he made to the poor. All this, and more, he uttered quietly and slowly, begging me to understand that this was "no wild scheme, but fact."

This state of complacency causes an entire disregard of their real affairs, their property, or their business, and often an almost complete indifference to their relatives and friends, and all domestic and social relations. It seems to be partly the result of a physical condition free from uneasy sensations; the appetite being good, the bowels not generally disordered, and, what is remarkable in relation to the appearances after death, the ordinary senses not being impaired; there being neither loss of sight nor strabismus, nor affection of the hearing. The appearance of the tongue, and the state of respiration, indicate little or no disorder. In the earlier stages, the pulse is very little affected; being only feeble and rather quick, as in other forms of insanity; but in the advanced stages it varies more from day to day, and is sometimes 140. Sometimes the pupils are dilated; and in some instances the patients suffer from a feeling of general debility; but upon the whole, they seem to be protected by the nature of this malady from all ordinary mental or physical discomfort. It seems as if all sexual feelings were early extinguished; as well as all care, ambition, rivalry, and other disturbing influences. Fits of impatience occur, but under proper management soon subside. The sphincters lose their power, or the mental infirmity leads to a neglect of cleanliness assigned to that cause; but the

patient seems unconscious of any distress; he cannot walk but he never complains; every function gradually grows weaker, but he never seems to imagine that he is seriously ill. In some protracted cases, the hands and feet, or the knees, become bent and contracted, particularly, I think, where women are the subjects of the malady; but the patient never refers to the inconvenience that results from this; and gangrenous ulcerations take place in parts pressed upon, or where no pressure exists, as on the top of the feet, healing and breaking out in succession, which yet rarely produce any suffering. To daily inquiries about the health, the patient's answer is, almost uniformly, "quite well."

Nothing struck me so much, when I first saw these cases at Charenton, in 1827, as the contrast between the joyous manner of the patients and their utter helplessness; and I still remember a poor creature, unable to rise from his chair, who, on being asked how he was, replied, after a short pause, with all the emphasis of his nation, "*content*." The senses become at last duller, and the patient weaker; he does not recognise those about him; but he sinks as from the mere decline of old age, with some of its irritability, but exempt in almost every case, even from the first, from all other perturbations.

Some exceptions, however, there are, in which the patients weep and are distressed; and others in which paroxysms of restlessness and excitement come on, and the patient runs wildly about, if able to do so, laughing, crying, complaining, exulting, and urgently begging to be allowed to go home. An intolerable sense of heat, or a morbid coldness, forms the occasional torment of others; and they all bear extremes of temperature with difficulty. Even when moribund, a painful state of restlessness is now and then observed; and death, in some cases, is preceded by a series of convulsive attacks, and subultus of one side of the body, or of both sides, continuing for days.

When going round the asylum this morning, you had opportunities of seeing examples of all the stages of this malady. You would observe, that whilst I pointed out many cases of it to your notice on the male side, there were but two or three shown to you among the female patients, the malady being far more frequent in men than in women. But some examples were found on the female side of the house. M. C—, a stout good-humoured woman, who spoke to us in the kitchen, and expressed herself so confidently about going home to her friends, is in the first stage of the malady. She is twenty-eight years of age, a widow, and has been a cook. "No cause is assigned either for her mental or bodily illness; she became insane about seven months since, (1844;) has some delusions about possessing property; is always very quiet and orderly, and is actively and usefully employed, sometimes in the kitchen, and sometimes in the bakehouse. At present her walking is just perceptibly effected, but when she speaks you distinctly observe a tremor of her lips and about the angles of her mouth; she protrudes her tongue by several little efforts, and her delayed words and syllables betray the first indications of a malady which will surely proceed to the worst consequences. Even now, she is occasionally confused and awkward in her work, and by and bye she will become unable to move about, and probably linger long in a helpless state. (Within a year she became unable to walk, but she is yet living, lying always in bed; frequent gangrenous ulcerations appearing and healing; her speech very tremulous, the motion of her hands very unsteady, but still cheerful, hopeful, and looking well. Her malady has now lasted three years. 1846.) In the male ward No. 11, you noticed a stout, fresh-coloured Irishman, T. C—, who has only been with us three months, (1843.) He showed, on admission, the incipient symptoms of the malady. He is a labourer, thirty-five years of age, and only reported to have been four months insane. His mind is full of ideas of grandeur; he is the Duke of Stratford, in Essex, near to which place he was employed: he says he has chests of money, hundreds, thousands, millions, but says, at the same time, that he is only a labourer at the docks; his speech is lingering; the legs are little affected; but from his appearance it is probable that his disorder will make a rapid progress. (He died within a year from the time of his admission.)

In ward No. 9, T. S—, a good-looking man, of very respectable appearance, also manifests the earliest symptoms of the malady; he talks confidently of his property, and is anxious to go and look after it. He is stout, and his complexion is good; his age is only forty-five, and he has been two years insane; but you may detect, in the motion of his lips, the signs I have already spoken of, and when he walks you see a kind of stiffness in the lower limbs; and the same may be observed of a tall young man, in ward No. 8, T. M—, whose age is only twenty-two. A further progress of the disorder is exem-

plified in J. H.—, in the male infirmary; he is thirty years of age, has been insane two years, and was affected with general paralysis on admission, three months ago. He looks fat and comfortable, and is very busily employed as a helper; but his gait is unsteady; his feet are planted wide apart in walking; there is very little flexure of the knee-joints; he speaks with much hesitation, and much trembling of the muscles about the mouth, and his tongue is protruded with difficulty; but whenever you ask him how he does, his answer is, "quite well." (In a year and a half afterwards, (1845,) he became rather suddenly worse, emaciated, feeble, scarcely able to walk or to speak, and sunk rapidly.)

The symptoms of this combination of insanity and general paralysis are in its middle stages so nearly the same, that I need not dwell on the numerous cases of which the impression must be fresh in your memory. In all of them you noticed the cheerful countenance, the hearty manner, the trembling speech, the tottering walk. It is by no means improbable that you may note changes in some of these cases before your visits to the asylum are concluded; for great alterations for the worse often occur rather suddenly in them; and the change is perceptible in all that the patient says and does: the lively expression of countenance becomes lost, the mind is oppressed and confused, and activity grievously diminished. In a great proportion of the cases I believe life is extinguished within two years from the appearance of the malady; but we have some patients who have survived four or five years.

There is in the male infirmary a patient now fast sinking under the malady, but who has survived its first appearance nearly six years. This patient, R. L.—, was admitted to Hanwell in 1840, having been previously at Bethlem: he was said to have been only six months insane, and slight symptoms of general paralysis were already established. In successive years his state has curiously illustrated the gradual advance of the disorder in a man of naturally robust constitution, and in the prime of life. When admitted, he was forty years of age: he had been a clerk in a public office, and had lived freely and gaily. He appears to have inherited a predisposition to insanity, and he has a brother who is insane. A blow on the head was received some years ago, which is thought to have brought on his malady. For a year after his admission he was generally lively, talking and often singing vociferously; he was then also active, prone to mischief, and subject to sudden fits of violent passion: but at times he conversed rationally, and frequently made witty observations. His state then began to change for the worse; he became dirty in his habits, and tore up his clothes and bedding: his speech about the same time became more imperfect, and his mode of walking unsteady. He was seen in this state when I gave the first course of clinical lectures in the asylum (1842): being indeed then scarcely able to support himself on his legs. At that time he had also a propensity to chew and swallow pieces of his torn clothing, and we were obliged to put him a dress on made of ticking, which he could not easily tear. Although he walked with extreme difficulty, he was fond of putting pebbles, broken earthenware, crusts of bread, bits of wood, or anything else which he could find, into his shoes or into his stockings. His head is large and bald, and at that time both his face and head were generally red from excitement. In a few months after that time the disorder seemed to have made rapid progress. He had become almost unable to walk; and he moved with difficulty from one chair to another. He had lost his liveliness; his wit had left him; he made no more attempts to sing. After that there was a truce, of the kind so often observed in this complication, but of longer continuance than usual; for when the lectures were given in 1844, he had become more lively, although very feeble: his state was indeed more comfortable than at first, for he was less irritable, and usually highly contented, sometimes still inclined to be jocose. Although scarcely able to rise from his chair, he boasted of possessing extraordinary strength and courage; and exultingly said, that his father was a cooper at the place where they lived in the country, but was George the Fourth when in London. At irregular intervals of a few months, he had fits of confusion and bewilderment, lasting for a few days, in which he seemed to have become slightly more paralyzed: he still knew everybody, and could amuse himself with a newspaper, and had sometimes a disposition to talk, and related some of his past adventures with considerable glee. From that time there has been a gradual decline both of mental and bodily power: he talks little; he cannot walk at all; and he cannot feed himself: his vivacity is quite gone; he scarcely recognises any of us: but still, when asked how he is, he summons all his strength to make his old hearty reply of "quite well."

You here see the last stage of this malady, and it consists of

a mere aggravation of the symptoms of the first: there is no contraction of the hands or feet, or deafness or blindness, but simply a general loss of power. (The patient died in August, 1845, without pain or apparent suffering of any kind.) All the stages, which have required years for their evolution in this case, are, in other instances, run rapidly through in a little more than a year. A female patient was admitted in December, 1839, E. W.—, only thirty years of age, married, and reported to have been insane one year: she was already slightly paralyzed. No cause of the insanity was assigned. In a month or two she became highly excited, but spoke with difficulty; she ran violently about, and followed us as well as she could through the ward, always exclaiming that she was going to be married to the most beautiful young man in the world, who was excessively rich, and had sent her all kinds of fine clothes, and had given her the most beautiful rings. After a time these ecstasies were succeeded by total silence, which was preserved until she died in April, 1841.

As the addition of general paralysis to insanity seems to constitute one of the many diseases which, when once established, are incurable, the best advice to give the student concerning it is, that he should do what physicians are beginning to do with respect to many of the affections they are compelled to acknowledge as incurable, and what mankind will in time be wise enough to do in relation to all diseases—namely, to endeavour to find out the cause of this calamitous complication, with a view to guarding patients from its invasion. There are several peculiarities of character about it, which may assist the investigation of its origin. It is far more common in men than in women. It is far more common in societies or nations of great cultivation, activity, and enterprise, than in others; and, apparently, more common in temperate than in cold or hot climates. It seems more frequently to affect well developed than ill developed brains; and although epileptiform seizures supervene upon it, it does not appear among the epileptic. Lastly, although the condition of the brain is in some degree that of chronic hydrocephalus in most of the cases, the ordinary senses are not impaired. Some of these circumstances have attracted attention in different countries, and others have offered themselves to my own observation in the course of a somewhat careful notice of a malady always, for several years past, before me.

Its greater frequency among men than women seems to be observed wherever the malady has been recognised. Out of 500 female patients, M. Calmeil only reports ten cases of general paralysis; but out of 1200 men, he reports eighty cases: being in the proportion of one to fifteen in men, and only one to fifty in women. In this asylum, we have at this time about thirty-two cases of it among 400 male patients; and not more than four or five women affected with it out of 560 cases. It seems to me remarkable, also, that I have never myself met with a case of it in a female patient, except in the poorer classes; whereas I have seen several examples of it in men of the higher ranks, and in professional men. In England, in France, in Belgium, in Germany, and perhaps generally in the north of Europe, it is met with in every asylum. Throughout Italy, according to the observations made by Dr. Guislain, of Ghent, in his instructive Medical Letters on Italy, it is extremely rare, although inflammatory affections of all kinds are common; and it has been ascribed to mere inflammation by some of the continental physicians. At the celebrated asylum of Aversa, containing 360 patients, it has seldom been observed; although intemperance is acknowledged there as a frequent cause of insanity, and has in our own country been most erroneously considered to be the general cause of the combination of insanity with general paralysis. M. Guislain found it to be rarely met with in the asylum at Florence, containing 300 patients; and the same was remarked at Turin and Milan. In the asylum at Genoa, containing 270 patients, he found no example of it. M. Guislain's mode of accounting for its greater frequency in the north of Europe is, by supposing it to depend on the same disposition which, in his opinion, makes it more frequent in men than in women—"a more humoral, serous, lymphatic, sanguine" temperament, and a more "humid, albuminous" encephalic character.

I have sometimes thought I saw reason to conclude that general paralysis was most frequent in those cases of insanity which arose from what are vaguely termed moral causes, meaning violent impressions made on the mind, disturbing the sentiments and affections, and often leading to misgovernment of the propensities. I think a cause of this kind has existed in several cases seen by myself in the asylum and in private practice; and it is frequently assigned in the histories of the cases given by M. Calmeil. Losses at play, disappointment of ambitious expectations, irregular habits of

life, anxiety in business, loss of relatives, sudden reverses, are among the causes of this kind which often occur in his work. These causes may in some cases, and more in some countries than in others, become associated with intemperance; but I have found a very small proportion of cases in any class of life in which this has existed; and I am equally doubtful of the origin of the malady in sexual excesses. All men are more or less actively virtuous or prone to faults in different states of health, and at different periods of life; and the moral aberrations unexpectedly appearing in persons previously of regular life and moral habits may generally be suspected of having their origin in some change taking place in the brain.

I have seen several examples of insanity and general paralysis appearing in men between forty and fifty years of age, men of education and high character, never guilty of excess of any kind. In all of these some modification of the character first attracted notice; and in three remarkable cases no probable cause could be assigned, excepting severe falls on the head sustained some years before. An hereditary tendency to cerebral malady clearly existed in one of these cases only: and in a malady only accurately observed for twenty years, materials for deciding on its hereditary character are scarcely yet possessed. In one case, in which no cause of this kind could be recollected, and no other cause, accidental or hereditary, two violent mental shocks had been sustained; one in consequence of the patient having been aroused in the night by the house being on fire; and one, a few months before that event, on seeing a child with its clothes in flames on the bank of a river opposite to his house; on which occasion he rowed across, calling to the child to throw itself into the water, which it did: he took it out of the river himself, but the child died soon afterwards; and this accident produced a very painful impression on the patient's mind.

In the humbler classes of life, I have met with cases which appeared to have ensued on loss of work, or on some fluctuation of affairs affecting particular employments. This was the case with R. D—, a mild, inoffensive man, in ward No. 3; he was a waterman, of particularly sober and industrious habits; and the employment on which he depended for the support of his family failed as steam-boats became more numerous on the river; and he fretted extremely. At thirty-five years of age he became insane, and was admitted here after being a few months ill. Symptoms of general paralysis were soon detected; epileptiform attacks supervened, and he is now, two years from the commencement of his illness, fast sinking under the malady.

My observation in this asylum and in private practice has convinced me that in almost every case in which this form of paralysis is complicated with insanity, the head is well developed. A defective form of the head is very general among the insane; a want of symmetry in the two sides of the head, great narrowness, or breadth and great flatness at the top or behind the head, and other malformations, are frequent: but there is also a form of the head which unquestionably in various degrees exists with and characterizes a great majority of the insane, and of those disposed to various forms of mental disorder. A deficient development of the forehead, especially of the upper portion of it, and a large occiput, surmounted by a high vertex inclining backward, is a general description of this peculiar form. A reference to the partitions of the phrenologists may enable you more clearly to understand that the whole of that part of the head in which they have placed the organs of eventuality, time, wit, causality, comparison, wonder, imitation, benevolence, hope, and veneration, is especially defective, and the portions assigned as the seat of firmness and self-esteem are largely developed, and the occiput generally, whilst the sides of the head are somewhat flattened. But it is not in these heads that the peculiar complication of insanity and general paralysis usually take place. In the greater number of such heads, mania, with or without delusions, soon passes into an almost constant state of imbecility or dementia, with occasional violence. But in the subjects of general paralysis, together with a better formed head, a greater portion of sense and understanding long survives, and only yields at last to the general debility which spares no function, mental or corporeal.

The causes of this distinct form of malady are, it must be confessed, obscure; and I cannot think that we are much assisted in the investigation of them by the appearances found in the brain after death. These appearances, in the cases examined here, have been somewhat uniform, and they agree with what I have found in a few cases examined elsewhere. In five cases lately inspected after death, all cases of a few years' duration, in men of middle age, the cerebral vessels

were full of dark-coloured blood, the substance of the brain was remarkably firm; the arachnoid membrane was thickened throughout, and especially in the ventricles and septum, where it had an almost flocculent appearance; and the ventricles were quite filled with serum. In one of these cases there was also much lymph beneath the arachnoid, over both sides of the brain; in the others, merely a milky effusion. Precisely the same appearances have been reported to me in three other cases. In another, a male patient, sixty years of age, there was milky effusion beneath the arachnoid, and the ventricles were full of serum, but the brain was not unusually firm: and in this case the cerebral arteries were dotted with atheromatous deposits, or points not so hard as to be termed osseous. There was also atrophy of the cineritious matter, which was in some parts pale, and reduced to extreme tenuity, and in several portions of a pink colour.

In several of M. Calmeil's cases the medullary substance of the brain is described as being firm; but in the twentieth case recorded in his book it is mentioned as having been in a state of general softening. Dr. Delaye, who is cited by Calmeil, found induration in almost every case. The numerous examinations described in M. Calmeil's book are nearly uniform in exhibiting serum in the great cavity of the arachnoid; it is also often mentioned as filling the ventricles; the cortical substance was generally injected, and the white substance occasionally firm. A morbid condition of the membrane lining the ventricles is also sometimes noticed, and induration of the spinal cord; but the last was only a rare appearance, as the cord was usually unaffected, except by the presence of serous effusion.

It appears, therefore, as if the only appearance constantly met with, or almost constantly, is that of serous effusion, to the extent of several ounces, under the dura mater, or in the great cavity of the arachnoid. This circumstance led M. Bayle, and also Esquirol, to ascribe the whole malady to membranous inflammation, and consequent effusions. But every day shows us the same effusion in cases of chronic insanity without paralysis. Effusion beneath the arachnoid, separating the convolutions, accompanied by a thickening of the membrane, are equally common in insanity with and without general paralysis. Effusion into the ventricles, to a considerable extent, with a thickening and roughness of the lining membrane and septum, are more frequent in general paralysis than in insanity, and seem in some way to belong to the complication of insanity with general paralysis. I have not myself noticed such frequent or marked alterations of the colour or consistence of the grey matter, as to attach so much importance to them as is done by M. Calmeil.

Perhaps the opinion of that excellent observer may be correct, that there is a chronic inflammatory state of the cerebral substance and periphery. The microscope may also afford us additional information as regards a possible interstitial deposition in the general cerebral substance: but I need scarcely observe that no observations require more careful repetition than those made by means of this instrument.

I confess that these statements of what the morbid appearances have actually revealed is not at all satisfactory; but I believe we are only on the mere threshold of this kind of knowledge. Our present disappointment may be lessened by remembering M. Esquirol's remark, that chronic inflammation of the brain produces compression and paralysis, which are also the consequences of effused blood; and that tubercles, cancer, and softening of the brain, produce peculiar symptoms, distinct from mental alienation. Nor can we forget the singular but well attested facts, to which the same experienced physician alludes, that sudden restorations to mental health have taken place after long and severe attacks of insanity; and that in some long existing cases no morbid change has been found in the brain, whilst every kind of morbid change has been found to exist without insanity.

Doubtless there are morbid changes, or deteriorations, which the eye cannot see, or the hand feel, but which the mind can appreciate: actions may be deranged, concerning the mode of which we cannot form a reasonable conjecture; or the structure of the brain may be complete, and the material itself defective. The unquestionable affinity between the constitution prone to phthisis, and that prone to mental disorder, is one of several facts illustrative of such possibilities; and cases of daily occurrence give support to them. As especially regards general paralysis, I find a most apposite observation in Dr. A. Sutherland's lectures in the *Medical Gazette*: he mentions that "a patient under his care, who died of general paralysis, was the only one of ten children who did not die of phthisis." It will at once occur to you, that the morbid appearances so generally found in the brain after death in

insane persons may have had no other relation to the original cause of the disease than that of effects; and that this explains why they so often explain nothing.

It is better frankly to acknowledge all this, and instead of contending for fanciful explanations, rather to have faith in the gradual discoveries reserved for future times, or for future investigators, in which number you may yourselves become distinguished. The certainty of many county asylums for the insane being constructed within the next two or three years, and the probable appointment of well educated medical men to superintend them, will give an impulse to the study of mental disorders which has long been wanting, and I do not doubt that the next twenty years will be prolific of great results in this department of pathology. Unfortunately, the late act of parliament, which prescribes the building of asylums, also authorizes the removal of chronic cases deemed incurable, from the county asylum, to any place provided for them by parochial authorities. By the fatal clauses permitting this, the treatment of the insane will be carried a great step backward. Small, ill-built, ill-governed asylums will be attached to numerous workhouses all over the country, and in such buildings the insane cannot possibly receive proper attention, nor can science, as respects these maladies, be successfully cultivated. The evils which will surely result from these arrangements, and especially the increased mortality among the insane, if correct returns of it can be ensured in such places, will in time lead to a remedy: but this part of the recent legislation respecting lunatics is a lamentable mistake.

At your next visit to the asylum, you will have another opportunity of seeing the patients who have formed the subject of the present lecture, and will be better prepared to observe, what must be, to most of you, a new form of disease. I shall then speak of its treatment.

FOREIGN DEPARTMENT.

M. MAGENDIE'S INTRODUCTORY LECTURE AT THE "COLLEGE OF FRANCE."

THE following remarks, which we extract from the *Epoque*, were made by M. Magendie, on opening his course of physiology at the College de France:

I have long been in the habit, previous to resuming my lectures, of devoting a few minutes to an inquiry into the actual state of medicine, and to an examination of the modifications which the theory and the practice of medical science may have undergone during the preceding year. This retrospective analysis will to-day furnish us with a certain number of reflections, the importance of which it would be in vain to endeavour to conceal, referring as they do both to the present and the future state of the profession.

Medicine and medical practitioners have attracted much attention during the last year. Many members of our profession have sat in congress, government has issued committees, the ministers have made solemn promises, and it is said that a law to regulate our destinies will shortly be presented to the Chambers. Everything, therefore, seems to smile upon us, and the wind swells our sails. But in the midst of these favourable circumstances—of these happy omens, alarming symptoms are discerned. The future prospects of medicine are the subject of deliberation, but ought we not sooner to deliberate on its very existence.

Medicine can only exist but inasmuch as patients have faith in it, and claim its assistance. It is not by theories that it lives, but by clients. Now it is impossible to conceal to ourselves that, at present, a certain proportion of the public abandons classical medicine, ironically called *old medicine*, and throws itself into the arms of new systems, thereby firmly believing that it associates itself to the progress of intellect.

Homeopathy—for it is more especially to it that I allude—aspires to nothing less than to overthrow the entire medical edifice with the arms of ridicule and contempt. And do you know how many specifics it numbers? Three hundred and fifty! With a few globules of aconite, at the dose of a billionth of a grain, it produces the same effects as a bleeding of twelve or sixteen ounces. You exhaust your intellectual energies to find out the seat and the nature of a disease. Vain efforts! Homeopathy shows that every morbid symptom has its origin in psora, a kind of imponderable agent, which therapeutic substances reduced to unimaginable proportions alone can combat. Thus it is only with infinitely small means that infinitely large effects can be produced.

But, you will say, the persons who believe such absurdities are poor dupes, and the men who prey upon their weakness,

hardened quacks. You are perhaps right; but listen to those whom you meet in society, and you will be surprised to hear of the wonderful cures that homeopathy has performed. No doubt its promises are often cruelly falsified, but the failures are but little spoken of. Moreover, we must not deny that many patients have recovered their health, in a most unhopèd-for manner, whilst under homœopathic treatment. It is easy to understand that enthusiasm or the love of gain should take advantage of such facts to exalt the marvels of homeopathy. This brings us back to a question which I have often raised, and which I have endeavoured to elucidate by experiments for the last ten years—viz., what is the influence of treatment on the progress of disease?

In hospitals, as well as in private practice, we must first take into consideration the influence of the mind of the patient. Now there can be no doubt but that a patient who takes a medicine, experiences immediate benefit, from the conviction that it will favourably modify his disease. If this favourable result takes place, what has been the real share of the medicinal substance administered? Medical men are always inclined to attribute the cure of the disease they treat to the means which they have employed; but recollect that disease generally follows its course, without being influenced by the medication employed against it. Thus it is that you are often much deceived. A given medicine will succeed in an apparently serious case, and will fail in another case of a less dangerous character, without your being authorized to attribute to yourself in any way the success or the failure.

These reflections explain at once the cures of which homeopathy is so proud. Homeopathy, instead of bleeding a patient, will place gravely on his tongue a globule of aconite, which he will swallow with confidence and faith. You then see the disease improve. But it would have improved just as well without globules, provided some singular operation had struck the imagination of the patient. It really is too great a stretch of credulity to believe that a globule prepared by the formulæ of Hahnemann can contain any active principle. But, on the other hand, any one who has seen disease, must at once admit that this same globule may exercise, through the imagination, a powerful moral effect. You must not, indeed, accuse me of partiality towards homeopathy, when I state that I firmly believe that a physician would cure a patient sooner with globules, if the patient has faith in them, than with the most appropriate medicinal substances, if he distrusted their action.

What I state respecting medicinal substances is equally applicable to bleeding. A patient is seized with the symptoms to which the term inflammatory has been applied, and asks to be bled, believing that the loss of blood will cure him. You open a vein, and the abstraction of a certain quantity of the vital fluid is followed by an amelioration of the symptoms. But take care how you interpret the fact; the improvement may be owing to the moral effect produced, more than to the venesection. I will mention as a proof what I have often observed in my wards at the *Hôtel Dieu*. A patient labouring under acute disease—pneumonia, for instance—enters the hospital, believing firmly that he ought to be bled; I bleed him, but merely to the extent of two or three ounces; too small a quantity for the circulation to be in the least influenced by its abstraction. Nevertheless, the patient becomes more calm, and says he is better. A mere trial of bleeding will thus often suffice to arrest the progress of a disease which under another physician would be treated by abundant depletion. For more than ten years I have not found it necessary to have recourse to copious bleeding; in other words, I have rather endeavoured to act on the mind of the patient than on the circulation, and I have no hesitation in asserting that my practice has not been the less successful. Indeed, were I to tell you my mind entirely, I should say that it is more especially in the hospitals, in which the most active treatment is adopted, that the mortality is the most considerable. You must not, however, think that I wish to proscribe bleeding; I only wish to warn you against the deductions that may be drawn from its results.

After mentioning various other pseudo-medical delusions, M. Magendie continued: "It is with regret that I have laid before you this melancholy picture of the deplorable abuses which exist in the medical world; I am afraid no laws on the practice of medicine will be able to eradicate them. The quack will always contrive to elude the wisest regulations, for he knows that patients want to be deceived. Yes, gentlemen, we love error, and often refuse to yield to evidence, even when it is proved to us that our good faith and credulity have been imposed upon. Of this fact I will give you the following proof. A lady, a fervent believer in mesmerism, asked her

niece, who was poorly, for a lock of her hair, in order to consult a somnambulist. The niece, wishing to try the credulity of her aunt, gave her the hair of her maid instead of her own. A renowned somnambulist was consulted, and at once recognised, by the hair of the maid, all the symptoms presented by the niece, whose sufferings she minutely described, to the great edification of the lady. The latter was then informed of the trick that had been played. You would naturally have thought that she would have recognised the imposture of the somnambulist. Not at all; she preferred concluding that the maid servant had the same disease as her niece, and obliged her to submit to a regular treatment, as if she had been poorly, although at that time in the best possible health.

Thus, many causes contribute to throw uncertainty on the result of medical treatment, either rational or empirical. Sometimes it is the patient who will be deceived; sometimes it is the quack, who deceives knowingly; sometimes it is the conscientious physician, who, notwithstanding his honesty, allows himself to be led into error by an erroneous interpretation of the means employed.

In the presence of such difficulties, it is less desirable for us to endeavour to lay down some law, than to give to our studies a more serious direction. Instead of demonstrating to pupils theories already framed, and often very badly framed, it would be better to teach them rather to study facts, and to take as their guide experimental observation. We have seen the rise, and, in the course of a few years, the fall, of a system which rested entirely on a single undefined word—*inflammation*. This system, opposed to all physiological ideas, was erroneously called “physiological medicine,” and yet its author was neither devoid of talent nor of knowledge. Such, no doubt, will be the destiny of those pretended methods of treatment which are, in general, founded on visionary speculations, have fashion for support, and dupes for followers.

As for us, gentlemen, we shall continue, as we have hitherto done, to study phenomena in the organs in which they are accomplished. Although the part of the physician may not be always as efficacious or as active as we could wish, when disease requires our assistance, we may still, by well-judged intervention, assist Nature in overcoming the functional derangements which give rise to disease. We shall more especially, therefore, endeavour correctly to appreciate the physiological action of organs. How, in reality, can we have recourse to rational treatment, when we are ignorant of the normal conditions of the economy?”

ON THE PATHOLOGY, DIAGNOSIS, AND TREATMENT, OF VENEREAL DISEASES.

By W. ACTON, Esq., Surgeon to the Islington Dispensary, and formerly Externe to the Venereal Hospitals of Paris.

ON THE MODERN DOCTRINES AND TREATMENT OF SYPHILIS WITH MERCURY.

Necessity for continuing and keeping up the judicious effects of mercury; opinions of various authors on length of time required; Brodie's opinion that the constitution suffers less from one long course of mercury than repeated short ones; a recent prescription of Ricord's to prove that three months is not too long to be under the influence of mercury in some cases; author's opinions; case showing how a surgeon's views must be modified by circumstances; errors of the day, in giving mercury, pointed out; observations on patients unsuspicious to mercury; effects of mercury on the system, and hygienic rules for supporting the constitution; rapid effect of mercury in removing disease when the mineral is indicated; deplorable effects produced when mercury is persisted in, in cases unfitted for its use; considerations on Abernethy's term, “Diseases resembling Syphilis,” instance of such a case at the present day; observations on relapses; the mercurial and anti-mercurial plans of treatment considered, and advantages shown of steering a middle course.

When the effects described in the last paper have been produced, they should not be allowed speedily to cease, but be maintained for some time after the disappearance of all the symptoms.* In the whole range of surgery I do not know a

* Brodie, in the Clinical Lecture reported in *THE LANCET*, and which I have so frequently quoted, says, page 676, “When the eruption has disappeared from the body, it (friction with blue ointment) must be used as a prophylactic to prevent the return of the disease, for, probably, another month.” On the score of economy to the constitution, Brodie is equally

more difficult or important subject than the question—How long should mercury be continued in the treatment of secondary symptoms? I cannot give any general rule; experience and the consideration of each particular case must decide the period. I may, however, remark, that when I commenced private practice, it was my determination to give very little mercury, and continue it for very short periods; but in carrying these my intentions into effect, I found the evil was as great in giving too little, as too much, of the mineral, and in spite of my early convictions, I now give mercury, not only in cases which formerly I thought required it, but continue it for periods longer than I did some three or four years ago. I should, however, be sorry to carry it to the extent some recommend; such treatment would be attended with the worst consequences; and even given with the greatest precautions, and in the most urgent cases, I am often obliged to leave it off, at the moment I am aware it ought to be continued for longer periods. I will here cite a case which has lately come under my notice, to show the practical difficulty surrounding this part of my subject. A gentleman contracted indurated chancre; frictions were employed, every precaution was taken by the patient and myself, but he did not and could not keep the house. The frictions failed in dispersing the induration, although continued for six weeks; the powers of my patient began to fail; the bowels became irritable; the digestion got out of order; the spirits low; the pulse feeble, and press of business prevented him leaving town. I was compelled to leave off mercury, and yet I was well aware that secondary symptoms might return. My patient at length left town, and his health recovered immediately; but with it a good crop of secondary symptoms appeared on the scalp. Under these circumstances, mercury internally was given, which, at first, the patient bore well, the symptoms rapidly disappearing; but diarrhoea coming on, partly owing to the mercury, and in part due to the copaiba he was taking, the mineral was obliged to be left off, and he came to town, and finding himself again with a relapse, had his confidence shaken in my treatment, and consulted a young surgeon, who told him that iodine was the remedy, and recommended it to be tried again, (for the patient had before taken it.) The symptoms, however, in spite of iodine, increased, and this gentleman again consulted me, and moderate doses of mercury, which he bore well, as he had recruited his powers in the country, cured him, although he took it for an insufficient time. This forms the sample of the cases we meet with occasionally in private practice, and shows the difficulty of treating cases by any rule a surgeon may lay down. It sometimes happens that our colleagues are not very charitable in the construction they put upon treatment, and my patient was told that mercury ought to have been given at the commencement of the chancre, and if it had been, these symptoms would not have relapsed. I shall have an opportunity of discussing the propriety of giving mercury in primary symptoms when I come to speak of that subject in a future paper. I should but distract my reader's attention were I to enter upon the subject at present.

explicit: “You may inquire if a long course of mercury will not injure the constitution more than a short one. Undoubtedly it will; but that is the very reason why you should give a long course at first. I will explain myself. If you exhibit a short course, the disease is sure to return; you administer a second course, and the disease returns again; and thus you have repeated courses. Not only is the system weakened by the disease, but whenever it returns it assumes a more formidable character. But if you put the patient through a long course in the first instance, the frequent recurrence to the use of mercury will be unnecessary. A patient who takes mercury for a month will probably never require it again; but if he takes it only for a fortnight, he has secondary symptoms, and then he will require to take it for four weeks, so that that which is a short course at first becomes a long one in the end.”

Lawrence says, “We must give the remedy several times, perhaps, in the course of the four and twenty hours, and we must persist in the use of it day after day, perhaps week after week, and even, sometimes, for months, before the effect will be produced.”—*Lectures in THE LANCET*, vol. i. 1829-30, p. 728.

Ricord, in a recent lecture, says, “Hitherto the difficulties have not been great, (he is speaking of the daily dose;) but what presents the greatest difficulty, and where every candid practitioner must acknowledge his almost complete inability to decide, is the determination of the absolute dose of mercury which can destroy the syphilitic diathesis. We have here but the dose proper for relieving the symptom; but the neutralizing dose, that which ought to constitute what is called a complete methodical treatment, what is it? How much mercury must be given? For how long must it be continued?”—*Gazette des Hôpitaux*, Sept. 16, 1845.

To show how long M. Ricord continues the use of mercury, I give here the copy of a prescription sent with a patient who has lately quitted Paris, “Chancre induré et adénite indolente il y a dix mois. Traitement incomplet: deux reprises répétées d'accidents secondaires aujourd'hui engorgement des ganglions mastoïdiens, plaques muqueuses de la gorge. Syphilide papulo squameuse.” Fumigations and iodide of mercury are to be given, and the prescription goes on to say, “Le traitement devra être suivi pendant trois mois, seulement lorsque l'éruption aura disparu on suspendra l'usage des fumigations.”

But to return to the length of time during which we should continue mercury, a month, six weeks, or even three months will be required, during which the mouth may be kept slightly affected, provided the health allows us to continue it so long, and no untoward accident happens, as occurred in the case just mentioned. The instances of failure depend, in the present day, upon practitioners giving their patients too powerful doses of mercury, salivating them too rapidly, and suspending the mineral too readily; a relapse occurs, and the same results follow, until the surgeon who may be consulted is unable to say if mercury, cachexia, (as the army surgeons call it,) or syphilis, is first to be treated.

There are a few patients who appear to resist the effect of mercury, just as there are some who are influenced by a few grains; the former may generally be salivated, when confined to a warm room, and not allowed to expose themselves to the air. Women, for these reasons, require less mercury than men, and infants at the breast are placed in the most favourable circumstances for the beneficial influence of mercury. If a patient will not confine himself to the house, at least he should clothe himself in flannel, avoid wet or cold feet, exposure to draughts, &c. Turning now to the effect of mercury on the system, it varies greatly. Some patients are not aware of any effect whatever; others, from the first dose, begin to feel lassitude and a general uneasiness; their appetite fails them; the tongue is moist and white, though not furred; there is some fever and heat of skin; this goes off in a few days, and the patient bears the remedy well during the remainder of the time. I generally recommend a glass or two of wine to patients who feel this uneasiness, or weak brandy and water; or brandy and soda-water seems to put the stomach in better humour than anything else. If, on the contrary, the patient habitually indulges in wine or spirits, his rations must not be cut off suddenly, but gradually diminished to a more moderate quantity. I have never found any advantage follow from keeping persons on low diet who are taking mercury.

Having discussed the effect of mercury upon the constitution and system, and described how far the mineral should be pushed, it remains for me now to speak of its influence in removing the present symptom, for which it may have been given, and its power in preventing relapses. The most experienced surgeon is often himself surprised at the almost marvellous rapidity with which symptoms disappear when mercury is properly given. A patient has been getting better and then worse under other treatment; he takes a few doses of the mineral, and his skin, before of an earthy, unhealthy colour, becomes clear, the eye resumes its brilliancy, the spots vanish, and the stains alone remain, in very old standing cases; the powers of the system rally, and the patient resumes his usual occupation with a vigour which he has been unused to for many a week. Cases, however, that are unfitted for mercury, instead of progressing thus favourably, take on a very different train of symptoms, lassitude, dyspepsia, and a chlorotic condition, sets in; the spots, instead of amending, begin to discharge, scabs form, which, on being removed, expose ulcers, circular in shape, with deficiency of, or presenting only, a few flabby granulations, attended with a serous or reddish offensive ichor: pain and restlessness attend the nights of these subjects, and the gums bleed on the slightest touch. We cannot say this is salivation, although many of the symptoms are present; but we have a cachectic state which proceeds from bad to worse. Did the Abernethian school call these varied and Protean complaints "*the diseases resembling syphilis*"? It is difficult, from the writings of that surgeon, to decide exactly what he may have meant by the term; but I am induced to believe that one form of that vague denomination consisted in the cases we are now discussing.*

I still meet with cases treated by some of that surgeon's former pupils presenting anomalies truly unusual. I have lately had one such under my care. A female, the mother of several children, presented herself with three circular sores of the size of a shilling on one leg, and five similar ones on the other lower extremity; they presented a foul surface covered with sloughs. She stated that a similar sore had existed on the

sternum; her mouth bore traces of salivation which had nearly passed away, and left the gums spongy, the teeth loose, and covered with tartar, and her whole system such as you might expect in scorbutic disease. If I might believe my patient, she had never had primary disease, or the usual secondary symptoms; but this disciple of the Abernethian school had given her large and repeated doses of mercury, and used black wash for six weeks. Instead of recovering, she had been getting progressively worse, and applied to me, as the gentleman said she had not taken mercury enough, and was about to increase the dose. This is one of the many cases I witness in London even in the present day, and I believe them peculiar to the English capital.

Will your treatment prevent relapses? is a question I have often been asked both by practitioners and patients. To one and the other I must candidly say, no; but in by far the majority of cases, secondary symptoms will not recur. I believe that no treatment can guarantee the system; and experience has proved that moderate courses of mercury succeed more frequently than any other. I have already shown, in speaking on prognosis, that however long, or largely given, mercury will not, and cannot, prevent relapses. I have likewise collected the opinions of former absolute antimercurialists to show that secondary symptoms do not disappear; or, if they do, readily reappear when no mercury is given. I have attempted to prove that mercury given in appropriate doses in the present day does no harm. I have shown, I think, that if long continued, and in large doses, it produces much mischief. Is it not safest, then, to steer the middle course, to reject equally that plan which avowedly, by the confessions of its staunchest supporters, cannot cure the disease, as well as the opposite one, by which you destroy your patient's constitution by the large and long-continued course of the mineral. Insidiously, as I have shown, the disease creeps over the system; by equally slow and sure means should we employ the remedy. I am convinced, that however beneficial a rapid salivation may be in iritis, it is very objectionable in other secondary symptoms: it leaps over the disease; it depresses the powers of the constitution, but fails in eradicating the complaint; and I almost question if the old humoral pathologists were not right in believing that Nature attempts to throw off the disease, and that we are called upon only to assist her, by exciting the different emunctories, slowly, but continually. The plan above recommended, if it does not profess to prevent relapses in every case, avoids those dreadful consequences so often met with in the practice of the mercurial school, and though, like these gentlemen, we see secondary symptoms recurring, they are of a very mild description, and soon yield to trifling remedies. We labour at first under one disadvantage—namely, if, under our treatment, relapses occur, they do so in a short time, and mildly, whereas, after large courses of the mineral, many months, or a year, may elapse before secondary symptoms show themselves; but their severity makes the patient pay dearly for the immunity by a longer period of imperfect health. If the surgeon should still object that the treatment here recommended is attended with ill consequences, can he say that the longer and bolder practice is not fraught with danger? or can he deny that the anti-mercurial school has failed in proving, that in this country, or in private practice, their treatment has succeeded?

The question of relapses I consider so important, that I cannot dismiss it without some additional remarks. Having shown that surgeons who give mercury, as well as those who abstain from its employment, acknowledge that relapses do occur, though in different proportions, I come to consider if the preparation is the cause. To believe some writers, relapses in their practice do not occur; others would lead you to infer it from the silence they maintain on the subject; others, again, allude to the few and slight cases, and they attribute this immunity to the preparation they employ. In my last paper, I quoted a passage from Sir B. Brodie, in which he goes so far as to say that, "except in the very slightest cases, you really cannot depend upon any mercurial treatment effecting a cure, or even giving a good chance of it by any other means than inunction." This, coming from such a source, is the more extraordinary, as Sir B. Brodie must see cases every day where mercury, given internally, effectually in many cases relieves, and in other instances cures, secondary symptoms; and if we go no further than the able lecture given by Sir Benjamin himself, we have evidence that inunction will not prevent their occurrence. Let the reader turn to the case from Abernethy in this paper—let him look back to the cases cited in former papers, and he will find satisfactory evidence (even if he has not often witnessed cases) that no treatment, however long continued, with inunction

* The case I allude to is that of a sloughy sore, treated locally with irritating substances and internally with blue pill, which was discontinued on account of derangement of system. For two months the sore continued to extend; a sloughy sore broke out at the corner of the mouth, became as large as a shilling; next a small spot broke out on the ear. A consultation was called on the case, and the surgeons decided upon treating the case by mercurial inunction, and the patient rubbed in two drachms, by weight, every night and morning, for six weeks. The sore on the ear healed, but not the others. Mercury was left off, and the sores now slowly healed. The further result of the case is not given; but Abernethy adds he has met with many similar cases.—*Abernethy's Surgical Observations*, vol. i. p. 129.

will guarantee the patient from a relapse of the disease in certain constitutions. It will be no answer to the plan I have recommended in the course of this and former papers to say, that had I used the various preparation, relapses would not have occurred. I could give extracts from nearly all writers to show that they do occur; and I have elsewhere shown that a relapse is a natural consequence of syphilis in certain constitutions, do what you will in our northern climates; but I can easily understand, and have occasional evidence of, the effect of climate, food, and temperature, in producing secondary symptoms; and because relapses are not frequent in the south, it does not follow they are present in the north, because there we give mercury. The day is, however, passed for the discussion of the non-mercurial doctrines: the surgeon now discusses how we may give the mineral with the greatest economy of the constitutional powers, and yet with the most probable means of guaranteeing the system from relapse. It is upon these two points that I have wished particularly to dwell, believing them to be of paramount importance; and if, in doing so, I have fatigued the attention of my readers, I must plead the importance of the subject, which has not lately been brought before the profession.

Queen-Anne-street, Cavendish-square.

A FEW OBSERVATIONS ON THE USE OF PROFESSOR SEUTIN'S STARCH BANDAGE IN THE TREATMENT OF FRACTURES.

By ALFRED MARKWICK, Esq., Surgeon, London.

In the treatment of fractures, any apparatus capable of fulfilling the chief indication—namely, that of maintaining the extremities of the fractured bones in exact apposition, and which, at the same time, permits of progression—must undoubtedly be a very valuable one to the surgeon. Numerous apparatus have been invented for this purpose, since the time of Hippocrates; the principal ones now had recourse to are, the common apparatus, with splints, Dessault's long splint, with Boyer's modification of it, for fractures of the thigh; the double-inclined planes of Mac Intyre, Liston, and Amesbury; Greenhow's apparatus; the fracture-box; the *appareils inamovibles* of Larrey, and Emile Lacroix, the former consisting of—1stly, a linen cloth several times double; 2ndly, two cylinders or junks, formed of straw bound tightly together with twine, each an inch and a half in diameter, and rather shorter than the cloth; 3rdly, one or two bags or cushions, stuffed with chaff, of sufficient thickness, and of the same length as the junks; 4thly, a conical pad, stuffed with tow, six inches long, three wide, and two thick at its base; 5thly, three six-tailed compresses; 6thly, a long compress, called the stirrup; 7thly, the “tibiale,” a large piece of linen cut to the shape of the apparatus; 8thly, ligatures five or six in number; 9thly, the resolvent liquid, a mixture of camphorated spirit, Goulard water, and white of egg, beaten together in water; and the latter, which is frequently employed by Dieffenbach, of a solid case of plaster of Paris, procured by pouring into a convenient sized wooden box, containing the fractured limb covered with oil or cerate, a sufficient quantity of the semi-fluid gypsum: the *appareil hyponarthrique*, or “a suspension,” proposed by Sauter, of Constance, in 1812, and adopted, with certain modifications, by Mayor, of Lausanne, and Chelius, of Heidelberg. It consists of a flat piece of board, a chaff cushion, and ligatures for fixing the limb; the whole is suspended by attaching a cord, passed through a hole in each corner of the board, to a pulley, fixed either to the ceiling, or the top of the bed: the moulding tablets of Mr. Smee, prepared by copiously brushing over one side of a piece of coarse sheeting with a thick solution of gum, and afterwards covering it “with a composition made by rubbing whiting with mucilage, continually adding the powder, until the whole” is “of the consistence of a thick paste; a second piece of sheeting” is then “rubbed over on one side with the solution of gum, and the moistened side applied upon the composition with which the piece of sheeting” has “been covered;” the apparatus invented by Jobert, of the Hôpital St. Louis, Paris, which consists of a leather sock or bracelet fastened to the foot of the bed, for making extension, a long cloth folded and passed over the opposite side of the body, and fixed to the head of the bed, for producing counter-extension, and another, if required, placed across the limb, for counteracting the action of the muscles on the upper extremity of the fractured bone; and lastly, the *appareil amidonné*, or starch bandage, which forms the subject of the present paper.

* Medical Gazette, vol. xxiii. p. 782.

The principal advantages of this bandage, which—from the facility with which it is split, thus constituting, at will, a moveable and immoveable apparatus—has been termed also by its inventor, the *appareil amove-inamovible*, are, 1st, that of effectually preventing any motion between the fractured extremities of the bones; this is evidently of the utmost importance in the treatment of all solutions of continuity in the osseous tissue, as, unless coaptation be maintained, not only will irritation and inflammation be excited, and the pain and suffering of the patient greatly prolonged, but also the formation of the callus considerably retarded, if not entirely prevented; for children and infants, also, whose restless nature is a source of considerable anxiety to the surgeon, in consequence of the difficulty thereby experienced in maintaining perfect immobility of the fractured bones, the starch bandage is an invaluable apparatus. All others, independent of their total inability to maintain perfect coaptation, become, in cases of fracture of the lower extremity, constantly saturated by the alvine and urinary excretions. They therefore require to be frequently changed, in order to prevent the irritation, excoriation, and fetor, which would otherwise be occasioned. But this frequent changing must evidently cause considerable pain to the patient, as well as greatly retard the formation of the callus, by allowing the fractured ends of the bones to rub against each other. Thus, it will be perceived, that by remedying one evil the surgeon creates another. In the delirium occurring in cases of compound fracture from extensive laceration of the soft parts, injury of the nervous filaments, &c., no apparatus will so effectually prevent the fragments producing that disturbance upon which the delirium in many cases depends. It forms, with the fractured limb, a whole, which cannot move without the concurrence of its constituent parts. Hence the impossibility of any partial movement taking place, or the occurrence of any displacement of the broken bones, the whole limb being obliged to move in the direction of any impulse given. “Neither can there be free motion in any articulation; for supposing a bone was solicited to move on another, it will be prevented from doing so by two diametrically opposite surfaces of the bandage; hence it is easy to conclude that the muscular contractions themselves will be unable to produce any change in the relation between the fractured surfaces, since, on the one hand, the contraction, requiring a certain lateral space for the development of the fibres, can but imperfectly take place, and on the other, although it might be freely effected, the displacement would be rendered impossible by the contentive means.”* The compression, also, which this bandage exercises, considerably suppresses the suppuration occurring in compound fractures, which, from its frequently being very excessive, greatly reduces the strength of the patient, and consequently protracts his recovery. It likewise secludes the purulent matter from the free contact of air, and thus renders its absorption much less dangerous. In gun-shot fractures of the articulating extremities of bones, in which, when amputation has not been immediately performed, a cure can only be obtained by ankylosis, the starch bandage affords an excellent means for securing this desirable termination, by preventing all motion of the joint; 2ndly, that of adapting itself, when properly applied, to all elevations and depressions, consequently it exercises an equal degree of pressure on all parts, and is therefore not liable to produce congestion or mortification; on the contrary, it acts antiphlogistically by giving tone to the vessels, relieving the inflammation, and by preventing any unnecessary afflux of the fluids towards the fractured limb, allows this to receive only sufficient for the repair of the solution of continuity; 3rdly, that it does not become deranged, but remains in the same position as when applied; 4thly, that it admits of progression, and enables the patient to be removed to any part without danger; thus, the adult patient who has been accustomed to a life of activity, is no longer under the painful necessity of remaining in bed during the formation and consolidation of the callus, there to become exhausted and cachectic by a long-continued decubitus, and a prey to his bitter reflections, but is able to change his position, get up, and even walk about on crutches, and by this means recruit his strength, relieve his mind, and facilitate and hasten his recovery. Those severe and distressing cases of ulceration and gangrene which are so commonly met with, especially in old people, and which are consequent on remaining long in the recumbent posture, are of very rare occurrence, if not entirely unknown to those who employ the “*appareil amove-inamovible*,” 5thly, that of the materials of which it is composed being economical and easily procured; 6thly, that it is equally applicable to all kinds of fractures; 7thly, that it

* Seutin du Bandage Amidonné, p. 71.

admits of the limb being placed either in a state of flexion or extension, of pronation or supination, or of abduction or adduction; 8thly, that it is more easily removed, and more speedily applied, than any other apparatus; 9thly, that from the facility with which it may be divided, it forms, as its name implies, a moveable and immovable apparel at will. These advantages are certainly not trivial, and when they are considered together with the success with which it has been attended in the hands of several distinguished surgeons, in the treatment, not only of both simple and compound fractures, but also of dislocations, ruptured tendons, caries, and other affections of the joints, &c. &c., it is a matter of surprise that this bandage has not been more favourably received and more generally adopted by the profession in this country.

On the mode of application.—The necessary requisites are one of Scultetus's bandages or a common roller, two or three old linen bandages, of convenient length and breadth for the fractured limb, some pasteboard, of sufficient stiffness and firmness, from which splints are to be torn rather than cut of the proper size, in order that their edges may be so levelled off as to lie evenly on the limb, instead of being sharp and angular, and thus produce an injurious pressure on certain parts, and some fresh well-made starch. These things having been previously prepared, the surgeon immediately proceeds to reduce the fracture. When this is accomplished, and while the bones are being maintained in apposition by an assistant, a bandage is to be applied first round the toes,—for instance, supposing it to be a fracture of the leg, taking care, however, to keep their extremities free, as an index to the condition of the remainder of the limb. Those parts which from their prominence are likely to receive too great a degree of pressure, and, by this means, become inflamed and gangrenous, such as the ankles, the tendon of the tibialis anticus, the spine and tuberosities of the tibia, the head of the fibula, and the condyles of the femur, are then to be guarded with wadding or amadou, previous to the application of the first roller. This is then to be passed round the foot and leg, as high as the knee, or to a short distance above it, according to the situation of the fracture, and afterwards slightly starched for the purpose of fixing its edges; if more be applied, it will penetrate through to the internal surface of the roller, which will, in consequence, be rendered harsh and irritating to the skin. The posterior splint, from which a semicircular piece has been torn to allow of a space for the heel, having been softened in water, starched, and padded, is now to be applied and secured with the second roller, which must be well starched by means of a brush, or the palm of the hand. The lateral splints, prepared as the posterior one, are next applied, and over them the third bandage, which should receive a good coating of starch. If preferred, the lateral splints may be applied at the same time as the posterior one. However, I think more firmness is obtained by applying them as I have stated. If more solidity should be required, a fourth, and even a fifth bandage may be applied. It is advisable, previous to the application of the bandages, the first, however, excepted, to dip their extremities in the starch; by this means the edges become fixed as the bandage is unrolled. The end of the last bandage should also be folded in and placed in a conspicuous place. In cases of compound fractures, the apparatus must be so applied as to allow a free exit to the secreted fluids; thus, the edges of the rollers must either be turned back from the solutions of continuity, or holes cut in those situations corresponding to them, and the splints either notched or perforated. A communication can then, if necessary, be established between two openings, and a free discharge promoted. The wounds can also, by this contrivance, be dressed according to circumstances. Metal splints are sometimes requisite to give support to the fractured limb when the apparatus becomes softened by an abundant suppuration. Extension and counter-extension should be kept up until the bandage is perfectly dry. An old shape, resulting from a previously treated fracture, is an excellent addition to secure perfect coaptation during its desiccation, which may, in some cases, be promoted by hot bricks, bottles of hot water, bags of heated sand, or by exposing the limb to a fire or the sun's rays. In fractures of the lower extremity in children, the bandage should be covered over, when dry, with white of egg or some kind of varnish, or enveloped in a piece of oiled skin, in order to prevent its being soiled and softened by the excretions.

The period at which the bandage should be applied has been and still is a point of much controversy. Professor Suetin is in favour of its immediate application, whether tumefaction be present or not, and states that, instead of its being followed by any ill effects, it lessens the traumatic in-

flammation by diminishing the afflux of blood, promotes the absorption of that already effused, and favours the circulation by its compression, which should be gentle and equal.

Others argue that if the bandage is applied where there is much tumefaction, and before this has arrived at its height, either strangulation will be the consequence, or else the swelling will decrease and leave a vacuum between the surface of the member and the bandage, the result of which would be a want of proper support to the fractured bones. These are certainly objections, but objections of little weight. It is true, strangulation would be occasioned if the swelling should increase after the application of the bandage, but this would not be the case provided the apparatus were properly applied. I believe the following remark of M. Velpeau to be perfectly just and founded on clinical observation—that “if there is no tumefaction, the bandage will prevent its recurrence; and if there is, and the pressure be well made, it will disappear.” Whenever the swelling is considerable, I should recommend the first roller to be wetted in simple or Goulard-water previous to its being applied. This would tend to reduce the tumefaction; but should such not be the case, space would however be given for its increase by the expansion of the bandage in drying. It is true, also, that the bandage no longer affords the necessary support to the fractured limb when an empty space becomes formed between it and the latter, in consequence of the subsidence of the swelling. But this will be of but short duration, as it is sufficient, when the vacuum is but trifling, to soften it with water, then mould it to the shape of the fractured member, and finally to secure it by a starched roller; or if the vacuum is considerable, to split up the bandage with the scissors which Mr. Seutin has invented for that purpose, and remove a slip, if necessary, of the requisite width, and then bring it together again with a starched roller. The section of the apparatus is of the utmost importance: it enables the surgeon to make a careful examination of the limb, to remedy any improper pressure or defect, and to ascertain the position of the fractured bones. It should always be done on the following day or the day after. It causes no pain or displacement, and may be repeated as often as required without any danger of retarding the formation of the callus, as the posterior surface of the bandage gives the necessary support. It is a good plan, when applying the “bandage amidonné,” to place a piece of tape in the situation where the section will have to be made, so as to serve as a guide to the scissors.

Langham-place, Feb. 1846.

ON SARCOMATOUS TUMOURS

(HYPERTROPHY)

AFFECTING THE MALE, AND SOMETIMES THE FEMALE ORGANS OF GENERATION.

By F. HARINGTON BRETT, M.D.,

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SOME interest has been excited in two cases of this description, now in the wards of St. George's Hospital, one in a male, and the other in a female. A wider range of experience in the East, where these affections are allowed to acquire an enormous size, has permitted oriental practitioners to decide upon the true nature of their pathology, and to introduce an improved method of operating. There is still a degree of confusion in the nomenclature* and classification of the disease in Europe, some confounding it with the “leprous elephantiasis,” (a totally different complaint.) Surgeons in Europe are likewise still in error as to the method of operating. Important parts are sacrificed which ought to be preserved, and have been so repeatedly under the most skilful hands; and the best mode of finding a covering to the genitals, when

* ANCIENT SYNONYMES.

Greek...	ελεφας ελεφαντιασις.
Latin....	Elephantiasis, phlegmasia Malabarica, bucnomia indica, hyper-sarcosis ulcerosa pedum.
Arabic ..	داء الفيل <i>da-oal-feal</i> دوالي <i>dawail</i> , as it affects the legs, or the other parts of the body.
Persian ..	فيل پيا <i>feal pa</i> .
French ..	Lépre tuberculeuse élephantine.

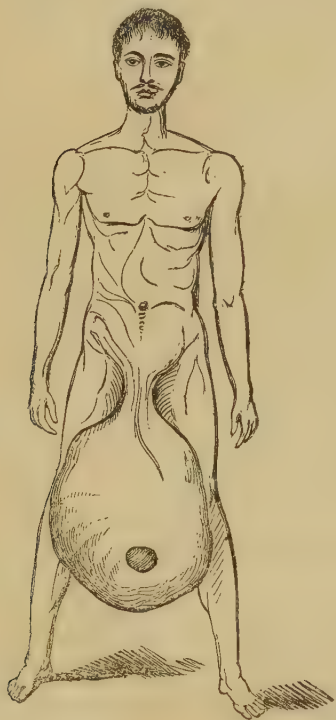
Most or all of which names are confounded with leprosy by the various writers on these diseases. ۞

stripped by a clean dissection of the whole disease, is yet unknown.

I shall endeavour, from the numerous cases which I have treated in India, to describe the true nature of the disease, and then explain the safest mode of operating.

I have termed the affection in the male, (in whom it is most prevalent,) hypertrophy of the scrotum and cellular tissue. Neither the testicles, or their coverings, or the penis, do in the slightest degree participate in the disease; certainly not necessarily so, and I have not seen a case in which they were accidentally affected. The spermatic vessels are not diseased; the tunica vaginalis is transparent; the tunica albuginea is unchanged. There are often hydroceles, the fluctuation of which is not perceived beneath the deep fleshy mass; but this is to be attributed to the pendulous state of the tumour, and the gravitation of blood, the superficial and deep-seated veins being greatly enlarged and distended with blood. The integument is thickened, and sometimes warty, but I have seen it but little changed. The annexed drawing (fig. 1) is a fair

Fig. 1.



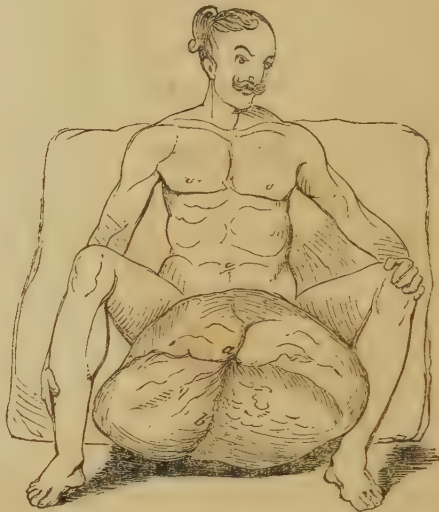
representation of the tumour during the erect position of the patient. The complaint is most prevalent in warm relaxing climates.

History.—In most of the cases I have met with, the patients have traced the commencement of the disease to an attack of local inflammation and cedematous swelling in the part, associated with an attack of fever; nature seeming to relieve herself by congestion and effusion into these parts, instead of forming engorgements of the spleen or liver. The fever becomes intermittent, and each successive paroxysm subsides under fresh attacks of pain and swelling of the part. Dr. Wise considers the disease to be essentially an inflammation of the veins, (phlebitis.) The patient feels pain and heat in the part, and it is often ushered in by a smart paroxysm of fever, followed by effusion of lymph in the scrotum, which becomes tumefied, and continues so, after the subsidence of the other symptoms. The fever frequently returns, with increased swelling. It may be successfully combated, in the early stages, by a persevering use of purgatives, issues, alteratives, local frictions, and a careful avoidance of the influence of the weather, particularly when combined with the local application of cold; but the natives can seldom be induced to persevere, and generally neglect the early stages of the disease.* Thus it is that the malady falls under our notice when it is only remediable by the knife.

* See Dr. Wise's paper, vol. vii., part i., of the Transactions of the Medical and Physical Society of Calcutta.

The tumour now advances, without pain, but not rapidly, until it has obtained a certain size. It at length totally conceals the organs of generation. Its progress then becomes more rapid, from the unresisting nature and pendulous position of the parts, so as at length to attain the enormous bulk shown in figure 2, which represents the first tumour of this

Fig. 2.



a, Urinary fissure.

b, Raphe.

kind on which the operation was performed in Calcutta, the weight of which, after the separation of its fluid contents, amounted to fifty-six pounds, and its circumference to fifty-five inches. The disease had existed for about five years, but had considerably increased of late. The patient, who was about thirty-six years of age, was in great misery at his unsightly appearance, and the great inconvenience he experienced from its weight. The urine flowed through a navel-like opening, which opening is the termination of a smooth channel, seven or eight inches in length, and which commences from the corona of the glans penis. This passage is the everted prepuce, elongated and stretched forward with the advancing growth of the disease; a fact very important to be attended to, for this elongated integument of the prepuce is smooth and healthy,—it is, in fact, now become mucous membrane, alike to the mucous membrane of the urethra, and it is of great value in forming a covering for the penis, when reflected, after the operation. It must therefore be carefully preserved during the operation.

In the patient above alluded to, the lower extremities were anasarous, owing to the great dragging and pressure of the swelling obstructing the veins and absorbents. He walked in a slow swaying manner.

The affection may commence in the integuments of the penis, as in fig. 3, or it may arise in the scrotum and penis

Fig. 3.



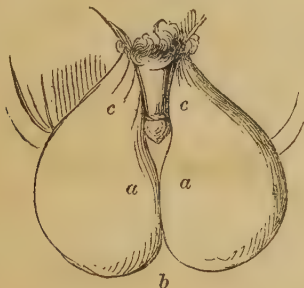
simultaneously, as in fig. 4; but in either case the disease advances so as to involve the whole in one mass, the signoid

Fig. 4.



(fig. 5) flexure between the penis and scrotum gradually becoming effaced.

Fig. 5.



Pathology.—On examination of these tumours after extirpation, the sub-cutaneous areolar tissue is found to be much increased in thickness and condensed in structure. On making incisions into this organized lymph, a quantity of transparent serum escapes. The corion is thickened, dense, and cartilaginous. The cutis is often thickened, rough, and scaly, with its papillæ much enlarged, and the surface is studded with warty tumours; at other times the cuticle is not at all changed. The arteries are not enlarged, but the veins are much increased in diameter, and their coats are thickened. I therefore am much inclined to attribute the commencement of the disease to a phlegmasia in which the coats of the veins are inflamed.

Operation.—A large sedative dose of laudanum (from 80 to 100 drops) having been previously administered, a staff is introduced along the passage leading to the penis.

The patient being placed on his back on a table, with the lower extremities widely separated, the tumour is to be turned over the abdomen, to allow of the veins being somewhat emptied of their contents.

First stage.—A large semicircular incision should now be commenced on the posterior part of the tumour, with its convexity forwards. This accomplished, the tumour should be turned down. Two longitudinal incisions are then made about three inches apart, commencing from the neck of the tumour on each side, corresponding with the entrance of the spermatic cords, and extending in a parallel direction for about three inches; their inferior extremities are united by a horizontal incision. Two elliptical incisions, with their concavities outwards, are now accomplished on each side, commencing from the same point, and terminating at the posterior incision. Hæmorrhage is suppressed as much as possible by the fingers of assistants.

Second stage.—Two bold and deep perpendicular incisions are now to be made through the mass, down towards the tunicæ vaginales, which, with a little dissection, are to be exposed and extricated, but not opened; they are to be dissected up towards the external abdominal ring, and held back, by an assistant, over the abdomen.

Third stage.—The flaps are all dissected back. A circular incision of the diameter of a crown is to be now made around the urinary opening, and the elongated and almost always healthy prepuce is to be carefully dissected down to the glans penis. This is most important, and if done carefully, will form a complete and natural covering to the penis when reflected back upon it. (Vide fig. 6, which exhibits the elongated prepuce in a.) One bold incision down to the body of the penis will facilitate this dissection.

Appearance of the exposed parts.—The parts as they are exposed at this period of the dissection assume a very beautiful appearance; the spermatic cords greatly elongated, the tunicæ vaginales with their vessels ramifying on them and distended with fluid, the corpora cavernosa and spongiosa covered with their ligamentous sheaths, all clearly exposed untouched by the knife.

Conclusion.—The remaining attachments of the tumour are now easily separated by a few strokes of the knife; and the hydroceles should then be punctured to evacuate their contents. The whole operation need not occupy more than ten minutes.

Dressings and after-treatment.—The lateral and posterior flaps are united by sutures and isinglass plaster. The pubic flap covers the root of the penis, and the loose elongated prepuce is reflected back to cover the body of the organ.

Great care should be taken to receive the urine when voided, so that none should escape on the wound; for which purpose the patient should wear an elastic gum catheter, well secured and stopped, and every mesurè should be taken to favour the adhesive process.

Concluding observations.—Hydroceles will almost invariably be found in both tunicæ vaginales, and there will generally be a considerable quantity of fluid in some parts of the substance of the tumour itself, escaping during the operation. The growth itself will be found to be a yellowish, hard substance, of fibrous consistence, and creaking beneath the cutting instrument. The cords are often elongated to the extent of thirteen inches; the testicles generally sound and of a perfectly natural size. The disease is totally divested of all malignity, and the whole of the generative apparatus may with safety be preserved. The processes of adhesion, granulation, and cicatrization, render the part compact, and further morbid development has not been observed to follow. A sort of artificial raphe is formed by the union of the lateral flaps and the subsequent contraction.

Improvements in the operation.—The chief improvements in the operation over those which have been performed in other parts of the world are—1st, the preservation of the entire organs of generation; and, 2ndly, that the prepuce is made to form a complete covering to the penis, (vide fig. 6,) which the

Fig. 6.



dissected flaps of thickened integuments are quite unfit to accomplish.

Results of the operations.—Of the seven operations which I performed in 1837, at the Central Hospital of Surgery, two died of mortification of the wound, but this occurred during most sultry weather, in a Bengal climate, and in a very crowded hospital, when other abraded surfaces were assuming a gangrenous aspect, and it cannot be too prominently dwelt upon as a subject of regret. It must be inculcated as a principle not to be forgotten, never to operate excepting during the cold or temperate weather of warm latitudes. The other five recovered, although one of them, after being discharged perfectly cured, and every vestige of wound healed, returned to the hospital three months and a half afterwards, and died of a dysentery totally unconnected with the disorder for which he was successfully operated on. The functions of the organs are restored, according to the statements of the patients themselves.

The aggregate weight of these seven tumours, when divested of their fluids, amounted to 280 pounds.

Hypertrophied pudenda.—After what has been said, it would

be superfluous to describe the disease as it affects the female. A precisely similar enlargement is not uncommon in the puerpera of females in Hindustan, the excision of which is very simple. There is just such a case at present in St. George's Hospital, of small size in comparison to the enormous ones in warm climates, where they have been known to extend below the knees and to weigh thirty pounds.

The disorder is a pure sarcoma of organized lymph, and is evidently the same disease as that which occurs in the West Indies, in Africa, Ceylon, and occasionally in Europe, and which has occurred in the practice of Delpech, Liston, Clot, and other surgeons.

Fig. 7.

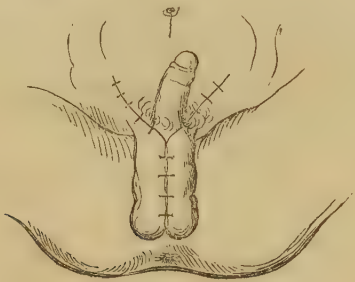


Fig. 8.



Fig. 7 represents the appearance, after dressing the wounds and reflecting the elongated prepuce.

Fig. 8 exhibits the appearance of the disease when it pervades the lower extremities.

Dorset-street, Portman-square, Jan. 1846.

ON THE VALUE OF QUININE IN AFRICAN REMITTENT FEVER.

By THOMAS R. H. THOMSON, Esq., M.R.C.S. Eng., R.N., Edin.

HAVING noticed some valuable remarks on the subject of yellow fever, by Mr. Birtwhistle, Surgeon R.N., in *THE LANCET* of the 3rd Jan., and in which he refers to the use of quinine in that disease, I beg to add a few statements of its efficacy as a remedy in African remittent fever, and confirmatory of Mr. Birtwhistle's observations. While acting surgeon of H.M.S. "Soudan," engaged on the Niger Expedition, in 1841-2, I had an opportunity of trying it in conjunction with chloride of mercury, in a few cases of primary fever. It certainly answered fully; but I believe it would have proved more valuable had I not restricted the quantity to two or three-grain doses.

Of its effect in the secondary and tertiary attacks of African remittent, which are certainly attended with worse-looking and more violent symptoms than the primary, it may almost be considered a specific. The first trials I made of it were at Fernando Po, in Dec. 1841, when left in charge of the sick. At that time the "Harmattan" prevailed, and although this is considered a healthy season on other parts of the West Coast, it was most decidedly the reverse at that island. All the few Europeans (old residents and well-seasoned, as far as this can be accomplished by prior attack, &c.) were laid up with remittent fever of a low character; and in all their cases I gave the quinine in doses of eight and ten grains daily, with perfect success. This induced me to try it in other cases of secondary fever, on board ship; and although in some of them the tongue was dry, foul, and cracked, with every indication of high febrile excitement, yet it had the effect of arresting the bad symptoms. Let me give you one short extract from the official journal forwarded to Sir William Burnett, Medical Director-general H.M. navy, (from the case of Mr. Anderson, entered on the sick list, April 30th, 1842.)—"May 10th.—The remissions have become very obscure; skin burning hot; occasional low delirium; rapid, jerking, but weak pulse; the bowels have been kept freely opened by seidlitz, &c. The tongue remarkably foul and dry. And both Dr. Pritchett (who also saw him at my request) and myself began to entertain unfavourable views of his recovery. I therefore determined to try the effects of quinine; and accordingly ten grains were given on the evening of the 10th.

"Continued restless during the night, but slept a little towards morning, and was relieved by a gentle perspiration. On the 11th, a very perceptible remission took place, and the quinine was again administered, at noon, in an eight-grain dose. This was repeated for the three following days, when the fever gradually declined; and on the 20th, he was so far recovered, as to be discharged to partial duty, there being no other executive officer on board at the time.

"In this case, as in all the secondary attacks of remittent fever in which this remedy was tried, it produced a most marked and beneficial effect; and, strange to mention, although the tongue was in most of them foul and dry prior to the administration of the quinine, it very soon became moist and clean."—(From H.M.S. Soudan's medical journal, 1841-2.)

Subsequently, in 1844, while employed in the Rio de la Plata, I was induced to try it in some slight cases of typhoid fever, in whom there existed considerable depression, a rapid pulse, and foul tongue, unaffected by purgatives; and it had the most rapid and satisfactory effect: and I think it well worthy of a fair trial in this country in typhus; but I should hesitate to use it in small doses, say two or three grains: my impression, as deduced from observations on its *modus operandi*, being, that in small quantity it only acts as a temporary stimulant, thereby producing more harm than good—given in a full dose, from six to ten grains, it would seem to have a different and specific action.

In all the cases in which I tried it in the African remittent, it reduced the number, but increased the momentum and roundness of the pulse. Connected with this subject, I would wish to bring under the consideration of medical officers serving on the West Coast of Africa—whether quinine in full doses has the power or not of warding off entirely the remittent fever?

It had long been known that persons affected with any form of intermittent fever on that coast enjoyed a certain immunity from the remittent, as pointed out by the late Mr. Boyle in his work on diseases of Africa; I therefore reasoned that if quinine was known to overcome the intermittent, that remedy might be used in full doses, and produce such an effect on the system as would prevent the attack of the other and worse form of fever, which is warded off by the presence of intermittent.

On my return to the West Coast from Ascension, in 1842, I determined to commence the experiment in my own person, taking daily one or two full doses of quinine; and although I may with truth say that I was more exposed than any other person to the exciting and predisposing causes of remittent fever—being almost continually on shore and in the woods, collecting specimens of natural history, and in obtaining information about the natives at Fernando Po, Bimbia, Cameroons, &c.—I quite escaped both forms of fever. On being ordered to England, in August 1842, I considered it necessary to reduce gradually the quantum of quinine; and just before arriving home, had left it off entirely: when, strange to say, I was for the first time attacked with tertian ague in England, under which I suffered for some time; and it returned again at the same season, September, in the following year.

It must not be supposed that, in thus calling attention to the trial of quinine, I wish to advocate its indiscriminate use in all forms of fever. On the contrary, my opinion has always been, that nothing tends to bring discredit sooner on our best remedies, than attempting to place them on the footing of general specifics, or quack nostrums.

Montague-street, Edinburgh, Jan. 1846.

REPORT OF A CASE OF PUERPERAL CONVULSIONS, IN WHICH BLEEDING AND OPIUM WERE SUCCESSFULLY EMPLOYED.

By GEO. HENRY BORE, Esq., M.R.C.S.E., Copford.

THE following case of puerperal convulsions, which lately occurred in my practice, appears to me to be highly interesting in a practical point of view, showing as it does the immense benefit resulting from the exhibition of that much disputed remedy, opium, in this frightful disorder; as I feel satisfied that the more approved treatment would not have led to a successful termination had that remedy been omitted.

Emma S—, aged seventeen, of small stature, and light complexion, was seized with convulsions about noon on the 31st of December last. She was in the eighth month of pregnancy, and had been lately rather desponding, on account of her situation, (being unmarried,) but her general health had not materially suffered. She had always enjoyed the best of health, and had never been the subject of epilepsy. On the morning of the attack she had not felt as well as usual, on which account she had not risen at her usual hour, but had not complained of headach, or any other symptom which might have been considered premonitory of her alarming seizure.

On my arrival at one p.m., I found her just recovered from her second fit; consciousness partially restored; pulse 90, small and labouring; no appearance of labour being instituted. I immediately bled her to twenty ounces, and administered fifteen grains of calomel. The bleeding appeared to relieve the system considerably, and, having another pressing case on hand, I left, with strict injunctions to be sent for in the event of a recurrence of the convulsions. In the afternoon I was again summoned, and was with her about six o'clock, when I learned that she had been again seized at three p.m., and had had eight more fits: pulse 100, and fuller than in the morning. I immediately tied up her arm and bled her to the amount of thirty ounces, from a large orifice from which the blood flowed in a full stream—another convulsion during the operation. Upon examination per vaginam I found the os uteri dilated so as to admit the index finger, membranes unruptured, presentation natural; as the bladder had not been relieved, I introduced the catheter and drew off about four ounces of rather high-coloured urine: feet and legs cold. Applied hot bottles and friction. She continued free from any return of the convulsions for three hours, but in a state of coma; there appeared to be no effort of the uterus to discharge its contents, except when the condition of the os was examined, which continued gradually to dilate. At nine p.m. she had another fit, which lasted about two minutes. As the os was now sufficiently dilated, I endeavoured to produce uterine contraction by exciting the os, and grasping the uterus over the abdomen; in this I succeeded, but as it contracted only when so excited, I imitated the natural process by intermissions, the head hardly seeming to advance, and being still at the brim, I applied the long forceps and extracted the child, dead, at half-past twelve; the placenta followed in about ten minutes, and the uterus was fully contracted. During the whole of this process there was no recurrence of the convulsions, and the patient remained in a state of quiescence, apparently asleep, breathing freely without stertor, until half-past two a.m., when she had another attack. I now removed the hair and applied cold to the head, threw up an enema of infusion of senna, and, the feet being warm, applied mustard cataplasms to the calves of the legs; pupils immovably contracted; pulse small, but not hard. The convulsions still continued to recur at intervals of about three-quarters of an hour, and I began to despair for the life of my patient, when it occurred to me that this was a case which warranted the use of opium, with a view to allay the morbid sensibility of the nervous system, upon which I considered the attacks now depended. I therefore administered thirty drops of the tincture, when she almost immediately fell into a profound coma, and I left her at six in the morning.

Jan. 1.—Nine a.m.: A very slight convulsion about an hour and a half previous to my visit; pulse eighty, soft; coun-

tenance placid; extremities warm; pupils not sensible to the stimulus of light, but contracting and dilating irregularly; breathing free. As there had been no action of the bowels, I put a drop of croton oil and ten grains of calomel mixed with a little honey upon the tongue. Six p.m.: Still comatose; pupils slightly sensitive; purgative dose has acted freely; bladder empty.

Jan. 2.—Consciousness gradually returning; reaction commenced; face flushed; pulse full, but soft; bowels still acting freely; lochia rather scanty; cloths wrung out of hot water to be applied to the pubic region; continue cold to the head; to take a saline draught of citrate of potass and antimonial wine every three hours.

Jan. 3.—Consciousness rapidly returning; inquires as to her state; lochial discharge sufficient; tongue clean; pulse natural; has taken plentifully of gruel; the saline has acted freely on the bowels and kidneys.

Jan. 8.—Progressing very satisfactorily; no head-ach; all the secretions natural; the breasts, which began to enlarge on the fourth day, are now soft and flaccid; consciousness perfect; memory unimpaired.

Feb. 1.—The convalescence has been gradual and regular, and the patient has resumed her accustomed avocations in her usual good health.

The above case demonstrates the good effects derived from rather extensive bloodletting, without subjecting the patient to the excessive debility and distressing headach which universally follows the abstraction of the enormous quantity of blood recommended and practised by some of our best authorities, and also the immediate relief which followed the taking of opium after the bleeding had relieved the cerebral congestion, which was the cause of the convulsions in the earlier period of the attack. My only regret is, that I did not administer the opium sooner after delivery. Had such been the case, I am persuaded that the number of fits would have been materially lessened, if they had not been altogether checked.

Copford, Essex, Feb. 1846.

CASE OF OVARIAN DROPSY, FOLLOWED BY RECOVERY.

By RICHARD EAGER, Esq., Surgeon, Guildford.

THE termination of a case of ovarian dropsy which lately occurred under my personal observation, is so rare, that I am induced to forward the details of it for publication in *THE LANCET*.

Mrs. —, aged twenty-eight years, after the birth of her first and only child, now three years old, suffered from attacks of inflammation of the left ovary and phlegmasia dolens in the left leg and thigh, the effects of which left her in an enfeebled state of health for several months.

On the 22nd July, 1845, I was consulted by her in reference to a tumour, about the size of a fully developed foetal head, occupying the left iliac region, easily defined to be circumscribed, moveable, and extending toward the right side, somewhat beyond the median line of the abdomen, having a smooth and even surface, and giving an obscure sense of fluctuation on percussion; an examination per vaginam manifested a healthy condition of the uterus, although it was somewhat altered in its position, the fundus being thrown forward, whilst its cervix rested on the recto-vaginal septum:—from these symptoms I diagnosed the disease to be encysted dropsy of the left ovary; and in this conclusion I was fortified by the opinion of Dr. Lever, who had seen the patient under her former illness, and who was also consulted on the present occasion.

The patient, in the history she gave of her ailment, traced the commencement of it to her recovery from her former illness; and, as it had made no advance in size, during a period exceeding two years, it was hoped it might continue in a quiescent state. Our attentions were therefore directed to the maintenance of the general health, and the promotion of the healthy functions of the system, by regulated exercise, diet, &c. &c. The compound iodine ointment was used freely over the site of the enlargement, and the hydriodate of potash with a bitter given three times a day.

From this time, however, the disease assumed a more active character, and advanced with such rapidity, that, by the beginning of November, the patient had attained the size of a woman at the full period of gestation, the ovarian tumour occupying the abdominal cavity from the pubes to the ensiform cartilage, producing great inconvenience and distress by its pressure on the diaphragm and surrounding viscera, and tap-

ping was regarded as the only probable means of affording relief.

On the 13th November a purgative was given to relieve constipated bowels,—it induced most distressing and violent vomiting, succeeded by rigors and syncope. On the following day a marked change had occurred in her size and form; and, to adopt her own expression,—“she felt a sense of want, sinking, and emptiness, almost amounting to fainting.” Early on the morning of the 15th November, I was called to her, and found her suffering from all the symptoms of sub-acute peritonitis, which readily yielded to the usual treatment. On the 17th November a very careful and minute examination of the abdomen failed to detect a vestige of ovarian enlargement, but the whole belly was augmented in size, and over its most dependent parts a very distinct sense of fluctuation was communicated to the hand by percussion. On this day her circumference over the umbilicus was thirty-eight and a half inches. During three or four days subsequent to this date, she evacuated large quantities of urine, to the amount of four, five, and six quarts per diem. On the 22nd November her size by ad-measurement was reduced to twenty-seven inches, with no perceptible enlargement or fluctuation. From the above time no remarkable symptoms have presented themselves, although her convalescence has been retarded by extreme debility:—this has, however, at length yielded to a generous diet, change of air, and a course of “steel bitter” medicine. At the present time she appears to be rapidly advancing to the recovery of her customary good health;—in fact, she told me to-day, she felt better than at any time during the past four years!

From a consideration of the above facts I am induced to believe, that violent action of the abdominal muscles and diaphragm, excited by the vomiting on the 13th November, ruptured the ovarian cyst; and its contents thus liberated, were extravasated into the abdominal cavity, (producing the attack of peritonitis,) whence they were removed by absorption, the cyst itself remaining in a collapsed and contracted state.

Guildford, January, 1846.

BRITISH MEDICAL ASSOCIATION.

EXETER HALL, FEBRUARY 17.—DR. WEBSTER, PRESIDENT.

AN ordinary meeting of the council was held this evening, when, after the transaction of some routine business, the revision of the laws and regulations of the Association (commenced at the last council meeting) was proceeded with and concluded.

The question of Medical Reform was then considered. The president took a general review of the various recent proceedings connected with the subject, and pointed out the present state of the politics of the profession and what he considered to be the best remedies for existing evils. An animated discussion ensued, during which nearly all the members present gave their opinions at some length, the tenour of which will be gathered from the resolutions, and all concurred in expressing their indignation at the insults so gratuitously heaped upon the general practitioners of this country, and upon the members of the College of Surgeons at the Hunterian Oration. The following resolutions were unanimously adopted:—

1st.—Moved by EDWARD EVANS, Esq., Southwark; seconded by REGINALD READ, Esq., St. John's Square—

“That in the opinion of this council, it is of the most vital importance to the best interests of the profession, at the present critical juncture of medical affairs, that medical associations and individual reformers of every shade and degree, but especially those who are acting as general practitioners, should lay aside their peculiar objects and opinions, and should unite and act cordially together for the attainment of those rights and privileges to which they are so justly entitled by their education and their important position in society.”

2nd.—Moved by RICHARD WALLACE, Esq., Hackney; seconded by R. L. HOOPER, Esq., London Road—

“That the council are firmly convinced, by recent events, that the first and great aim of the general practitioners so combined, should be to obtain a separate and independent College, with an appropriate title, and ample powers for its regulation and government, and to secure the control of the education and examination of all future general practitioners in the various branches of the profession which they are called upon to exercise.”

3rd.—Moved by SEPTIMUS READ, Esq., Jewin Street, City; seconded by WM. EEALLES, Esq., Parliament Street—

“That until a Charter and Act of Parliament for such a College can be obtained, the Council earnestly recommend the

general practitioners of the various associations, and also individual members who may not have joined any association, to at once form themselves into a College or FACULTY OF MEDICINE AND SURGERY; that a diploma as a Fellow (or Member) of the Faculty be granted to every registered member who is legally qualified to practise in any or some part of the United Kingdom of Great Britain and Ireland, with the right to vote in the election of the Council or governing body; that a Board of Examiners be appointed to examine all candidates in medicine, surgery, and midwifery; and that lectures be instituted in the various departments of medical science.

4th.—Moved by G. WEBSTER, Esq., Dulwich; seconded by A. B. WALL, Esq., Bayswater—

That if any doubts had existed in the minds of the Council as to the utility of any further endeavours to open the College of Surgeons, so that it might become the “Home and Head” of the general practitioners, those doubts must now be for ever removed by the late public announcement at the Hunterian Oration, made in the name and with the sanction of the Council of the College, (many of whom were present,) and by the insults and obloquy cast at the same time upon the great body of English surgeons—the general practitioners—and upon the Society of Apothecaries, by the orator of the College upon that occasion.

MEDICAL SOCIETY OF LONDON.

MEETING OF JANUARY 25, 1846.

(Read by MR. HILTON.)

REPORT OF A CASE OF LACERATED WOUND OF KNEE FOLLOWED BY TETANUS.

JULY 29th, 1844.—C. G.—, aged eleven years and three quarters, fell whilst running in a dry, gravelly, dirty yard, producing an extensive lacerated wound of the integuments over the left knee-joint, towards the inner side. A flap of integument was torn downwards, leaving the ligamentum patellæ exposed. Both the inner surface of the flap and deeper portion of the wound were jagged and dirty, the dirt being ground, as it were, into the cellular tissue. The wound was carefully cleansed by washing, and by the aid of scissors; the edges brought together by two sutures, warm-water dressing applied, and the leg kept extended upon a splint.—Calomel purge, followed by a black draught.

August 1st.—Until this time, the wound appeared to be uniting by the first intention; suppuration now commenced; the discharge was thin, and there was some little dirt in it. As there were present nausea and other symptoms of constitutional irritation, strict antiphlogistic treatment was adopted.

4th.—As he was evidently losing ground, and suppuration increasing, tonics were commenced. He rapidly improved in strength, and apparently in flesh; the wound granulated, and had cicatrized by the 18th of August. About this time he had cynanche parotidea; the parotid and sub-maxillary glands were enlarged, and there was some difficulty in deglutition. The mouth could not be freely opened. His gait was rather stiff, but appeared to be gradually improving, until

August 27th, when he was attacked with spasm and pain, including, more especially, the upper and inner part of the left thigh. But no very marked symptoms presented themselves until the morning of the 29th of August, when he was first seen by Mr. Hilton, at six o'clock. He was then obviously suffering from tetanus; pulse about one hundred in a minute; perspiration profuse; frequent general spasm; inability to open the mouth wider than to admit the little finger; difficulty in swallowing; forehead corrugated; eyelids slightly closed; lips retracted; abdomen rigid; slight priapism; the left knee more sensitive to pressure than the right; no tender spot in the cicatrix. He was ordered extract of belladonna to the knee, and three grains of calomel, and half a grain of opium. This procured some sleep. A senna draught, with tartrate of potass, was given, three hours after. This draught was repeated three times, and was completely effective at five in the morning.

August 30th, five A.M.—The bowels having now been freely relieved by repeated doses of infusion of senna and tartrate of potass, it was agreed that the subsequent part of the treatment should consist in the administration of mercury and opium; opium alone, and the local application of sedatives in the form of aconitine. During the first day he took one grain of calomel, and one-sixth of a grain of opium, every two hours,

and he had a hot bath, which exerted no evident influence; a solution of veratria five grains, spirit one ounce, was applied by a camel's hair brush to the seat of injury, the left groin, and over the spine as high as the scapulae. It was applied twice, and followed by a sense of tingling in the parts, but with no obvious effects as regards the spasms or the pulse, which continued at about 120.

31st.—There was no improvement in the symptoms, except that the pulse was reduced in frequency; there was mercurial fœtor. In the early part of the day a solution of aconitine five grains, spirit of wine two ounces, was applied to the left groin and back three times, at intervals, and each time was followed by a remission of the spasms, and then by sleep, and in one instance during an hour and a half. Towards the evening the spasms were evidently again increasing, a stronger solution of aconitine, five grains to the ounce of spirit, was now tried by painting as before, and also upon the rigid abdominal muscles; shortly after this application he fell asleep. Strong priapism existed when the aconitine was applied, but very soon subsided; his pulse varied from 100 to 110 during the day, and he took one-fourth of a grain of opium every four hours.

September 1st.—On this day the spasms had increased in frequency and severity, and now included the muscles of the back. The aconitine appeared to produce a slight mitigation of the spasms: half a grain of opium was given every two hours, and in the evening the spasms were less urgent; pulse 94; muscular rigidity diminished; mercurial fœtor present.

2nd.—Much the same symptoms on this day as yesterday. Opium was freely administered, and the aconitine ointment six grains to three drachms of lard rubbed upon the cicatrix on the left leg and along the back, without any very certain benefit. At this time Madeira wine was suggested; this was tried to a large extent during the evening and earlier part of the next day, but without any advantage gained; the pulse was now 120 to 130.

3rd.—Since the application of the aconitine last night to the left leg it has been free from spasms; hydrochloride of morphia, in doses of a quarter of a grain, was frequently administered with the effect of inducing sleep, with heavy stertorous breathing.

4th.—No mitigation of the symptoms; doses of half a grain of morphia persevered in; and on the 5th, early in the morning, after having constant spasms affecting the larynx, threatening immediate suffocation during the night, laudanum was administered very freely, and until it produced a decided effect upon the system; the pulse reduced to 74; extremities cold; clammy perspiration; exhausted, he sank on the bed, and appeared to be dying for a few minutes. The respiration now became steady, at sixteen in the minute; the pulse rose to 102, and the intense sleep which now overcame him continued with but very slight intermission for nearly four hours, when he awoke refreshed, and swallowed some coffee. Towards the evening the symptoms became again urgent, but were controlled by tincture of opium, administered until quiet and repose were produced. From this period to the 12th, each day presented the patient affected with frequent spasms, sometimes very severe, and these were controlled by laudanum, each day evincing a slight improvement upon its predecessor.

12th.—Some tenderness observed in the cicatrix, and the knee-joint contained excess of fluid. A small pustule, or very minute abscess, formed in the cicatrix, which, and the adjoining part of the cicatrix, were freely divided, without any very evident advantage to the patient's symptoms; the pulse was generally about eighty. The laudanum was still persevered in, and used directly there was any indication of spasm occurring. In addition, quinine was now given as a tonic, and this combination of means was employed daily, with the effect of improving the strength, and reducing the frequency and severity of the spasms, which were henceforward confined chiefly to the lower extremities.

On the 14th, the alvine secretion being again unhealthy, and the daily improvement doubtful, mercury with chalk was added in small doses three or four times daily. With this combination of opium, quinine, and mercury with chalk, daily persevered in, beyond a slight pyalism produced by the 17th, this state was kept up for several days, during which the patient slowly improved—any appearance of spasm being always checked by laudanum. The symptoms continued subsiding until September 22nd, from which time he took gradually diminished doses of laudanum every night only. In addition to the remedies here briefly alluded to—wine, antimony, and belladonna, were temporarily employed, but without any obvious benefit.

In April, 1845, the patient had another attack of the spasms, affecting more especially the muscles of the thighs and legs; but there was no general tetanus, and the pulse did not rise to 100. This attack of muscular spasm was controlled by opium.

In June there was a recurrence of the symptoms, but not urgent: opium was effective.

In September he had another slight attack, when by purgatives and opium he was relieved.

In December, 1845, he was again the subject of tetanic spasms, the sequel to some small inflamed wounds on his fingers; but the spasms never affected the larynx; nor did the general symptoms become the source of much anxiety. Ape-rients and opium were effective.

In the course of the observations on this case, Mr. Hilton expressed his opinion that tetanus was essentially an inflammatory condition of the spinal cord.

FEBRUARY 2, 1846.

Mr. PILCHER inquired of Mr. Hilton what reasons he had for thinking that tetanus was an inflammatory condition of the spinal cord? This opinion had been promulgated by Mr. Baynton, and believed to be true by him (Mr. Pilcher) for some years: he was now convinced, however, that it was founded in error. That the disease was removed by antiphlogistic treatment was no proof that it was inflammatory.

Mr. HILTON, in reply, enumerated various appearances, evidently, as he thought, the result of inflammation, which he had observed in examining the spine in several fatal cases of tetanus. These appearances were not confined to the membranes, but sometimes implicated the substance of the spinal cord itself, in which increased vascularity, papulous spots, and other morbid appearances, were visible.

Mr. PILCHER alluded to a case occurring some years since in the practice of Mr. B. Cooper, in which there were no appearances whatever of inflammation in the spinal cord or its membranes. Papulous spots were not uncommonly observed in the spinal marrow of persons who had no disease whatever of that region. He did not deny that the spinal marrow in tetanus might be inflamed, but it was not always so, and might be the consequence and not the cause of the disease. Tetanus might be the result of irritation in a nerve, as was proved by the removal of the disease by Mr. Bickersteth at the Cape, by the division of the posterior tibial nerve. Such irritation, exciting the general nervous system, might exist without inflammation. He questioned if remedies exerted any beneficial influence in this disease, although temporary relief might be obtained from narcotics.

Mr. DENDY agreed in the main with Mr. Pilcher, but he thought idiopathic tetanus might be inflammatory, not so traumatic. He had examined five or six cases of tetanus after death, in which there were no marks of inflammation of the spinal cord.

Mr. HILTON said that the spinal marrow might be irritated, and tetanus ensue. The treatment that had been found successful in many cases was no proof of the non-inflammatory nature of the disease. Even when the division of a nerve effected a cure, it was no proof that inflammation did not exist. He alluded to the alleviation of the priapism in his case by the local application of the aconite. He had never seen distrust of the spinal marrow from inflammation in a case of tetanus, but had seen this state when no tetanus had been present.

Dr. G. O. REES alluded to a case of traumatic tetanus which Dr. Bright treated by quinine alone: the patient got well.

Dr. WILLSHIRE observed, that the success of the remedies employed in this case did not militate against the opinion that the disease was inflammatory. All the remedies employed had, at one time or another, been used in inflammation. With respect to the use of aconitine in tetanus, he believed that Professor Miller, of Edinburgh, had called it the "antistrychnia medicine," and suggested that it might possibly relieve the spasms in tetanus.

Mr. BISHOP thought that we must refer the tetanic spasms entirely to the spinal cord. At present, however, we were too ignorant of the physiology of that part of the nervous system to be able to decide positively on its exact condition.

Mr. ALDER FISHER had seen a case of traumatic tetanus cured by the application of a blister to the epigastrium.

Mr. WRAY mentioned a circumstance in connexion with the case under discussion, which had not been particularly alluded to by any of the speakers, but which, in his opinion, might throw some light on the pathology of the disease. It was a remarkable fact that no permanent benefit ensued from the

remedies employed, either the opium or others, until, in each attack, the system had been placed under the special effects of mercury. It was curious, in this case, that the spasm affected the flexors of the left and wounded extremity, and the extensors of the right.

BRITISH AND AMERICAN MEDICAL JOURNALS.

The first number of the *Dublin Quarterly Journal*, (an old acquaintance assuming a new form, and an increase of size, corresponding with an increase of age,) contains some papers of interest; amongst others, one, by Dr. GRAVES,

ON THE RELAPSE PERIODS OF AGUE, AND THE INDICATIONS OF TREATMENT.

The writer observes,—

"Having noted with much anxiety and accuracy the course of a quartan ague for twenty-seven months, I constructed a table for the purpose of obtaining a connected view of the number and dates of the fits. This table had been made for some time before I discovered that it contained *data*, which authorize us in concluding that the law regulating the periodicity of agues applies, not only to the succession of paroxysms, but is extended to the free intervals between them—in other words, that the same law of periodicity which governs the disease, while it occasions fits, continues likewise to preside over its latent movements during the interval when no fit occurs, and thus the true periodic rate is carried on, though, as in a clock from which the striking-weight has been removed, the usual signal does not mark the termination of each certain definite portion of time.

"This law, now for the first time brought to light, exhibits a new example of the tenacity with which periodicity clings to a disease, when once firmly impressed on it, and recalls a very similar phenomenon observed with respect to the catamenia, which, having been suppressed for many months, not unfrequently re-appear on the very day on which the monthly period should have occurred, had no such suppression taken place."

The case referred to is that of a youth, eleven years of age, in whom the disease resulted from imprudent daily bathing in a pond of stagnant water. It illustrates several points of interest. To the periodical law established by Dr. Graves, and supported by many practitioners, there were, during the entire period that the disease lasted, but three exceptions. These were very slight, and in two instances after lengthened periods of freedom from paroxysms. The practical inference to be drawn from Dr. Graves' observations is by him thus expressed:—

"A knowledge of this law will, therefore, prove of the greatest importance, in enabling us to guard against the return of the disease; for, for several weeks after the series of fits has ceased, we can point out to the patient on what days they are liable to re-appear; and, consequently, he can upon those days more effectually guard against the occasionally exciting causes of the disease, such as cold, fatigue, &c."

In reference to the treatment by quinine, the writer believes the practice generally followed to be wrong. He objects to the continued use of the remedy, as thus the constitution becomes accustomed to its influence when the ague-fit is absent, and then that influence is weakened.

"The mode of treatment which I adopted was calculated to avoid this inconvenience. It consisted of giving the quinine for four successive days, and intermitting it for the six following days, thus embracing the interval comprehended in three fits. By these means it was hoped to keep the system sufficiently under the curative influence of quinine while we avoided rendering the constitution too familiar with the medicine, the six-day interval preventing it from becoming saturated by the quinine."

Tables illustrative of the author's observations are appended.

A NEW METHOD OF DETECTING SPURIOUS MUSK

is detailed by Dr. NELIGAN, in the same journal, and the application depends on the use of the microscope. Abbreviated, the observations are to the following effect:—

"The Chinese, finding a greater demand for musk than they are able to supply with the genuine article, squeeze out some of the secretion, which is fluid in the recent state, and mix it with, it is believed, the dried blood of the animal; this compound, which presents the same physical characters as true musk, they put into small sacs made of pieces of the skin cut off from other parts of the animal's body, and prepared with the usual ingenuity of this people, so much so, indeed, as almost to defy detection with the naked eye.

"The method hitherto adopted for detecting this sophistication has been the peculiar position of the hairs, which are arranged in a circular manner around the orifice in the genuine musk-pod, and also the absence of any remains of the penis in the artificial pods. But these characters are not invariable, and some spurious musk-pods are so skilfully prepared as to be undistinguishable from the genuine article when compared."

The plan proposed by the author is a microscopic examination of the hairs taken from both varieties of pod. The hairs differ in structure, and the difference appears to depend on the fact, that those hairs growing on the true sac are furnished with distinct regular colour-cells, which are still observed, whilst in hairs taken from other parts these cells seem to be obliterated. It is possible that an examination extending to the contents of the sac might likewise show some essential difference.

ON THE CONTAGIOUS NATURE OF PUERPERAL FEVER, AND ITS CONNEXION WITH OTHER DISEASES.

Under this title, Dr. PEDDIE details, in the *Edinburgh Medical and Surgical Journal*, several cases which occurred in his practice, and which, illustrating the highly contagious character of puerperal fever, show how unwittingly the physician may be made to scatter, in his progress, the seeds of destruction and death. Independently of the facts which are by all admitted, Dr. Peddie's cases confirm the experience of a more limited number, which shows that puerperal fever may originate from the contagion of a different disease,—in this instance, erysipelas,—and they moreover show that the contagion of puerperal fever may give rise to a different disease, in this instance, also, erysipelas. Mr. STONE, of Doncaster, illustrated this subject in the *Provincial Journal*, (No. 166,) and adduced a host of evidence from his own painful experience, and that of several other practitioners. The following are Dr. Peddie's conclusions. One in reference to treatment is omitted. The observations are not judicious.

"1. That a specific virus, of an animal nature, is produced under certain circumstances, and in turn generates a peculiar form of fever in the puerperal state.

"2. That that virus frequently originates from erysipelatous inflammation.

"3. That, when once generated, it may be communicated from one lying-in patient to another with extraordinary virulence, quite independently of locality, either by direct intercourse, or through the medium of a third person; and that this is more likely to happen when the predispositions of a weak body and a depressed mind exist.

"4. That it may produce disease of various kinds in non-puerperal individuals, more especially of an erysipelatous and phlebotic character.

"5. That the principal concern of the medical man, seeing that a cure is so difficult and so very rare, should be, to adopt every conceivable precaution against the occurrence of a single case of it, or to lessen the risk of its propagation when once established. And to attain these ends, patients in childbed should either not be attended at the same period with cases of malignant or severe erysipelas, or that proper caution should be observed as to ablutions, &c., more especially after contact with any discharge from them; and that when a puerperal fever case does occur, lest it should be something more than sporadic, chlorinated ablutions and change of garments are first required; and then, should a second case occur, it would be the safest plan for the practitioner to abandon the practice of midwifery for a time—two or three weeks, if possible—and in the interim attempt, by removal into the country, warm baths, and other alternative and purifying means, and by the exposure of the clothes to a free atmosphere or to a high temperature, (150° dry heat,) as Dr. Henry recommends, to rid himself of the subtle virus which adheres to him so tenaciously,"

THE LANCET.

LONDON: SATURDAY, FEBRUARY 28, 1846.

In the history of all the scientific institutions of this country, the Royal College of Surgeons of England *now* holds an isolated place. Alone does it stand in the glory of the purposes which it was designed to fulfil,—*alone*, happily, in the infamy of its practices. Amongst other institutions devoted to useful public objects, their governing authorities, stimulated by high and noble feelings of ambition, exulting in the reputation and success of the bodies whom they govern, the rulers and the ruled are frequently united by the closest ties of sympathy, and concur, heartily and cordially, in promoting the success of all the members of their establishments.

But in the College of Surgeons, the incapacity, the ignorance, the incompetency, of the members have been proclaimed, *ex cathedra*, in the theatre of their own institution. In the face of the President of the College was this audacious act perpetrated, and also in the presence of many members of the Council. By the President (Mr. SAMUEL COOPER) the perpetrator of the insult was not rebuked. From the Council in attendance he received no check. Fortunately, the fate of the calumniator is decided; he has committed both a professional and a moral suicide. Some events in the life of this worthless, unprincipled man, may be subjects for future notice, but such is the importance, in law and in position, of the body of which he was the chosen actor, on the 14th of February, that the apostate himself is too insignificant an object to claim attention, while we consider the attitude in which the Council, as the governing body of thirteen thousand members of the College, have been placed by the foul and odious calumnies that were uttered in the theatre on Saturday se'nnight. As an unmasked renegade, and as the malignant libeller of the members of the College, we for the present consign the unprincipled offender to the affectionate sympathies of his colleagues, and to the scorn, indignation, and contempt of his injured and insulted professional brethren.

Turn we, then, to the Council in their collective and official capacity. What is the present position of that body with respect to the MEMBERS of the College?

Until this moment, the Council remain the silent abettors of the author of the insult. Up to this hour, by no official act have they publicly repudiated the insulting language of their foul-mouthed spouter of insult and venom. Associated with him in office, having selected him to perform the task which was so vilely executed on the 14th inst., the Council deem it wise, just, and dignified, to remain silent and passive, while the feelings of indignation which agitate the minds of the numerous thousands of members are far too forcibly felt to be repressed. Instead of coming forward, without a moment's delay, to exculpate themselves from the injurious suspicion of sanctioning the misconduct of the libeller of the profession, the Council remain taciturn—are silent as the tomb; and thus, by implication, stand before the public as a body approving of the calumnies which the reviler directed against the professional character and attainments of thousands of gentlemen holding the diplomas of the College!

With a body occupying at once an attitude so insulting, a

position so degrading, the MEMBERS can *now* hold no official intercourse. Antecedent to all further communications with the Council, there must be published by that body a clear and an unequivocal repudiation of the insulting language and offensive conduct of the calumniator. There ought to be, there can be, no mistake on this subject. If the Council do not repudiate the renegade, the profession will repudiate the Council. Presently it will be discovered where the "geese" are to be found. The offer of an apology from LAWRENCE would only be an additional insult, probably the worst of all, as the bare surmise that it would be received from him, or obtain a moment's calm attention, would imply that the members of the College are insensible to every feeling of self-respect, are devoid of judgment, and cannot estimate what is due to a sense of wounded honour. Yes; the libeller would be ready enough to "retract" and "apologize," and then laugh at the "geese" that were stupid enough to be deceived by his treachery, sycophancy, and baseness. He "retracted" before the governors of the Bethlem Hospital, in 1821, and then sneered at his dupes. He has again "retracted," more recently, and was again successful in the practice of deception. He will not *now* succeed in playing at that game. His own self-exposure is complete. Had a knowledge of his true character been less perfect, he might once more have partially deceived those whom he had so basely injured and wantonly insulted. But no new mask or device can now conceal that character which he has so fully and completely exposed to public view.

But, turn we to the Council. In attacking the capacity, attainments, and professional skill of the MEMBERS, they have broadly and emphatically confessed their own misgovernment. This will prove an useful fact, and must have a telling effect in Parliament. An acknowledgment of their own misgovernment furnishes the best argument for making the whole Council elective, immediately, by the Members. Grossly has this last body been attacked and vilified. In their education, and at their examination, they complied with all the demands of the Council, and then, by way of reward, they are charged with ignorance, with incapacity, with not being *surgeons*! How profoundly grievous, how scandalous, how wickedly and maliciously unjust, is the attack that has been directed against them. When candidates for the diploma, they, in effect, addressed the Council thus:—

"We seek to be incorporated as members of this College; here are our testimonials, proving that we have complied with the 'orders' and 'regulations' relating to the education of students in surgery, which you have issued; we believe that we are qualified to practise surgery; accordingly, we invite you to apply to us such tests as will have the effect of proving the sufficiency of our attainments. If you find us incompetent, reject us; if you are satisfied with our capacity, receive us as members. We do not flinch from the mental and scientific trial to which you may consider we ought to be exposed; but if you admit us, let our diplomas proclaim to the world that we are entitled, as surgeons, *being members of your College*, to the full confidence of the public."

But, the examinations passed, the diplomas conferred, and the fees paid, what is the unprecedented act of official injustice which the Council perpetrate? Why, they announce, then, publicly, in the theatre of the College, that the holders of the diplomas—the very men whom they have examined—are in-

competent, unqualified, practitioners in surgery! In all the histories of all the corrupt corporations that ever existed, we firmly believe that the parallel of such an act of baseness is not to be discovered.

The poisoned shaft, however, has missed its mark, and recoiled, with deadly force, against the columnist. The intended victims are untouched. Officially have the Council thus made a proclamation of their own misgovernment,—of *their own* incapacity for conducting the examinations of the candidates. Self-condemned, the Council, as a culprit body, now stand before the profession, Parliament, and the public. In reply to a claim for their dissolution, and for making the whole Council at once elective, on a liberal system of representation, what arguments can they offer, what facts can they urge? They have confessed that the parties on whom the diploma of "SURGEON" has been bestowed, are not qualified to discharge the duties of SURGEONS. With the libel which this cruel, this injurious calumny exhibits, we have, at this moment, no concern. Amply sufficient is it to know, that in the attempt to injure many thousands of the long-persecuted MEMBERS, the Council admit, before the community, that for forty-five years they have misgoverned the College, and scandalously neglected the important duties which the law required them to discharge.

On every account it is a fortunate and well-timed confession. In this degraded position we leave the Council for the present, to the full enjoyment of their own peculiar meditations. And let us proceed to inquire what course of policy the profession ought to adopt in consequence of the outrageously hostile attitude which the Council of the College of Surgeons has just, most unexpectedly, assumed? Is the medical profession of this country to be stigmatized as a subservient truculent body, or will it forthwith take up a commanding position, suitable to its high scientific character, and the great public and private duties which it is destined to fulfil? Onward, and uninterruptedly brilliant, must have been the career of the profession, had there not existed in it such various conflicting interests, so many antagonizing institutions. Standing in a commanding position, apart from the corporations, the members of the profession—all ranks and classes of it—should now combine, and throw their intellect, vigour, and energy, into one rallying focus. A Council, elected on an equitable system of representation, would, in its deliberations, exercise more influence over medical affairs than all the corrupt and exclusive colleges. Such a council might at once proceed to REGISTER all the medical men in this country, who, by diploma, licence, or otherwise, are entitled "to practise any branch of the profession in any part of her Majesty's dominions." In such a registration all class distinctions ought to be avoided, the names being entered alphabetically, as of persons legally qualified to practise medicine. Appended to each name would be a description of the qualification. Thus, in the REGISTER the designations of "Physicians," "Surgeons," "General Practitioners," and "Apothecary," would be avoided, and thousands of qualified persons might thus be relieved from the annoyance of being thrust into the *lowest* division of a three or four-fold classification. As no one ought to be permitted to practise without being legally qualified, so all ought to be considered as entitled at law to an equal position on the register. The annual publication throughout the kingdom of such a register of qualified practi-

tioners, would operate beneficially both for the profession and the public. In Ireland and Scotland the election of similar Councils, and the adoption of a like system of registration, could not fail of being attended with equal benefits in those countries.

Thus organized, and the profession having three powerful and intelligent representative governing bodies, the question would soon arise, Where should the executive functions of each faculty be exercised? But nothing can be gained by the discussion of that question at present. The extent of the organization will furnish the best indication of the influence which it would be likely to produce in Parliament, and of the direction which it ought to take with respect to the existing institutions. The legislature, after due deliberation, might devote to it the College of Surgeons in England, with its invaluable museum, and splendid library, the first having been purchased with the public money, and the last with funds obtained directly from the pockets of the members. But these are questions for future consideration. Another subject claims attention at this moment. The ground is again cleared for action; all the obnoxious medical bills are abandoned, and the HOME SECRETARY has most judiciously declined to advise the Crown to connect the great body of the profession with an *inferior* College,—an institution having no power to grant diplomas, and not being by title connected with either medicine or surgery. Thus a new state of affairs has suddenly arisen, and the demand for the establishment of a NATIONAL FACULTY OF MEDICINE is likely to become general. That such a claim will be urged with warmth and sincerity we fully believe. It is a just and a wise claim, and must succeed if the profession be *united*.

Without combination our cause is hopeless; with it, success is certain. While, therefore, we feel more strongly than ever, that the members of the College of Surgeons should continue to enforce upon the legislature the justice of their demands with respect to a "Supplemental Charter" for that institution, fully and entirely do we concur with the Council of the BRITISH MEDICAL ASSOCIATION, in thinking that the most opportune and favourable moment has arrived for entering into an ORGANIZATION, with the view of establishing a NATIONAL FACULTY OF MEDICINE. In that Council there are some of the most intelligent and faithful of the medical reformers. The "British" is now the parent society. Without presumption, therefore, it might undertake the initiative duty of convening a meeting of the Councils and Committees of all the medical associations in the metropolis and adjoining counties, and from the deliberations and decisions of a body thus constituted, we decidedly think there would follow the best possible results. Evidently, the profession cannot remain in its present anomalous and unsatisfactory condition. Equally obvious is it, that to emerge from its difficulties is impossible, unless the combined power of the profession is devoted to one chief object. A FACULTY OF MEDICINE, with a representative government, is greatly required. Such a system of government would necessarily embrace the widest range of parliamentary influence and medical interests. A governing body, voluntarily formed, not being vivified by the influence of the representative principle, could not acquire so good a position in Parliament as would one of the vicious corporations. Whatever measures may be adopted by the BRITISH MEDICAL ASSOCIATION, or by any other combination

of medical reformers, let us express an anxious hope that a strict adherence to principle will be rigidly maintained, and that faith will be kept with the members of the profession throughout the kingdom. If there be any leaning after selfish interests, any attempt made by the leading persons to secure personal advantages at the risk of sacrificing general interests, —should such attempts succeed, the movement must fail. But in the defeat of mere personal motives, the prospect of a general advantage also may be lost. An intercourse of many years' duration with our professional brethren has had the effect of impressing our minds with the firmest conviction that a governing council, *justly* chosen, and faithfully reflecting their opinions, would receive an amount of support altogether unprecedented. The proposal for establishing a Faculty of Medicine has long obtained the hearty sanction of the profession, because it provides for a representative system of government. Of all the elements of the scheme, this, without doubt, was the most attractive. The inviolable maintenance of that principle will, therefore, we are confidently assured, be one of the safest means of conducting the profession to the haven they are so anxious to possess.

In the FOREIGN DEPARTMENT of this week our readers will find some introductory remarks made by M. MAGENDIE, at the College of France, previous to commencing his annual course of lectures on Physiology, which will, no doubt, be perused with interest. M. MAGENDIE's reputation as a physiologist stands so high, especially in England, that any views or opinions emanating from him claim attention, however irregular they may appear,—however contrary to generally-received doctrines.

It will be perceived that MAGENDIE has taken advantage of the opportunity furnished him by a cursory sketch of the popular medical delusions of the day, to give utterance to peculiar opinions respecting the influence of medicinal agents in the treatment of disease—opinions which stamp him as nearly a sceptic with reference to their therapeutic powers. The partial scepticism of M. MAGENDIE as regards medicinal agents has been long known to French pathologists, and has contributed not a little, with them, to throw discredit on his physiological experiments. He may be considered the most prominent representative of the French "expectant" school—a school which now numbers but very few votaries among our neighbours, notwithstanding the opinions to the contrary generally entertained in this country. The great reputation of M. MAGENDIE among British physicians, which induces most medical travellers when in Paris to hasten to his wards at the Hôtel Dieu, of which he is one of the medical officers, will partly account for the erroneous views respecting modern French practice that are entertained by many of our countrymen. M. MAGENDIE has experimentalized himself into the belief that nature requires but little other than dietetic and hygienic assistance when disease is present. Discarding, consequently, the accumulated wisdom of former ages, he treats his patients, conscientiously, according to these views, and it is generally considered by his Parisian colleagues with but indifferent success.

The error into which M. MAGENDIE has fallen exemplifies the danger of laying too great stress on the results of mere experiments, sometimes as fallacious sources of knowledge as any. The same may be said of the numerical system

when pushed to the extreme, and resorted to without due qualification, as a means of therapeutic research. Both these modes of investigation, although admirable in themselves, when abused, or used as mathematical formulæ, nearly inevitably lead to that most lamentable of medical errors, scepticism in the power of therapeutics.

The following paragraph, which we extract from a masterly article on homœopathy, contained in the new number of the *Dublin Quarterly Journal*, aptly applies to the above remarks:—

"When studying in Paris, we had an opportunity of witnessing, in M. MAGENDIE's wards at the Hôtel Dieu, the powerful influence on disease of mere hygienic conditions. We have seen pneumonias and other acute inflammations brought to a successful issue by attention only to temperature, hygrometric state, diet, and rest. Still, however, we believe every one but the distinguished physiologist himself was convinced that the fatal cases were much more numerous with him than with his colleague, M. CHOMEL."

In pursuance of our resolve to assault quackery, its body and spirit, wherever it appears, we come to the consideration of those cases in which the names of living medical men are adopted by notorious quacks, or are falsely used by them to promote their nefarious trade. The use of the name of Dr. Locock is one of the most glaring of this kind, and however painful the matter may be, it must be searched to the very root; and we do this chiefly for the purpose of expressing our views of the duties of medical men who are thus openly scandalized.

It is no new thing to any one with eyes to see, that for a considerable time a quack medicine has been advertised under Dr. Locock's patronymic, namely, "Dr. Locock's Pulmonic Wafers." This nostrum had a modest birth for such things; it was at first a palliator of coughs, colds, &c., but recently its virtues seem to have increased in an extraordinary degree. At the present time it is declared that by these wonderful wafers,

"Perfect freedom from Coughs in Ten Minutes after use, and a Rapid Cure of Asthma and Consumption, and all Disorders of the Breath and Lungs, is insured. To singers and public speakers they are invaluable, as in a few hours they remove all hoarseness, and wonderfully increase the power and flexibility of the voice. They have a pleasant taste. Price 1s. 1½d., 2s. 9d., and 11s. per box.

"*Caution.*—To protect the public from spurious imitations, her Majesty's Honourable Commissioners have caused to be printed on the stamp outside each box, the words, "Dr. LOCOCK'S WAFERS," in white letters on a red ground, &c."

Another advertisement sets forth that

"The number of deaths in London alone, from diseases of the chest, is upwards of 300 a week, or nearly 16,000 in the year, and in many other parts of the kingdom the rate of mortality from these diseases is considerably higher. It is with confidence asserted, that were those who labour under disorders of the lungs to take a course of Dr. Locock's Pulmonic Wafers, *one half, at least*, of the deaths which occur from such diseases would be prevented, and all would experience an amount of relief which no other remedy can bestow."

Some may maintain that the proper way to treat such a stupid thing as this, is by silence; that it is absurd to suppose that any one can be duped so far as to believe that the Dr. Locock is meant, or that the wafers are in any way sanctioned by him. But on considering the extent to which this nostrum is taken by the public, as evidenced by the enormous number of its advertisements, are we to suppose that all those who use it clearly see that Dr. Locock's name is falsely used, that the

thing is a deception from beginning to end, and that they consciously swallow an enormous lie with every dose they take? The advertisement sets forth—

“That the truly wonderful powers of this remedy have called forth testimonials from all ranks of society, in all quarters of the world. The particulars of hundreds of cases may be had from every agent throughout the kingdom.”

Long strings of these letters are contained in the provincial newspapers, some of the writers returning thanks to Almighty God for their relief by means of this lie-built nostrum! Do religious people, who are so greatly given, as a class, to the encouragement of quack medicines, and who habitually invoke Providence to aid in their restoration; do they ever think of the crime they commit in supporting so gross a system of fraud, or of their intense impiety in associating prayer with this iniquity?

We do not believe it possible. Medical men have so frequently given the sanction of their names to preparations of doubtful origin, that society is confused. The public cannot see the line between legitimate medicine and quackery; it has been so broken down by thoughtless medical men on the one hand, and the impudent quacks on the other. We are not, then, of those who believe the thing should be allowed to go quietly on. We consider, on the contrary, that had Dr. Locock resented the prostitution of his name, in the first instance, and publicly exposed the attempt to ally his name with quackery, or, what would have been still more to the purpose, if he had applied to the Court of Chancery for an injunction to prevent the proprietor, DA SILVA, from using his name,—we repeat it, had he done either of these things, the fate of the pulmonic wafers would have been speedily sealed. Furthermore, we believe that, apart from personal consideration, it was his bounden duty to the profession to have exposed the imposition which was practised in his name.

If an injunction were applied for, the proprietor would be obliged to show *what* Dr. Locock it was whose name had been given to this quackery, and the mere exposure of the attempt to fasten this disgrace on the only Dr. Locock recognised either by the profession or the public, would have been sufficient if the injunction were not granted; but of this there could be no doubt.

From being suffered to proceed uninterruptedly, other medical men, or pretended medical men, become implicated. The following is an example of the medical testimonials with which this thing is bolstered up:—

“From Mr. F. C. Ladbury, Surgeon, &c., Wednesday:—
‘September 6th, 1845. Gentlemen,—I have proved your Pulmonic Wafers to be most efficacious in all pulmonary affections, and a powerful sedative in diseases of the heart. The combination I consider especially good, as it relieves without producing any of the unpleasant sensations in the head so generally caused by all other anodyne and cough medicines. (Signed) F. C. LADBURY.’”

Do any of our readers know anything of this puffing, certifying Mr. LADBURY?

DA SILVA has so long vaunted Dr. Locock's name with impunity, that a double, a less courageous pretender, a Hebrew corn-cutter, we believe, now attempts to use it in the following furtive manner:—

“From Dr. Locock:—‘Mr. Eisenberg.—Sir,—Having witnessed some of your operations, I can testify that you effect them with great ability, very expeditiously, and without pain. I especially noticed the case of Lady Dick, in which you displayed the skill of a talented practitioner and the care of a considerate man. Yours, &c., Henry Locock, M.D.’”

Dr. Locock's name, simply as Dr. Locock, is become a household word, but not one in a thousand out of the professional pale think or care whether he rejoices in the name of Charles or Henry. We have no doubt that those of the laity who have associated any name with that of the Doctor, give him the name of Henry on Mr. EISENBERG's authority, as no other Dr. Locock has ever been popularly known. A lofty notion they must entertain, too, of Her Majesty's physician-accoucheur, looking after Mr. EISENBERG's operations in general, and watching the paring of Lady Dick's toes in particular.

In these modes, a physician in high practice suffers himself to be made the supporter of quackery, without, as far as the profession is aware, lifting a finger to defend himself or the faculty to which he belongs. The profession complains loudly of quackery: they are not so helpless in the matter as they suppose. The powers of the law, and the moral powers in the profession itself, have never been invoked for the defence of legitimate medicine. The man who does invoke it, and there are abundant opportunities, will win great and deserved honour. It is said that Dr. Locock is contemplating his partial or entire retirement from practice, having earned a fortune in the profession. It would be a great misfortune if such a man, on retiring, left behind him so glaring a legacy to quackery as is involved in the tacit permission to the continuance of his name in the quack advertisement columns of the newspapers. We hope better things. We trust it has been from mere thoughtlessness or constant occupation, and the influence of other examples, that this nuisance to every right-thinking man has been so long allowed to continue. We say this in the full belief that it might be prevented; and we commend the following to Dr. Locock's consideration—to the consideration of all those who are similarly implicated. “Qui non prohibet cum prohibere possit, consentire videtur.”

IN our remarks of last week we assumed, on the authority of the *Standard*, that Mr. BACOT, “the Master of the Society of Apothecaries,” was present at the commemoration dinner. We are glad to see that Mr. BACOT has contradicted the statement, in the following letter to the Editor:—

“Portugal-street, Grosvenor-square, Feb. 23rd.

“SIR,—In your paper a few days since, there is an account of the dinner given by the Royal College of Surgeons, on Saturday, the 14th instant, in which you state that the ‘Society of Apothecaries’ was given as a toast, and responded to by me as ‘Master’ of that Society.

“This account having been copied into other publications, and extensively circulated, I beg that you will give it the earliest contradiction. I was invited as ‘Master’ of the Society of Apothecaries, both to the Hunterian Oration and to the dinner annually given by the College on the evening of the same day; I was present at the Oration, but withdrew immediately upon its conclusion, and addressed a note to the President of the College, (Mr. Cooper,) in which I gave my reasons, in strong but temperate language, for declining to attend at the dinner.

“I beg to subscribe myself, your obedient servant,

“J. BACOT.”

There was a singular want of presence of mind on the part of all concerned while Mr. LAWRENCE's tirade was being delivered. He said of the projected resignation of their duties by the Society of Apothecaries,—“Nothing in their life became them like the leaving it.”

Mr. BACOT would have been justified upon this, if he had appealed to every general practitioner present to show their

sense of the speaker's conduct by leaving the room in a body. This would have been marking their sense of the matter at once. It will not, however, be any the less severe that the matter is rankling in their minds as an unpunished attack, which took them by surprise.

Universal is the condemnation bestowed on Mr. LAWRENCE. Two opinions respecting his conduct cannot be found. It is certain he can never again hope to regain his position. He has begun and ended his professional career by two bad and bold mistakes. We say, ended, for it may, with more truth, be said of him, that he is morally and professionally defunct, than it could be said that there was an end of the apothecaries. His bitter revilings of the general practitioner, his cowardice in attacking the profession on an occasion properly sacred to the amenities of science, and the bad taste of doing this when a number of eminent lay persons were assembled, each and all have sunk deeply into the professional mind, and will never be forgotten. The conduct of the audience in abstaining from retaliation shows that all who went there were well disposed. Not one went away but felt himself and the profession scandalized or insulted.

HOSPITAL REPORTS.

UNIVERSITY COLLEGE HOSPITAL.

ON PERICARDITIS.—By JOHN TAYLOR, M.D., Professor of Clinical Medicine in University College, and Physician to University College Hospital, London.

CASE 26.—*An elderly female, attacked with bilious vomiting and hæmatemesis, followed by melæna and discharge of red blood per anum; pain in left side; little cough; no dyspnoea; coma; dilated pupils; heart's impulse increased; dulness over lower part of left lung, with absence of respiratory sound; death.*—*Post-mortem examination:* Eight ounces of pus in left pleura and old adhesions superiorly; engorgement and œdema of both lungs; pneumonia in left? old and recent adhesions of pericardium; cirrhosis (?) of liver; stomach healthy; ulceration of ascending colon; granular disease of one kidney; brain healthy.—*Remarks:* Pericarditis latent; causes of absence of friction-sound; hypertrophy of the left ventricle simulated by pleuritic effusion; grounds of diagnosis; pleurisy latent; signs of effusion into the pleura; pneumonia? cirrhosis of the liver; its form peculiar; sequelæ; hæmatemesis, but no ascites; the reason suggested; Bright's disease of one kidney only; sequelæ; pleuritis and pericarditis; coma? another cause of the coma; absence of anasarca and of hypertrophy of the heart in renal disease; ulceration of colon; its causes and symptoms; causes of the renal and hepatic disease, and of the pericarditis and pleuritis.

D. H.—, aged fifty-six, admitted March 6th, 1840; a widow; monthly nurse; of regular habits. She could give no account of herself on admission. The following particulars were obtained from other sources:—A fortnight ago, whilst employed in washing, she was suddenly attacked with violent retching, and vomited large quantities of bilious matter; she had also great pain in the left side. A surgeon saw her, and ordered leeches and a blister to the side, and gave her some purgative medicines. A day or two afterwards she vomited some clotted blood, on account of which she was bled from the arm. Blood afterwards passed from the rectum, mixed with the evacuations, and likewise alone, in a fluid state, and of a red colour. The bowels were at first constipated, but afterwards there were frequent, loose, very dark, and exceedingly offensive motions; was very thirsty, but did not refuse her food. When brought to the hospital, she was lying on her back in a semi-comatose condition, and returned only monosyllabic and irrelevant answers to questions put to her; the pupils were rather large, but contractile; pressure on the abdomen appeared to give pain; the knees were drawn up towards the abdomen; tongue covered with a white moist fur; stools dark-coloured and fetid; pulse quick and sharp; urine high-coloured and sedimentary; little or no cough; no apparent embarrassment of the respiration; dull sound on percussion over the lower half of the left side of the chest; respiratory murmur distinct in the upper part of the left lung, but inaudible below; slight

crepitation below the axilla, and about the middle of the back of the left lung; heart's sounds natural; impulse too strong and too extended. Ordered venesection to ten ounces; mercury with chalk, four grains; Dover's powder, three grains; and antimonial powder, one grain; to be taken every six hours. Also, tartrate of potash, half a drachm; carbonate of soda, ten grains; nitrate of potash, three grains; water, an ounce; in a draught three times a day. A blister to the left side.

8th.—Increased torpor; she is unable to answer questions; pupils widely dilated; urine passed involuntarily; bowels not open; pulse small and feeble. Died at twelve o'clock.

Inspection of the body twenty-seven hours after death.—A considerable quantity of a dark semi-fluid substance, containing blood, had escaped from the intestines after death.—*Chest:* Upper half of the left pleura adherent; lower half filled with greenish-yellow pus of the consistence of very thick cream, being, in fact, only semi-fluid. There were about eight ounces. A layer of recent lymph covered the surface of the pleura, in contact with the pus, and beneath the lymph the serous membrane was exceedingly vascular. In the fissure between the lobes of the lung, the pleura was smeared over with blood. The upper lobe of the left lung was of a very dark red colour, dense, scarcely crepitating at all; contained much spumous serum, and broke down readily on pressure: a portion cut off sank slowly to the bottom of a vessel of water. Lower lobe dark-coloured and dense, but containing less serum. No adhesions of the right pleura. The whole of the right lung was in the same condition as the upper lobe of the left, but was affected in a less degree, and the lower lobe was less affected than the upper. Portions of this were not put into water. Weight of left lung, twelve ounces and a quarter, avoirdupois; right lung, twelve ounces and three-quarters.—*Heart:* Pericardium adherent almost everywhere; anteriorly, by old false membranes, and behind, by rather soft coagulable lymph. This portion was extremely red, and had an almost hæmorrhagic appearance; it was in contact with the inflamed left pleura.—*Left ventricle:* Walls not too thick; muscular substance flabby and rather pale; cavity not too large; endocardium transparent to near the aortic valves, which also were scarcely, if at all, thickened; a few small yellow spots in the commencement of the ascending aorta; mitral valve healthy; orifice admits two fingers.—*Right ventricle:* Walls rather thin; cavity of the ordinary size; endocardium and valves healthy; both auricles healthy; foramen ovale closed.—*Blood:* No coagula except in the right auricle, and but little there; weight, nine ounces, avoirdupois.—*Liver:* Its bulk much diminished; peritoneal coat thickened; external surface paler than usual, and covered with elevations, which in form were small sections of a sphere, most of them about half an inch in diameter, some smaller, others larger, and separated from each other by shallow sulci only. On cutting into the organ, the cut surface appeared divided into portions corresponding in size and form with the external elevations, and separated from each other by cellular or fibrous tissue. The colour was uniform, paler than natural, and the substance firmer. Weight, thirty ounces and a half, avoirdupois; no serous effusion into the peritoneum.—*Spleen:* Full sized; weight, six ounces and a half, avoirdupois.—*Kidneys:* Right one rather small; the capsule was readily removed, carrying with it portions of the substance of the kidney; external surface pale, mottled, and exhibited a few granular elevations; interior rather pale, with a few small yellowish spots in it. The left was larger than the right, and had no appearance of granulation. Weight of left, five ounces and a half; right, four ounces and a half.—*Pancreas* not examined.—*Stomach* healthy; all the tunics quite pale; the small intestines were pale externally, but were not laid open; ascending colon dark-coloured externally, and contained a dark-brown slimy-looking substance; the coats of a great part of the ascending colon were much thickened; mucous membrane thick, of a slate-blue colour, and almost covered with small ulcers; the long diameter of the greater number was transverse to the axis of the gut, their edges uneven, and many were exceedingly small; the rest of the colon was healthy. *Rectum* was not examined.—*Head:* Brain rather pale; no subarachnoid serous effusion, nor any in the ventricles; consistence everywhere healthy; basilar artery dilated, and its coats thin; middle cerebral still more so; the coats of all the arteries marked with atheromatous spots. Weight of cerebrum, cerebellum, and medulla oblongata, forty-one ounces, avoirdupois.

SUMMARY OF THE CASE, WITH REMARKS.

Symptoms and diagnosis.—*Heart:* 1. The pericarditis was not suspected during life, although the heart was examined.

There had been pain in the left side in the early part of the illness, which might have been connected either with the pleurisy or the cardiac inflammation. On admission, however, the patient was too torpid to be sensible of pain, even if the other conditions for producing it were present.

2. There was no physical evidence of the disease; the sounds of the heart were healthy. Two causes may be assigned for the absence of friction sound, either or both of which may have led to this result. The recent adhesions which were found may have been formed before the patient was admitted, which was only two days before death; or as the attrition of the serous surfaces must have been confined to the posterior surface of the heart, and also limited in amount, (in consequence of old adhesions anteriorly), the consequent friction sound may have been too feeble to be heard on the fore part of the chest. It is probable that there was no friction sound behind, for the chest was examined carefully for other purposes, and none was heard.

3. The impulse of the heart was too strong, and was felt over too large a space, so as to lead to the belief that there was some hypertrophy of the organ. The heart, however, was found to be rather below than above the natural size. The modification of the impulse had been produced by the pus effused into the left pleura. This had pushed the heart into closer and more extensive contact with the walls of the chest in the mammary region, and the effect of the fluid pressure must have been further increased by the adhesions of the pleura over the upper lobe of the left lung. The character of the impulse in such cases is not to be distinguished from that of actual hypertrophy. Perhaps the increased loudness of the healthy second sound over the commencement of the aorta, which often occurs in hypertrophy, might serve as a ground of diagnosis, especially taken in connexion with the discovery of effusion into the pleura, or of an aneurismal or other tumour, capable of pushing the heart forwards. As might be expected, the heart's sounds in the present case were healthy.

Lungs: The dull sound on percussion, and the absence of respiratory murmurs, over the lower part of the left side, corresponded with the extent of the pus found in the pleura. There had been pain, but it existed no longer; there was scarcely any cough, and no apparent dyspnoea, and the blood drawn from the arm was not buffy. There was engorgement, with consequent oedema of the lungs. There might, in addition, be some pneumonia on the left side, for portions of a simply engorged lung do not usually sink in water. This may have been the source of the crepitation mentioned as heard on the left side only.

Liver:—The aspect of the liver was peculiar.* Dr. Carswell stated that he had never before met with similar appearances. It seems probable from the history of the case, viewed in connexion with the anatomical appearances, that the disease was a variety of cirrhosis. Contrary to the statement in the report of the case, I learnt from a lady who had long known the patient, that she had been accustomed to take spirits freely. We know that hæmatemesis is an occasional result of cirrhosis, and there was nothing but the condition of the liver to which that hæmorrhage could be referred in this case. The mucous membrane of the stomach was healthy and pale. There was, however, no ascites, which is a much more common consequence of the obstruction to the portal circulation, to which the exudation of blood into the stomach, in such cases, is believed to be due. Perhaps the hæmorrhage from the colon so far emptied the intestinal branches of the portal vein as to prevent the occurrence of ascites. The liver, as a whole, was considerably atrophied, for it was hardly two-thirds the average weight of the organ in health. The morbidly dense cellular element seems to have been less abundant than in common cases of cirrhosis, and to have inclosed within each of its meshes, and thereby subjected to compression, masses of lobules rather than one or two lobules only. Hence the difference in the appearance of the surface of the organ in the two cases.

Kidneys.—1. The appearances in the kidneys are not minutely described, yet sufficiently so to prove, I think, that the right one, at least, was affected with Bright's disease. The urine, unfortunately, was not tested.

2. This view is further in complete harmony with the history of the case; for (a) the patient had been exposed to a common cause of the disease, intemperance; (b) it explains the occurrence of the thoracic inflammations; (c) it may have been connected with the coma which preceded death. The brain was found to be healthy and pale; there was no in-

ordinate serous effusion. These are the common appearances found after fatal coma from Bright's disease. If the head symptoms, however, were due to the renal disease, it is remarkable that one kidney should have been found healthy, as far as we can judge from the description. There is another cause which may have produced the coma, or which may have co-operated with the renal disease in producing it,—viz., the exhaustion consequent on repeated losses of blood, especially by the bowels.

3. In case twenty-four, I had occasion to make some remarks on the relation between hypertrophy of the heart, anasarca, and Bright's disease, and in connexion with those remarks I may notice, the absence of both the complications referred to in the present case. The absence of dropsy is sufficiently explained by the want of any marked dyspnoea, and by the considerable diminution of the total mass of circulating fluid.

Intestines.—1. The blood passed per anum in the form of pitch-coloured evacuations, may have been poured out either in the stomach or colon. It is probable that the colon was the source of it, because the same kind of matter was found in that part of the bowel; and, judging by the external aspect, was not present in the small intestine.

2. The only other symptom of the extensive disease in the colon was, a degree of tenderness of the abdomen, and the position of the patient on her back with the knees drawn up. I ascertained that the woman's bowels were habitually constipated.

3. The appearances in the colon are those of dysentery—but, perhaps, owing to the necessarily imperfect history, no more of the common symptoms of dysentery are mentioned. For the same reason, perhaps, there is no mention of any of the ordinary causes of dysentery. Was the inflammation of the colon another of the consequences of the renal disease?

4. If the report be correct that pure red blood was also discharged per anum, it must have come from the rectum—perhaps from hæmorrhoids. The rectum, however, was not examined.

Causes.—1. The renal and hepatic disease might both be caused by the patient's habit of spirit drinking.

2. The pleuritis may have been of older date than the pericarditis—if so, the inflammation in the pleura may have extended to the pericardium through the contiguity of the tissues.

3. It is, however, equally likely, that these two inflammations arose at or about the same time and from the same cause, viz., impurity of the blood itself, induced by the imperfect action of the kidney or liver, or both. The same cause as has been stated, may have been wholly or partially concerned in producing the coma, dilated pupils, and involuntary evacuations. We might have expected, that as one kidney appeared to be healthy, it would have been sufficient to eliminate the injurious matters which must have been retained in the blood. But with so imperfect a description of the appearances before us—with manifest granular disease in the other kidney—and in the absence of a microscopic examination of its structure, it would be a hasty conclusion to affirm that even one kidney was healthy.

WESTMINSTER HOSPITAL.

CASE OF DELIRIUM TREMENS FROM OPIUM EATING—IMPROVED GENERAL HEALTH, BUT TERMINATING IN DEMENTIA, WITH CLINICAL REMARKS BY DR. BASHAM.

T. F—, aged 42, a clerk in mercantile employment, was admitted into Burdett ward under Dr. Basham, September 3rd, 1845. Has been habituated to the use of opium during the last seven years, taking from twenty to thirty grains daily. On admission, there was great physical prostration; face flushed; eyes inexpressive, glazed, and suffused; temperature of the scalp not increased, that of the surface of the body and the extremities much below the natural standard; hands and feet cold and damp; tongue very foul, coated with a white slimy fur; pulse scarcely perceptible, very small, easily compressed. The bowels habitually costive; for some time past has seldom had more than one evacuation in the week. The stomach was very irritable; no desire for food; there was deafness of thirteen years' duration. The mental perceptions were dull and adumbrated, comprehending faintly the purport of questions, and making wandering and imperfect answers. There was much mental aberration, and muttering delirium during the night, but there was not any distinct hallucination in his wanderings. There was continued insomnolency. Whatever mental emotions or expression exhibited during the day were allied to depression; frequent crying, sobbing, and gushes of tears. Similar attacks to these have previously

* A model of the liver has been placed in the museum of University College.

occurred whenever he has been deprived of his accustomed drug, and these attacks have been always accompanied (as was this before admission) with fearful symptoms of collapse; cold and livid extremities; face becoming of a purple hue, with a temporary prostration of the whole frame, suggestive of immediate dissolution. One grain of opium was ordered every four hours; six ounces of brandy daily; beef tea of double strength, and porter, if he was inclined to take it. An enema to be administered, and to be repeated till free evacuations were obtained.

During the following six days, to Sept. 9th, scarce any very evident alteration occurred in his symptoms. There was continued insomnia, absence of all desire for food, craving for opium, and a mental condition allied to idiocy. The bowels, after the second injection, had acted well; faeces hardened, knotted, and then scybalous; but on the fourth day, a more natural eudict. The balance of the circulation had gradually become restored; the pulse was improved in volume, and the tongue had a cleaner appearance, although still coated with a creamy layer. The above treatment was continued.

11th.—During the two last days considerable improvement had taken place. A few hours rest on the 10th was followed on the 11th by many successive hours of quiet and refreshing sleep. The tongue had become clean; a desire for food had manifested itself; the face was less flushed, and the bowels acted without assistance. The pulse was regular, though small, and the countenance had assumed a less demented expression.

12th.—The appetite had become craving; tongue of a natural aspect; and the manner of the patient, in respect to mental efforts, more vigorous and rational. There was considerable bodily debility. The brandy was reduced to two ounces daily, and to take two grains of the disulphate of quinine, with one grain of opium, every four hours, and to have middle diet.

14th.—Appetite still improving; bodily vigour greater; pulse natural and quiet; countenance more expressive; bowels regular; sleep quiet and refreshing. Ordered full diet, and the brandy to be discontinued.

18th.—The report book stated him to be steadily gaining strength; the organic functions performed naturally; his manner is rational, tractable, and contented; the emotions of the mind are more cheerful, and he is not averse to reading the books the hospital supplies. To omit the opium from the pills.

29th.—During the past week he has continued steadily to improve in health, and has slept well each night; although now taking no narcotic, and no other stimulus than a pint of porter daily, with full diet; yet, notwithstanding this improvement, there has returned upon him an uncontrolled longing for opium, and he has more than once during the last two nights been detected searching the lockers of the other patients in the ward, while they slept, for any pills, which his longing sense would soon unerringly discover to contain opium. Having been detected, his manner became uneasy and restless, and although the appetite continued good, and the organic functions regularly performed, yet a despondent, spiritless state of the mind supervened, and in a low, piteous moan, he would make appeals to those who visited him for opium. Dr. Basham, thinking it prudent to adopt a little deception, with a hope, if possible, of annihilating in time this fatal craving, directed that bread pills should be made, first soaking the bread in an infusion of opium, sufficiently strong to impart the odour, but not the narcotic effect, of the drug. He was directed to take four of these daily, and for the next ten days the desired effect was obtained, evidenced by quietude of manner, and refreshing and undisturbed sleep.

October 10.—The improvement last mentioned continuing uninterrupted, the patient was directed to be discharged; and his wife cautioned to exercise sufficient control over him to prevent a relapse into his former habits. This control over him the wife feared to undertake, and Dr. Basham consented to the patient remaining in the hospital till she could make some family arrangements, by which she hoped the more effectually to manage him.

November 9th.—During the last three weeks occasional attacks of melancholia have occurred. It is probable that a not unfounded dread that his illness may have unfitted him for his former employment may proximately have brought on this despondency of manner and feeling. He sits now in a dreamy, drowsy, spiritless state; not unfrequently giving utterance to childish expressions and wants. His bodily health did not depart from the improvement already established, and he left the hospital on the 13th, with physical health and organic functions restored, but mentally in a condition scarcely removed from the demented idiot.

Remarks.—Dr. Basham directed attention to this case as one of delirium tremens from opium. There could be no doubt, that the ultimate effects of opium, long and habitually used, were identical with those of the abuse of alcoholic stimuli. Both, in their earlier effects, produced mental excitement of a temporary duration, with more or less derangement of the assimilative processes. The elevated passions and excited sensations in each were dependent on an accelerated circulation, and local congestion in the cerebral organs. For a time the balance of the powers of the mental as well as physical functions was only temporarily disturbed; the intervals of abstinence were unmarked by disorder; the elasticity of the functions, as yet unsprung, in each interval had opportunity for restoration, only, however, to be abused in a fresh debauch; till at length the frequency of their recurrence exhausted this power of energetic reaction. More frequent recourse was made to the agent by which alone vivacity of the mind, and a treacherous and deceptive vigour could be maintained, till at last, incapable of resistance, dependent on an artificial stimulus for the energy to perform the commonest duties, and scarcely equal to the feeblest mental effort, the wretched sot, unable any longer to feed the flame by which alone his powers have been maintained, sinks, flickers, flames up with one expiring flash, and dies. Such is the moral picture of the causes and progress of this *self-inflicted* disease.

To explain these conditions pathologically, it is inferred, that agents, while they spuriously elevate and increase the cerebral function, excite also the cerebral circulation;—that an artificial activity in the circulation of an organ, continued for a time, is invariably succeeded by local congestion or retardation of blood in the capillaries of the part;—that continued local congestion in, or augmented determination of blood to a part, or retardation of blood in its capillaries—by whatever expression the condition is indicated, leads either to induration or softening;—that the first of these is the sthenic, the second, the asthenic form of disease; and that for the most part cases of delirium tremens belong to the latter; for generally the post mortem appearances are those of softening of the substance of the brain, with meningeal congestion.

The character of the symptoms during life, the nature of the treatment uniformly adopted, the morbid conditions of the brain presented after death—all stamp the disease as the asthenic. The essential nature of the disease being determined, the general principles upon which the treatment was conducted should be next explained. It would be fatal to the patient to withdraw abruptly and suddenly the stimulus to which he has been so long accustomed. As a general rule, the delirium tremens from alcohol requires opium, while that from opium requires alcohol,—the object being first to change the nature of the stimulus, and then gradually to withdraw it—supporting the system by the agency of quinine and the mineral acids. In the present case, addicted as the patient had been to the use of large quantities of opium daily, and as the collapsed and prostrate condition of the system arose from the deprivation of his wonted narcotic, a continuance of its use in small doses was deemed advisable,—giving him brandy in moderate quantity in the place of a larger amount of opium. Four grains of opium with six ounces of brandy, and a pint of porter daily, was deemed a sufficient supply of stimulants to support his prostrate powers. A larger quantity would have been given if necessary, but during the first seven days, a gradual, though not very vigorous change took place for the better—and on the eighth day sleep of some hours' duration supervened. Sleep once obtained in delirium tremens, the worst phase of the disease is passed; a more rapid improvement soon followed, a better appetite—even craving for food—and the re-establishment of the regular diurnal evacuations, sufficiently testified to the satisfactory progress he had made. These favourable symptoms had been produced by steadily pursuing the plan originally directed: the quantity of opium had not been increased, (one grain every four hours;) each day exhibited a more favourable condition than the preceding; and though sleep was absent, there was continued prospect of improvement—tongue becoming less slimy, face less suffused, temperature of the body more equable and higher. True to the character of delirium tremens from other causes, so soon as sleep occurred, a manifest change for the better was immediately apparent: altered countenance, improved secretions, a craving appetite, and a relish for food that he had not known for years. Quinine, in two-grain doses, was now added to the opium with much advantage. So effective was the quinine in the restoration of the digestive and assimilative powers, that by the fifteenth day from admission, the opium was omitted from his pills, and he continued improving in health with no other stimulant than a pint of por-

ter and a small quantity of brandy per diem. Great progress had thus been made towards complete and permanent recovery, and scarcely any dietetic discipline short of that pursued at a public hospital could have so early effected the satisfactory progress. In private practice the stern severity of such regimen could seldom be so effectually carried out.

The sequel of this case presented a striking example of the fearful consequences of uncontrolled self-indulgence; and if it were possible to hope that example could beneficially warn others from the dreadful results of intemperance, the last stage of this case might be cited most forcibly. In three weeks from his admission, this man was able to walk about the ward, sleeping and eating well, gathering physical strength daily; dull in his manner from his deafness—but rational, placid, and tractable: amusing himself with reading; not unruly—not even captious or wayward. In the following week temptation beset him—and a strange freak possessed him: he stole from his bed at night, and while the other patients slept, searched their lockers for pills. He was detected; he essayed again and again: disappointed, he became fractious, disquieted in his manner, suspicious; at length gloomy, low-spirited, and despondent. Pills with the odour and somewhat of the flavour of opium without their narcotic power, were administered, with a hope that this relapse might be but temporary. But no—his bodily health continued good, but the mental organs, so long fed and excited by artificial food, received no share of the physical vigour which the organic functions derived from the treatment to which they had been subject: those agents which had so successfully nourished and restored the physical man, had no power to reduce the moral man to their influence. Incapable of self-control—unequal to the struggle with an accidental and most unforeseen temptation—the subsequent detection and disappointment were but preludes to that last stage of the drunkard's career, in which, helpless to work for a livelihood—helpless even to feed, clothe, or cleanse himself, he becomes a wretched desponding inmate of an asylum; his condition, terrible in its suggestions of a self-inflicted, self-purchased curse, and startling from the numberless examples that yearly prove the relation of cause and effect between demented lunacy and habitual intoxication.

ROYAL HUMANE SOCIETY.

THE 72nd anniversary dinner of this Institution took place at the Freemasons' Hall, last week. The chair was filled by VISCOUNT INGESTRE, M.P. The numerous company were provided with an excellent entertainment. The gallery was filled with ladies. On the removal of the cloth,

The Noble CHAIRMAN proposed, "Her Majesty the Patroness." The Chairman, having gone through the formal business, said that the Humane Society did not confine its exertions to this country, but extended them to every quarter of the world. Wherever a gallant action was performed, the Society was ready to reward it with its approbation, and thus held out a stimulus to others to imitate such conduct. In the profession to which he belonged, he had frequent opportunities of judging of its value. The admirable instructions issued by it for the recovery of suspended animation, and which in the excitement of the moment might not be otherwise thought of, had been the means of saving numbers of their fellow-creatures from a premature grave. For himself, without such instructions, he would confess that he should scarcely know how to act in a case of drowning, but with them it was easy to act. The Society had existed since the year 1774. During the last year, 126 cases were brought under the notice of the Institution, of which 116 were successfully treated. Fifteen honorary medals were awarded for cases of extraordinary courage. The thanks of the Society, inscribed on vellum, had been presented to five persons; seventeen bronze honorary medals had been awarded, and numerous other claimants had received pecuniary rewards. During the past winter, 186,000 persons trusted their lives on the ice of Hyde Park, St. James's, and the Regent's Parks, and Kensington Gardens. The frost which then prevailed, continued at intervals during the long period of nine weeks. Of this number 127 individuals were immersed; but, thanks to the precautions adopted by this Society, not a single life was lost. The bathers in the Serpentine River last year exceeded 400,000; out of which only one fatal case occurred, although twenty-six persons had to be rescued by the boatmen, and receive medical treatment at the Society's Receiving-house. Eleven individuals were also prevented from committing suicide.

After a speech from the LORD MAYOR, a large number of the persons who had been restored to life through the instrumentality of the Society, passed in procession round the hall.

The CHAIRMAN then presented medals, and the thanks of the Society, to several gentlemen, accompanying each with a few observations, to which the recipients briefly responded. Amongst these, was one received by Mr. T. H. WAKLEY, on behalf of Dr. THOMAS MAXWELL, of Glasgow, presented to that gentleman in token of public admiration for saving the life of a sailor who had fallen into the water of the Crinan Canal, in October last, and an account of whose daring and courageous act appeared a short time since in THE LANCET. Dr. MAXWELL has received the appointment of Assistant Surgeon in the Indian Army, and is now on his voyage to Bengal.

THE "RENEGADE ORATOR."

THE following are passages from some of the numerous letters we have received relative to the conduct of Mr. LAWRENCE in the theatre of the College of Surgeons. The expressions are so strong in many of the letters that not a passage could be extracted from them. Probably at no former period was the profession so indignant and excited as at the present moment. A demand for an independent faculty of medicine is becoming universal.

A correspondent writes:—

"A perusal of the Oration will insure for it universal disgust and condemnation. It was impossible to understand how gentlemen could have remained for two hours to hear themselves abused and insulted for acting independently—not like the orator, deserting a just and righteous cause for self and station."

He then continues:—

"But let me notice the mistakes of this learned orator.

"Misrepresentation the first—'That it was a gross and vile calumny to assert that the Oration was not delivered last year because the council were afraid to meet the members.' I, sir, as flatly assert, and many of the council have confessed it, that they were afraid of a 'demonstration,' and therefore the Oration was not given.

"Misrepresentation the second—'That it is not compulsory for the members of the profession to join the College.' Mr. Lawrence, sir, knew, when he gave utterance to this piece of sophistry, that gentlemen are compelled to join the College, or they are not eligible to public appointments, &c.

"Misrepresentation the third—'That general practitioners have done nothing for science,' witness the Medico-Chirurgical Society's Transactions, &c. One of the last of the three greatest luminaries (according to Lawrence) in Britain—Jenner, was a general practitioner."

He then asks, whether—

"The members of the College will continue to submit to unmerited insult, or whether they will combine and free themselves from the bondage of men, who, by their past misconduct, have shown themselves unworthy of the high post which they occupy."

Another correspondent writes:—

"Saturday the 14th of February will long be remembered by the Members of the College of Surgeons. Under the shadow of the great name of Hunter an atrocious and premeditated stab was made at the reputation and standing of the general practitioners, by the renegade Lawrence."

"The Oration was a wretched failure, characterized by bad temper and worse taste. He travelled out of the record to outrage and insult the whole body of general practitioners."

"The president ought to have interposed, and silenced the slanderer. Some of the most moderate men in the profession were loudest in their hootings, and all cried 'Shame,' with the exception of a few boy fellows. It is to be regretted that some of the spirited men who have endeavoured to rouse the members to throw off the yoke of the monopolists were not present, to have risen and called upon the base and worthless renegade to retract his insults."

Another writes thus:—

"Mr. Lawrence's father was a general practitioner at Cirencester, Gloucestershire, and died only a few years ago. One would have thought that this alone would have made him a little more courteous in his expressions relative to that class from which he himself has sprung. Every general practitioner henceforth ought to refuse meeting Mr. Lawrence; this, I know, would soon bring him to his senses."

In another, we find the following:—

"I cannot but call it an unhappy and degrading exhibition, not only on account of the inherent vulgarity of the thing,—inviting gentlemen with the deliberate purpose of insulting them,—but from its being calculated to lower the profession in the estimation of the illustrious visitors who were present, as well as in that of Europe, who will be ill compensated for the usual topics introduced in the annual Oration, by the scurrilous and vulgar attack upon the Society of Apothecaries, and those members of the Collège who have exerted themselves to reform and raise the profession. Verily, if the Council knowingly, and of aforethought, put Mr. Lawrence forward as their defender, it is only to be accounted for on the old principle, that

Quem vult Deus perdere
Prius dementat

"We have not forgotten, although Mr. Lawrence may have done so, that he once presided at a meeting held at the Freemasons' Tavern, for the purpose of reforming the Collège, and for tearing open the exclusiveness of the Council, in condemning which he could scarce find words strong enough to express his virtuous indignation. We have not forgotten either his humiliating election to the Council by a bare majority of one,—his toadyism and turnings even to obtain this! And yet Mr. Lawrence is the man,—Mr. Lawrence, the maligner of his brother Councillor, Mr. Guthrie,—the spitter of his venom upon all who thwart his vanity,—the convicted of a falsehood at the first public election of Councillors,—whom the Council, in their utter helplessness and destitution of talent, in their imbecility and temerity, thrust forward to insult a profession already degraded by such an one being amongst the Council. Surely it were better that the Oration should have been altogether omitted, than that such an one should be delivered, and by such a man! If the Council come not forward to disown it as a body, they are lost; utterly lost in public opinion; for which, despite their silence, despite the vulgar and coarse effrontery of Mr. Lawrence, they have some regard, as evinced by the show of defence which he made."

MR. LISTON ON LITHOTRITY.

In Sir Philip Crampton's lecture on the merits of lithotripsy, published in THE LANCET of Feb. 14, p. 182, Mr. Liston's opinion of the operation is quoted from his "Elements of Surgery," published in 1832, as opposed to the operation of lithotripsy. The defective state of the apparatus, rendering the operation difficult and extremely dangerous, fully justified Mr. Liston in adopting the unfavourable view with which he regarded the operation. Since that period, the lithotripsy instruments have undergone considerable modification and improvement; and Mr. Liston writes thus in the third edition of the "Practical Surgery," published in 1840:—

"The operation of lithotripsy has been much improved and simplified in all respects; it is applicable now to a great variety of cases, and is likely, in a few years, to supersede in a great measure the operation of cutting for stone. Until very lately, patients applying to surgeons were constantly recommended to submit to the knife, in order to get rid of stone in the bladder, whatever might be the size of the concretion, or the state of the urinary organs. On the other hand, if he fell into the hands of the grinder, no matter what the peculiarities of his case, he was as certain to be subjected to the boring and hammering processes. Now that the merits of both operations are better understood and appreciated,—some few surgeons having thought proper to turn their attention to the matter, and study and understand lithotripsy as well as lithotomy,—patients have a chance of being treated judiciously and conscientiously, and of having that proceeding resorted to which is adapted to the circumstances of their respective cases. I was not slow to adopt the operation of crushing, have always had a favourable impression of it, and have throughout used the same language regarding it; yet I have the credit of being an opponent of lithotripsy. I have all along been, and am certainly still, opposed to the abuse of any one operation, by its indiscriminate employment in all cases, and by its being practised by those alone who know no other. It can be employed safely only by those who understand well the healthy anatomy of the urethra and bladder; who are acquainted with their sympathies, vital actions, and pathological changes; and who both understand, and are in the constant habit of treating, derangements of their functions. The operation of lithotripsy is applicable to patients above the age of puberty, when the symptoms have not endured very long; when the foreign body is ascertained to be about six or

seven lines measurement, or even more perhaps, say as large as a chesnut; when the bladder and urethra are in a tolerably healthy and normal condition,—as indicated by the power to retain the urine comfortably for several hours, and to pass it in a tolerably free stream; and when the viscus admits of injection and a careful exploration. That the stone may be seized readily, and acted upon without danger to the lining membrane, the bladder should contain at least five or six ounces of fluid."

LETTER FROM DR. CORY.

To the Editor of THE LANCET.

SIR,—In your leading article on the subject of "Quackery," in THE LANCET of Feb. 14th, you have introduced the name which I bear, among the delinquent disciples of Empiricism. As there are only two or three of the name practising in this metropolis, I hope you will allow me to state that I have never had any connexion, either directly or indirectly, with any nostrum or patent medicine, and also that I consider the legitimate practitioners of medicine much indebted to you for your able exposition and denunciation of all the varieties of quackery.—I am, Sir, your most obedient servant,

EDWARD AUGUSTUS CORY, M.D.,
Member of the College of Surgeons and
Society of Apothecaries, &c.

Clarke's Terrace, Cannon Street Road, Feb. 1846.

LETTER FROM DR. BASHAM.

To the Editor of THE LANCET.

SIR,—In one of the leading articles of your journal of last Saturday, on quacks and their abettors, you have selected a letter of mine, in favour of the use of Carrara Water, as an illustration of the dietetic quackery of the day. I do not complain of the tone or spirit in which your observations are made; but I claim your attention to the fact, that in last July, before my letter to Mr. Maugham was published, there was admitted into the pages of THE LANCET an article by me on the medicinal uses of the bicarbonate of lime, containing a short statement of the special forms of indigestion, in which this factitious water had proved serviceable: mention was also made of those cases in which it was inadmissible, and probably might prove injurious. The paper contained, also, a short account of the mechanical process of preparing the water, and some difficulties of a chemical nature, inseparable from its preparation from common chalk—such as the presence of alumina, &c. &c.—are mentioned.

This article was intended honestly to direct the attention of the profession to the dietetic and medicinal uses of this new preparation; that my opinion might be tested by general experience, convinced that the same journal which permitted an advocacy of its efficiency would equally receive a denial and counter-statement, if I had overrated the merits of this water.

I cannot think, therefore, that, after your publication of an article explaining the manner of preparation, and the dietetic and medicinal uses of this water, I can be accounted amenable to your condemnation of giving a most unqualified opinion of a patent medicine; or that, after directing the attention of the profession to a new preparation, which I had satisfied myself was serviceable, as an adjunct, in some forms of indigestion, and cautioning against its use in others, I can be entitled to the not very enviable distinction of an abettor of quackery. I trust, therefore, that you will afford publicity to this letter, or to the facts stated therein, that I may be exonerated from the charges, whether of presumption in dictating to the profession, or of having committed the grave error of intruding myself between medical men and their patients.

I have the honour to be, Sir, your obedient servant,

W. R. BASHAM.

Chester-street, Grosvenor-place, Feb. 1846.

* * Dr. Basham is on the wrong tack. Explanation of a paper published before it was generally known that the Carrara Water was to be launched out as a quack medicine, is no defence of a testimonial published constantly since the said preparation has been so advertised. Dr. Basham defends that which is indefensible. He was charged with giving, for public advertisement, a testimonial in favour of a patent medicine, or dietetic nostrum. His letter does not touch this charge at all. It would have been much better if he had written to say that as a patent preparation he should never

prescribe it again, and should forthwith recall his testimonial. He would thus have remedied his own error, and saved us further remarks. What if the Carrara Water have virtues? Is it not indisputably a patent, a quack medicine? We know of no difference between the terms; and would Dr. Basham fasten a moral poison on the profession, for the sake of another palliative of dyspepsia? This is what it really comes to. We respect the Doctor, and regret finding him in a wrong position.—Ed. L.

THE BRISTOL MEDICAL SCHOOL.

To the Editor of THE LANCET.

SIR,—I am directed by the Associated Lecturers of the Bristol Medical School, to request insertion in THE LANCET, of the following remarks, in reply to a letter from Mr. Lansdown, published in the number of that journal for February 7.

Mr. Lansdown states, that having had occasion to prefer a charge against the Bristol Medical School, his complaint was treated with insolence: and after going into a variety of details to substantiate his charge, he appeals to the medical public for a verdict in his favour.

The charge originally brought by Mr. Lansdown against the lecturers was,—to quote the words of his first note addressed to them,—“of the very irregular manner in which the lectures at the School are usually delivered:”—and he subsequently, in the same note, refers to this as “a general charge of complaint,” including unpunctuality in the hour of attendance, as well as omission, or rather postponement of lectures. And all this was mainly based on the testimony of one pupil, whose own attendance was found, on reference to the class registers, to have been extremely irregular.

To this allegation, so supported, the lecturers, believing it to be unwarranted, returned by their secretary, a simple, but not, as they conceive, uncourteous, far less insolent reply,—expressive of surprise that it should have been made, and offering Mr. Lansdown the means of investigating for himself the degree of regularity with which the lectures had been delivered. The result of such an investigation showed, that out of the whole number of lectures which, agreeably to the prospectus, should have been delivered from the commencement of the session to the time of Mr. L.'s complaint, and which would have amounted to about 360, thirty-three had been postponed. Of these, it further appeared, seven belonged to the course of Theory and Practice of Medicine, six to that of Surgery, six to Midwifery, three to General Anatomy, one to Descriptive Anatomy, and ten to Materia Medica. With respect to the last-mentioned course, the lecturer himself has sent you an answer, removing the responsibility from the body of lecturers; and, with that exception, it will be at once evident, that the only noticeable postponements occurred in those courses, the delivery of which is, from the nature of their subjects, preferably entrusted to gentlemen whose extensive engagements in practice, while furnishing presumptive evidence of superior qualification for the chairs they occupy, afford at the same time a sufficiently obvious explanation of their occasional unanticipated and unavoidable absence from their place in the lecture-room. Such an explanation, seeming to the lecturers themselves both obvious and reasonable, must, they thought, have occurred to Mr. Lansdown; and they therefore again declined to admit that the general charge preferred by him rested on just or reasonable grounds. They had reason to believe, that whenever the cause for which a lecture was postponed allowed it to be done, due preparatory notice had been given; and they knew that, with respect at least to six of the seven winter courses, the punctuality of the lecturers was as great as was possible. The readers of THE LANCET, to whom Mr. Lansdown appeals, need not to be informed that the engagements of men actively occupied in the general duties of the profession in provincial towns,—and by such it is that the posts of teachers in the provincial schools must necessarily for the most part be filled,—are absolutely unable to obey, with un-deviating regularity, the fixed appropriation of their time at a certain hour on every day, or on four out of the six days in the week.

By far the greater number of the instances of alleged neglect brought forward by Mr. L., are capable of satisfactory explanation on the grounds alluded to;—one might be shown to have been due to the pupil on whose testimony Mr. L.'s first sweeping charge was made. But the lecturers, not supposing it likely that the tribunal before which Mr. L. has brought them, will enter into the details either of the accusation or

defence, prefer to base their justification upon the general statements already made:—adding only what was stated also to Mr. Lansdown,—that the breaks, which unavoidably occur from time to time in the continuous delivery of a long course of lectures, are never allowed to prevent the completion of the course, in accordance with the regulations of the examining bodies,—and that it is very seldom that any one of the courses remains uncompleted at the time when the respective sessions usually terminate.

I remain, Sir, your obedient servant,
AUGUSTIN PRICHARD, Honorary Secretary.

Bristol Medical School, Feb. 1846.

STATE OF THE MEDICAL PROFESSION IN SCOTLAND.

To the Editor of THE LANCET.

SIR,—I take the liberty of sending you a copy of a certificate, (addressed to the teacher of a neighbouring parish—Kilmalcolm,) as an example of the necessity of some legislative enactment, compelling public bodies to receive medical certificates which are signed by medical men only. The individual whose name is attached has a licence, it is true, but it is from the board of excise, permitting him to retail spirituous liquors. He, however, scorns such limitations, and will sell a half-penny's worth of butter-milk, or a shilling's worth of quinine, will bring a pot of porter, or set an arm with equal complacency. He commenced business here as a dancing-master, but not succeeding, turned, with dancing-master-like agility, to the analogous (!) branches of medicine and surgery. That a portion of the population should entrust their lives to an individual to whom they would not confide their children's education in so important a matter as dancing, is their own affair. But, Mr. Editor, would you believe that an officer of her Majesty's customs was permitted to absent himself from his duties on the ground of a certificate granted by the same individual, of corresponding orthography, and in which, among other symptoms of indisposition, the patient's pulse was stated to be nine hundred and ninety-nine.—I am, Mr. Editor, your obedient servant,

A PROVINCIAL PHYSICIAN IN SCOTLAND.

February, 1846.

13th octob., 45.—to the Gentlemen of Purs rets in Kilmalokam Gentlem this is to certfy that Alex Holm hes ben affected with a sor hand this 2 weets and wil be for a few weets longer “I have Been Drecing his wounnds ones a day Sinc and I Know his Sirckamstans which I hope your Honors wil do the Sam your arly notes to the abuve wil obleg the Nedful.—I am, Gentlemen, yours Trwly.

“To Mr. —, Techer, Kilmalokam.”

MR. BROWN'S CASE OF OVARIAN DROPSY.

To the Editor of THE LANCET.

SIR,—I do not know whether you admit into your journal reviews or critical remarks* upon articles originally appearing in your pages; but if such productions have an exemption from the notices that point out the value or defects of other publications, there is clearly a flaw in our system of journalism that affords impunity to the writers of twaddle and quackery.

I am led to make these remarks by the perusal of a paper, in the last number of THE LANCET, by one “Isaac B. Brown, Esq., Consulting Accoucheur to the Paddington Lying-in Charity.”

The “practice” in this case, as detailed by the “practitioner,” is a specimen of what sometimes occurs in that walk of the profession called “general practice”—a profuse pouring in of drugs of all sorts, without any settled physiological principle of treatment.

When I read the reports of cases in the journals of the day, the blood freezes within me, so horror-struck am I at what the patients suffer at the hands of the doctor; and I am never astonished at finding an account of the *post mortem*, for which, I confess, I often look down to the bottom, in advance, seeing, from the first day or two's treatment, that all is up with the patient. That the patient, in the present case, had a narrow escape, is palpable, and it is equally so that her surviving the treatment is to be attributed entirely to a more than human constitution. But the lady recovered, and the recovery is called a *cure*, and the cure, so called, is ascribed to the treat-

* If our correspondent had been a regular reader of THE LANCET, he would have known that it has never been our practice to exclude such “critical remarks” from our columns.—Ed. L.

ment, though it is evident on the face of the report, that the cure, if such it was, was effected by an accidental occurrence, which the treatment was calculated to prevent, and which was unlooked for and unexpected by the author—namely, the suppurative inflammation of the sac.

Mr. Brown is evidently an indulgent doctor, for it seems that he allows his patients, "at their own requests," notwithstanding "hot skin," "flushed face," "pulse at 120," and so on, whatever they like in the way of beer, brandy, and wine.

It is true, he throws in, at the same time, out of his own shop, for reasons best known to himself, a *mixture* *gathering* of a draught, every four hours, and a rattling purgative at night into the bargain, although the bowels be already distended with flatus, and the abdomen sore from the brisk operation of purgatives and other sorts of doctor's stuff. Oh, this *quarta q.q. hora* system! What in the world do these doctors think that human bowels are made of? The thickest leather breeches that ever a huntsman put on, if made into bowels for the patients of some of these doctors, could not hold out against the batteries of stuff, as killing as grape-shot, which our blue-bottle doctors discharge at their patients.

It is said that medicine owes more for its advancement to the ignorance and boldness of empiricism, than to the inductions of science and philosophy; and certainly, in the practice of "Isaac B. Brown, Esq." there seems not a little to go towards the establishing of that fact.

In the same number of THE LANCET, I have just read an excellent review of the same "Author's" "Work" upon Scarlatina. I have read the "work," an evident get-up to catch patients through the timidity and apprehensions of loving and afflicted parents, for whose reading the lucubrations of the "Consulting Accoucheur" was manifestly designed. Ah! what a cunning Isaac is this "Isaac B. Brown, Esq." I know of no title so prostituted and ill used as that of "esquire." Badly as "doctor" is treated, it is favoured in comparison to "esquire," a title of honour to which every costermonger's son in the country lays claim the moment he passes the pots, and hoists a blue bottle over his door. But to return to our author's contributions to medical literature.

Should our neighbours the French read his "works," what will they say? Why, nothing. They will only shrug their shoulders, and feel that they have no longer any grounds to doubt the veracity of their compatriot, who reported to the French faculty of medicine that red herrings were a specific for the cure of fevers in England. It may be gathered from our author's labours, that "cold roast beef, cut up very fine and soaked in vinegar and mustard, and some iced champagne," is a capital remedy in scarlatina, as from the hour the patient took it, "at her own earnest request," she improved; and I think, sir, you will agree with me in concluding, that the author cheats the roast beef so soaked of its merits as a remedy, in not ascribing the cure to it, instead of to the "*acidum acetum dilutum* of the Pharmacopœia."

I will conclude these random remarks with expressing a hope that your review of his ephemeral catch-penny production on scarlatina will have as wide a circulation in the drawing-rooms of the "west end," as the poison for which it is a befitting and an admirable antidote; and I remain, sir, your constant reader,

Cambridge, Jan. 1846.

M. D.

THE WATER QUACKERY IN THE YEAR 1736.

AS DESCRIBED BY THE CELEBRATED ROUSSEAU.*

HOWEVER, the country air failed to restore to me my original health. I was languid, and became still more so. Being sick of a milk diet, it was necessary to discontinue it. At that time water was the fashionable remedy for all diseases. I put myself on the cold-water system, and with such little discretion, that it nearly relieved me, not only of my ills, but of my life. Every morning, as soon as I was up, I went to the fountain, with a huge goblet, and drank, as I walked about, as much as two bottles full of water. I entirely left off taking wine at my meals. The water which I drank was a little hard, and difficult to pass, as mountain springs generally are. In short, I succeeded so well, that in less than two months I entirely destroyed the powers of my stomach, which had been very good up to that time. Being no longer able to digest anything, I thought it useless any longer to hope for recovery. At this time an accident happened to me, singular in itself, and in its consequences, which will only cease with my life.

One morning, when I was no worse than usual, whilst raising up a little table which had fallen, I perceived a sud-

den and almost inconceivable revolution throughout my whole body. I know not how to compare it better than to a kind of tempest, which, arising in my blood, gained in an instant all my limbs. My arteries commenced beating with such force, that I not only felt their beating, but I even heard it, especially the beating of the carotid. In addition there was a great noise in my ears, and this noise was triple, or rather quadruple—to wit, a deep hollow buzzing, a clear murmur like that of running water, a very shrill blowing sound, and the beating which I have mentioned, the blows of which I could easily count, without feeling my pulse, or touching my body with my hands. This inward noise was so great, that it destroyed that fineness of hearing which I had had formerly, and rendered me, not entirely deaf, but hard of hearing, as I have continued to be ever since that time.

One may judge of my surprise and consternation. I gave myself up for dead, and took to my bed. A physician was sent for, to whom I related my case trembling, supposing it beyond remedy. I think he thought so too; but he knew his business, and began long reasonings, of which I understood nothing at all. He commenced in *animâ vili* the experimental treatment which it pleased him to adopt. It was so troublesome and disgusting, and succeeded so little, that I soon left it off; and at the end of some weeks, finding that I was neither better nor worse, I left my bed, and resumed my ordinary habits of life, with the beating of the arteries, and the buzzing in the ears, which from that time—that is to say, for thirty years—has not ceased for one minute.

I was constantly troubled with this noise. But I suffered no pain, or other inconvenience, except an habitual sleeplessness at night, and always had short breath, not amounting to asthma, but only making itself felt when I wished to run, or to make any active exertion.

POISONING BY PRUSSIC ACID.

To the Editor of THE LANCET.

SIR,—In turning over the pages of a volume of THE LANCET, for 1835-36, (vol. i. p. 175,) I found allusion made to the trial of Freeman, for the murder of Judith Baswell, which took place at Leicester, April 2, 1829. I never saw or heard any account of the trial, or the result; if any of your readers will favour you with a report of it, I shall be greatly obliged. I well remember the occurrence; Judith Baswell was a maid-servant at a druggist's, and was found dead in her bed, with a phial which had contained five drachms of the medicinal hydrocyanic acid by her side, having the cork in it, and wrapped in paper. Freeman was an assistant, or an apprentice, in the same house.—I am, Sir, your obedient servant,

G. C. H.

THE EFFECTS OF LABOUR IN FACTORIES ON YOUNG PERSONS.

AT the suggestion of an intelligent correspondent, we insert the following questions as indicating the information which we should be glad to receive on this subject. Should any of our correspondents take the trouble to supply it, we trust that they will observe the most precise accuracy in their statements, and allow their names to be mentioned in the House of Commons. An objection on this point would, of course, be decisive:—

1. How many hours a day are young persons, between the ages of thirteen and eighteen years, required to work in the factories in your neighbourhood?
2. How many hours are they employed in *actual* labour in the mill?
3. How many hours are they allowed at meals?
4. How much time is occupied in going to and returning from work?
5. What are the effects of the employment produced on the females?
6. What diseases are most prevalent amongst the females between thirteen and eighteen years of age?
7. What effects are produced on the constitution of the boys?
8. Do you observe that children aged thirteen years, who have up to that age worked six or eight hours a day, on being put to twelve hours' work decline in health and strength?
9. Does the heat of mills in which "fine numbers" are spun cause much bodily exhaustion?
10. Which suffer most, boys or girls, when both are work-

* Les Confessions de Jean-Jacques-Rousseau. Part I. Lib. VI. A.D. 1736.

ing during the same number of hours, and at the same kind of work?

12. What is the general state of physical development of children and young persons of both sexes, under eighteen years of age, employed in factories?

13. What is the usual food of such persons?

Information on several of the above subjects, respecting young persons employed in agriculture, would be regarded by us as interesting and valuable.

NEWS OF THE WEEK.

A meeting of the Committee of Associated Surgeons, sitting at the Freemasons' Tavern, Great Queen-street, is, we understand, convened for Wednesday evening next, March 4th, at Seven o'clock. This body deservedly commands the respect of the profession.

Mr. NASMYTH has received the appointment of surgeon-dentist in ordinary to the Queen, in addition to his previous appointment in the same capacity to Prince Albert.

MARQUIS OF NORTHAMPTON'S SOIREE.—The Marquis of Northampton, as President of the Royal Society, gave his first soiree for the season, on Saturday, February 21st. It was numerously attended, and was honoured by the presence of Prince Albert. On the tables were some prints of subjects, etched upon daguerreotype plates; one of them was the portrait of M. Claudet; another, the bust, Principia, and first telescope of Newton. The subjects were faithfully given, and the process promises to be one of great importance to science. There was also a series of tints, arranged in a radiated form, and showing the degree of intensity of the light, from half-past nine till half-past four in the afternoon of Saturday, every five minutes during that period. The variation in the degrees of tint were very curious.

Among other objects of interest distributed through the rooms were some beautiful oak carvings, executed by machinery, and exhibited by Messrs. Taylor, Williams, and Jordan, of the machine carving works, Lambeth. This process has been most usefully employed in the adornment of the interior of the House of Commons. Mr. Sedgwick, of Regent-street, furnished some beautiful specimens of the new process of coating glass with porcelain, the principle to which the Portland Vase owes its celebrity. After the coating is complete, it is cut away, and fashioned into various elegant designs, which have a brilliant effect. One of the specimens was a glass vase, coated with two layers of porcelain, opaque white, and a deep and brilliant blue; the subsequent carving of the porcelain displayed the two colours, and produced an admirable effect.

In a corner of one of the rooms was a working model of a new locomotive engine patented by Mr. Parsey, and at present exhibiting at No. 5, Pall Mall East, the offices of the Compressed Air Engine Company. The principle of the machine is the compression of air into two large globular chambers by means of a small engine; and directing this air, at its escape, to the working of the wheels. As far as we could judge from the model, the invention promises to be one of very great importance, occasioning an enormous saving in fuel, and being wholly free from any danger of explosion.

Mr. Goadby exhibited some of his beautiful preparations, preserved in the well-known fluid discovered by him, and mounted in little glass boxes. His nautilus is an elegant object.

The next soiree is announced for Saturday, March 7th.

Mr. ANTHONY WHITE has resigned his seat at the Board of Examiners of the College of Surgeons, previous, it is said, to his resignation as Surgeon of the Westminster Hospital.

The Royal Medical and Chirurgical Society will hold its Anniversary Meeting, on Monday next, at four p.m. It is a fact that although general practitioners form a large portion of the Fellows of the Society, only one of that body is suggested to be placed on the Council! Will this be tolerated?

The Medical Society will hold its Anniversary Meeting on Monday, the 9th of March, at the Crown and Anchor, Strand, at 5 p.m. Mr. Bishop, F.R.S., will deliver the oration.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted members on Friday, Feb. 20th, 1846.—O. H. Higgs, T. C. Paley, D. Mahony, A. R. R. Preston, R. Appleton, G. F. Burroughs, J. Black, J. S. Mitford, J. M. Sellers, J. C. Day.

ROYAL COLLEGE OF SURGEONS.

Thursday night, Feb. 26th.

THERE was a tolerably full attendance of the Council this evening, the PRESIDENT in the chair.

A warm discussion arose on the subjects of the Oration, and the offensive conduct of Mr. LAWRENCE. A vote of censure on the politico-medical part of the Oration was proposed, seconded, and carried, by a majority of seven to four.

The "propositions" of the Deputation of Associated Surgeons were also considered, but nothing final was settled with respect to them, and the subject is adjourned to the next meeting of the Council.

An opinion generally prevails, that Mr. LAWRENCE must retire from professional life.

CORRESPONDENTS.

Had A Subscriber attached his name to his letter, it should have been printed.

Mr. Richardson.—The communication was not received, and Mr. Wakley does not remember to have seen any letters on the subject. Should the communication arrive, Mr. Richardson's request shall not be forgotten.

Chirurgus, (Liverpool).—There ought to have been an inquest. The constable must have misrepresented the facts of the case to the coroner in the first instance, otherwise he could not have formed the opinion he expressed. A case more clearly demanding an inquest never occurred.

A. M. C. is advised to apply to any qualified physician or surgeon; his disease is curable, and in all probability without difficulty.

G. M. B.—All those publications are the works of impostors; application should be made to a respectable practitioner. In Glasgow there are several gentlemen of eminence and ability.

I. I. C. (Old Kent Road).—There is no such work. The doctor, on an application being made to him for that purpose, would give another prescription, without a moment's hesitation.

H. Arnold.—It is a case for prompt medical treatment. A qualified medical practitioner should be consulted without delay, or an insane state of mind may become established.

Dr. H. Robertson is informed that the original memorial has not been received, either by Mr. Miles or Mr. Berkeley, (members for Bristol.) Both of those gentlemen have expressed their willingness to see Sir James Graham, and present the memorial. (Written before the receipt of the letter on Thursday.)

The case forwarded by Mr. Eccles will be published.

C. M. W.—The Gazette des Hôpitaux.

The communication relative to the "Move" at Portsmouth, and the paper on tetanus, have been received.

The case mentioned by Mr. J. B. Bryant has been received, but it could not be published anonymously, as originally sent. To what "particulars" not yet forwarded does Mr. B. allude?

Communications have been received from—Mr. S. H. Wraith, (Darwen;) Muscle; Mr. C. Wordsworth, (House-surgeon, London Hospital;) Mr. Wilton; Mr. Alexander; Mr. A. Doria; A. M. C.; G. M. B.; H. Arnold; Mr. C. Radclyffe Hall, (Holmes chapel;) Dr. Pritchard; Mr. Crosfield, (Manchester;) Mr. O'Shea; Mr. W. White Cooper, (London;) G. M. B., (Glasgow;) An Union Medical Officer; A General Practitioner proud of his Order; Mr. Robinson, (London;) Medicus, (Bristol;) Dr. Routh, (London;) Mr. C. H. Hallett, (Edinburgh;) A Student, (Bristol;) One who was present at the Oration; An Insulted Member, (?); Mr. C. Stokes, (London;) Dr. Turnbull, (Liverpool;) W. R. G.; Mr. A. Wolff, (Shoreditch;) A Member of the College, (a host of letters with this signature;) Mr. Moorcroft; Dr. Letheby; Mr. Toynbee.

ERRATA.—In Mr. Jones's case, page 229, line 14, for "acting" read action. Line 6, col. 2, for "more application of" read merely applying.

THE

HUNTERIAN ORATION, A. SHORT-HAND REPORT,

(THE ONLY ONE PUBLISHED.)

OCCUPYING SIXTEEN COLUMNS OF THE ENLARGED
JOURNAL, WAS PUBLISHED IN

THE LANCET of Saturday, February 21st,

AND MAY BE OBTAINED OF ALL BOOKSELLERS AND NEWSMEN.

** Sets of the First Eight Numbers of the New Volume for 1846, are still on sale.

LECTURES

ON

PLETHORA AND ANÆMIA,

AND ON

SOME FUNCTIONAL DISORDERS DEPENDENT
UPON THE STATE OF THE BLOOD.

DELIVERED AT THE LIVERPOOL NORTHERN HOSPITAL, SESSION 1845-46.

BY JAMES TURNBULL, M.D.

PHYSICIAN TO THE HOSPITAL.

LECTURE II.

Anæmia from direct loss of blood; reaction; physical signs of anæmia; cardiac and arterial murmurs; diagnosis of organic from anæmic murmurs; vibrating pulsation; continuous murmur of the veins and purring thrill; dependence of arterial and venous murmurs upon the state of the blood; table of 164 cases with venous murmur; comparative frequency in females and males; unfrequent occurrence of venous murmurs in phthisis.

ANÆMIA may be produced by direct loss of blood, or it may occur spontaneously, as in chlorosis. Where small quantities of blood continue to be lost for a considerable time, the functional disorders which result are very similar to those of spontaneous anæmia. When, however, a large quantity of the circulating fluid is at once removed from the system, we have more violent effects produced upon the nervous system, and upon other parts of the economy; but the symptoms still resemble those of the spontaneous form of anæmia, and differ from them chiefly in degree.

Effects of loss of blood.—The nervous system is the part of the economy which suffers most directly from excessive loss of blood, and we have vertigo, followed by loss of consciousness, and fainting, among the first effects. The respiration, at the same time, becomes slow, and apparently suspended, whilst the heart contracts feebly and more rarely, and the surface becomes pale, cool, and damp. Sickness and vomiting may also occur, and restoration takes place with irregular sighing, yawning, and return of consciousness. When the loss has been very great, instead of recovery there may be some delirium and dyspnoea, gasping for breath, tremors, jactitation or convulsions, and death. Dr. Marshall Hall has shown that convulsions may result from states of the brain produced by directly opposite conditions of the vascular system. They may occur directly from hæmorrhage, especially in the puerperal state, and also from large depletions, and they are most apt to come on when venesection is practised in the recumbent position, in which case a large quantity of blood may be drawn without causing syncope, instead of which we may have a sudden attack of convulsion. Delirium is another effect of loss of blood, and it generally occurs in adults and those advanced in life, and, like convulsions, may ultimately be followed by coma or lethargy.

The reaction which follows syncope from moderate loss of blood, consists of a gradual return to a healthy condition of the functions, without increased frequency of the pulse. When, however, the loss of blood has been very great, we have the excessive reaction, which has been described as the more remote effect of loss of blood, a state which has not unfrequently been mistaken for, and treated as, inflammation of the brain, or of some other part. When excessive reaction occurs, there is great excitement of the vascular system, palpitation of the heart, and throbbing of the carotid and temporal arteries. The pulse is quick, from 100 to 140, sharp and jerking, but easily compressed, and there is often epigastric pulsation from throbbing of the aorta. The brain and nervous system are morbidly excited; there are anxiety and trembling; the sleep is agitated; there is intolerance of light and noise, and sometimes delirium and noises in the head. There may also be compressing pain in the temples or some other part of the head; the respiration is frequent, hurried, or panting, and there is a desire for fresh air; there is much thirst, and the skin is frequently hot, but the lower extremities are usually cold.

The functional disorders, which often remain for a considerable period after much blood has been lost, and which are present where small quantities have continued to drain away during some time, are so similar to those of spontaneous anæmia, that we will at present only observe that they consist of palpitation, dyspnoea, pallor and puffiness of the face and cellular tissue, œdema of the ankles, nervousness, giddi-

No. 1175.

ness, amaurosis, delirium, and sometimes mania, atonic indigestion and flatulence, and difficult or scanty menstruation.

Physical signs of anæmia.—In examining with the stethoscope the heart, the arteries, and the veins, we ascertain the existence of certain murmurs, caused by the passage of the attenuated blood through those parts, a knowledge of which is of great importance in enabling us to discover the dependence of some functional disorders upon the state of the blood. Laennec found that a bruit de soufflet could be heard at the heart and in the arteries, not only where there is disease of these organs, but also in many individuals perfectly free from organic affection. He also discovered that the murmur is most common in persons of nervous constitution, in hypochondriacal and hysterical patients, and in those who have suffered from hæmorrhage. The rapidity with which the bruit de soufflet came and went in these cases, as well as its occurrence in persons of nervous temperament, led him to ascribe it to some incomprehensible anomaly of the nervous influence; but the knowledge which has since been acquired of the pathology of the blood, has proved, that where such murmurs are discovered at the heart or in the arteries, the proportion of globules is below the average of health, and that, therefore, there is anæmia. This state is very generally accompanied with nervousness, and, when the individual is at rest, and with the nervous system in no way excited, we are often unable to perceive any cardiac or arterial murmur, and this is because the slow motion of the blood is insufficient to throw it into a state of vibration even though diminished in density; as soon, however, as the motion of the blood is accelerated by sudden mental emotion, or by bodily exertion, the murmur may become audible from the vibration then caused during the passage of the blood through the orifices of the heart and the arterial system. It is believed, too, that diminution of the quantity of blood, as well as of the proportion of globules, contributes to produce this effect in the arteries, from the diminished tension of the unfilled arteries allowing them to vibrate more easily; and from what I have observed, I am disposed to think that this diminished tension of their coats is an important cause of the production of these arterial murmurs. It has appeared to me that they are loudest where the quantity of blood in the system is diminished, and is insufficient to distend the nervous system so as to cause a continuous murmur; for where the quantity of blood seems much lessened, we seldom fail to find an intermittent arterial murmur, though the continuous venous may be absent.

The inorganic or anæmic bellows murmur (endocardial, as it has been called by Dr. Latham) is, in general, of a softer character, as well as less persistent, than the murmurs dependent on organic affection. It is heard only during the first sound, and is most distinct at the base of the heart over the situation of the aortic orifice, which is its usual seat, as it is only through this orifice that the blood seems to be driven with sufficient force and velocity to produce an anæmic murmur. Some have also thought it possible that it might be caused by the passage of the blood through the orifice of the pulmonary artery.

The anæmic murmur of the arteries is a short blowing or whiffing sound, which is heard on pressing gently with the stethoscope on the subclavian or on some of the other large arteries. It is distinguished from the murmurs of the veins by corresponding with the arterial pulsation and being always intermittent. In thin anæmic individuals it may generally be found in several of the large arteries, but it is most easily heard in the subclavian and carotid. Occasionally, it may also be found in the internal mammary and other branches of the subclavian, when we are examining the upper part of the chest; and in very anæmic patients I have discovered it in the arteries at the bend of the arm. When it occurs in the abdominal aorta, it is often accompanied by considerable epigastric pulsation, and the diagnosis of anæmic from aneurismal pulsation and murmur is not always very easy. The four following cases illustrate some of the chief points in reference to the diagnosis. A short time since, two patients with epigastric pulsation came under my care at the same time. In one, a man who was admitted into the Northern Hospital, with defined tumour in the epigastrium, a little to the left of the median line; the murmur was hoarse, loudest in the situation of the tumour, and had an aneurismal character. The patient died suddenly, from extravasation of blood into the abdomen, and aneurism of the coeliac axis was found. Here the diagnosis was made chiefly from the character of the murmur, and from its being confined to the situation of the pulsating tumour: in the other, there was bronchial affection and slight fever, previous to the occurrence of which, however, the epigastric pulsation had

existed. In this case, the murmur could be discovered over a considerable extent of the aorta, as well as in the arteries of the neck, and it was therefore the effect of anæmia. In a third case, one which came under my care at the Northern Hospital, there was a small tumour in the epigastrium, to the right of the median line, like a button, but with surrounding hardness and tenderness. There was strong pulsation in the tumour, and about an inch above it there was a loud intermittent murmur. On examining the veins of the neck, a loud venous murmur was discovered. The subsequent development of small, pin-like tumours in the parietes of the abdomen, along with tenderness, emaciation, and hectic fever, indicated clearly the existence of tubercular peritonitis with anæmia. In a fourth case, along with the murmur, there were strong epigastric pulsation, great nervousness, and irregularity of the pulse. There was no abnormal sound at the heart, but there was a continuous murmur in the veins of the neck. The symptoms were speedily relieved by treatment calculated to remove anæmia. In the two last cases, the dependence of the murmur and pulsation of the aorta upon anæmia was discovered chiefly from the presence of the venous murmur.

Dr. Hope has endeavoured to explain, physically, the production of the murmurs of the heart and arteries in anæmia, by showing that the attenuation and diminution of the blood increase the vibration from friction. He shows that the blood is propelled with greater velocity, from its quantity and its lubricity being diminished; and the tension of the arteries being at the same time lessened, they are more easily thrown into sonorous vibrations; the action of the heart is also more abrupt in these cases, and this also increases the velocity of the blood. The three causes are, then, according to Dr. Hope, 1st, attenuation of the blood; 2nd, unfilled arteries permitting unusual vibration of their walls and a rippling current; 3rd, a certain velocity of the current, occasioned by abrupt contractions of the heart.

Laennec believed that there was spasmodic contraction of the heart and arteries, and the sudden development of cardiac and arterial murmurs, from mental emotion or exertion, seems to favour this opinion. Dr. Williams thinks that the murmur with the first sound, referrible to the aortic orifice, is dependent, in part, on some irregularity or narrowing at the mouth of the aorta; too trifling to give any obstruction or sound when the blood is abundant and of due spissitude, but readily causing vibrations and sonorous gushes when the fluid is thin, and the relations between the size of the heart and arteries are somewhat changed.*

Vibrating pulsation of the arteries.—Along with the murmur in the arteries, we not unfrequently find in those who have become anæmic, either spontaneously, or from direct loss of blood, that the pulse has a peculiar thrilling or jerking character. Dr. Hope found, that when dogs had been repeatedly bled, a murmur became audible at the heart and in the large arteries, that there was also throbbing in the arteries, and that the pulse was increased in frequency, and became violently jerking or thrilling. In chlorosis, too, and the other forms of anæmia, we not unfrequently find the same thrilling or vibrating character of the pulse. In these cases the pulse is generally much more frequent than natural, and the thrilling character may be permanent, but is usually present only under the influence of some bodily or mental excitement, and subsides quickly as the action of the heart becomes quiet. A loud murmur always, I believe, accompanies this thrilling of the arteries. The character of the pulse in these states of anæmia is very similar to what we find it in cases of insufficiency of the aortic valves, and, as we have the bellows murmur very distinct in the arteries in this organic affection, as well as in anæmia, it is not unfair to conclude that the unfilled state of the vascular system present in both, may be one of the causes of this peculiar pulsation. Dr. Hope has therefore thought, that the loudness of the murmur and the strength of the thrill are caused by the blood being shot through the artery with great velocity, whilst the vessel, from its unfilled condition, has greater latitude of motion for its own vibrations and those of the enclosed blood.

In the physical condition of the heart and arteries, and in the excitability of the vascular system, caused by excessive bleeding, we remark a great similarity between spontaneous anæmia and that from loss of blood.

Venous murmurs.—Auscultation of the large veins, more especially those of the neck, furnishes us with another very important sign of diminution of the globules of the blood. The murmur which may thus be heard, is either perfectly continuous, or it is remittent in intensity, and it has been

called the continuous or venous murmur, to distinguish it from the intermittent bellows murmur which has its seat in the arteries. In highly anæmic individuals, the murmur, which is a more or less loud rushing noise, may be heard in the external and internal jugular veins of both sides of the neck. It is, however, generally loudest in the internal jugular vein of the right side, but occasionally loudest, and only on the left. It is best heard by causing the patient to turn the head to the left side, and to raise the chin by throwing the head back, in such a manner as to give a certain degree of tension to the muscles, the integuments, and the coats of the vein; the stethoscope may then be placed upon the sternomastoid muscle just above the sternal end of the clavicle, and the murmur will be heard with an intensity bearing some relation to the degree of anæmia. It was believed that the murmur thus developed had its seat in the arteries, until it was proved by Dr. Ward that it is caused by the passage of the blood through the veins, from the fact that the sound may be stopped in a moment by pressing upon the vein higher up, with the finger, in such a manner as to intercept the current of blood, and may be again restored by removing it, and allowing free course to the current. Though this seems perfectly sufficient to prove that the murmur is produced in the vein, the fact does not seem to be admitted by French writers, who still speak of the venous murmur as the *bruit de diable*, or continuous *bruit de soufflet* of the arteries, to distinguish it from the intermittent or true arterial murmur. The murmur, instead of being perfectly continuous, may present augmentations during which the sound swells and increases; and these swelling augmentations may correspond with the act of inspiration, or with the ventricular systole and arterial pulsation. We can easily account for the increase of the sound, when it occurs during inspiration, from the expansion of the chest drawing the blood towards this cavity, and thus increasing the rapidity of the current in the vein, which is, on the other hand, retarded during expiration. We find, too, that by intercepting the current, by pressing firmly with the stethoscope, and then lessening it, the murmur is, in some cases, for a time increased. The augmentations which correspond with the ventricular systole and arterial diastole, and which closely resemble the blowing of a smith's forge, cannot be quite so clearly accounted for as those connected with respiration. Dr. Hope considered the swelling increase of the sound entirely owing to the superaddition of the arterial whiff to the venous murmur; and he states that it is closely restricted to the course of the artery, whereas the venous murmur sounds wide and diffuse. In a case of disease of the heart, with jugular pulsation, in an anæmic patient, I found a murmur in the right internal jugular vein with two interruptions, which corresponded in time and rhythm with the first and second sounds of the heart. The stoppage of the murmurs by pressing upon the vein above enabled me to recognise their venous character; and by the same diagnostic test we may always make the distinction between an arterial and venous murmur, whether perfectly continuous or of remittent intensity.

Venous thrill or purring.—In some cases where the venous murmur is very loud, we may feel, on placing the finger over the vein, a very distinct continuous thrilling sensation. It occurs only in very anæmic patients: those in whom I have observed it have generally been chlorotic females; and I have always felt the purring sensation just above the sternal end of the clavicle. The continuous character of this tremor, and its position over the internal jugular vein, would lead us to attribute it to the passage of the blood along the vein. Dr. Hope does not, however, seem to have held this opinion, for he says, "I have never been able to feel a thrill in the external or internal jugular, or any other vein; but I have felt it over the arteries yielding venous murmur. It may be a question, therefore, whether the current in veins is strong enough to produce a thrill; and whether, when it exists over veins, it is not referrible to the concomitant arteries."

Musical venous murmurs.—There are other modifications of the venous murmur which have been called musical. In some instances, these murmurs have a whistling character, or they may imitate the humming of an insect. They arise from the same state of the blood as the ordinary continuous murmur, and, like it, they cease when pressure is made so as to stop the current of blood in the vein. An ordinary venous murmur may sometimes be converted into an insect sound, by change of the position of the stethoscope, or of the degree of pressure; and I have thought that this peculiar sound is most apt to occur when the vein is pressed upon so as to be nearly obliterated. The humming sound has appeared to me to occur most frequently when the integuments and coats of the

* Principles of Medicine, p. 125.

veins are loose, and the blood deficient in quantity as well as slow in its motion. And these conditions are present in thin persons and those advanced in life. Dr. Hope seems to have met with musical murmurs more frequently in another class of patients. He observes, "They appear to me to be most common in a class of young females of what is called phlegmatic temperament—that is, with a lax, flabby, muscular system, large bloodvessels, thin arterial coats, proclivity to hæmorrhages, often a rather full habit, and whose blood, even during health, contains less than the average of fibrin and red globules. In such cases as are here described, I have generally found the ordinary venous murmur; and I would rather agree, with Bouilland, that the musical murmurs are most apt to occur in thin individuals. "It appears to me," he observes, "(though there are exceptions,) that women very thin, and in whom the arteries are little developed, present more especially the sifflement modulé, whilst the ronflement de diable, the diffuse blowing, appertains rather to women who enjoy a certain embonpoint.*

Dependence of arterial and venous murmurs on the composition of the blood.—We have now to examine the facts in regard to the state of the blood where arterial and venous murmurs are present, which have been brought to light by analytical research. For what definite knowledge we possess in reference to this part of the subject, we are indebted to the labours of Andral. The opinion entertained by medical men, from observation of the appearance and symptoms of patients presenting arterial and venous murmurs, that such abnormal sounds were the effect of diminution of the solid part of the blood, has been verified by this able pathologist from analysis of the blood in eighty-eight cases, in which there were continuous or intermittent murmurs in the situation of the carotids. From these cases he has shown that they are not caused from diminution of the proportion of fibrin or albumen, but solely from the quantity of globules falling below the average of health; for in those cases in which he has found the fibrin and albumen below the ordinary proportion, he has not been able to discover these murmurs, unless at the same time the globules were diminished in quantity. Of the eighty-eight cases in which he examined the blood, there were fifty-six in which the murmur was continuous, and thirty-two in which it was intermittent. Out of the fifty-six in which the murmur was continuous, or what has been called the bruit de diable, (venous,) there were twenty-eight in which the proportion of globules did not rise above eighty, and descended as low as twenty-one; there were thirteen in which it varied between eighty and one hundred; ten in which it rose from 100 to 115, and five in which it was as high as 115 to 125.

In the thirty-two cases of intermittent murmur, (arterial,) there were only three in which the proportion of globules was below eighty, (76—77—77;) thirteen from eighty to one hundred; eight from 100 to 115; and eight others from 115 to 126. He has found that the following law holds true without a single exception: that these murmurs are heard constantly in the situation of the carotids, when the quantity of globules has descended below eighty; that they are still heard, but no longer constantly, when the proportion is above eighty, and varies between eighty and one hundred; that when above 100 they are heard much more rarely; and that when the quantity of globules is above the mean of health, they are no longer heard in connexion with alteration of the composition of the blood.

These observations of Andral prove, in the clearest manner, that diminution of the quantity of globules is the chief cause of arterial and venous murmurs; at the same time it must be observed that we sometimes meet with well-marked cases of anæmia where we are unable to detect these morbid sounds. These experiments would also seem to show that the continuous murmur is more a sign of advanced anæmia than the intermittent, and this accords with my own observations; for I have always regarded the venous murmur as a more certain sign of anæmia than the arterial, and have generally observed that where the former was present, the latter could also be discovered, unless the venous murmur were so loud as to drown the arterial.

The frequent occurrence of these murmurs in pregnant women is owing to the same state of the blood—viz., the diminution of the globules, which commonly takes place during pregnancy. Although, then, the fact seems clearly established, that diminution of the globules is the chief cause of these murmurs, no satisfactory explanation has yet been given of the cause of the absence of the venous murmur in cases where anæmia is certainly present, or of the effect which may be

exercised upon the production and character of these murmurs by diminution of the globules, in conjunction with vascular fulness, as contrasted with the reverse condition.

In order to examine some of these points more fully, and to show the kind of cases in which we most commonly meet with the venous murmur, I have drawn up the following table from my notes of 164 cases, taken from hospital and dispensary, as well as private practice, in which this murmur was distinctly heard:—

Chlorosis	42
Irregular menstruation	13
Anæmia from miscarriage	7
Anæmia from lactation	6
Simple anæmic general debility	19
Atonic dyspepsia	9
Irritative dyspepsia	2
Gastrodynia	7
Hæmatemesis	4
Loss of blood from piles	1
Dysentery	2
Anæmic head symptoms	6
Paralysis and weakness of inferior extremities	4
Epilepsy	3
Chorea	3
Periodic neuralgia	2
Spinal irritation	2
Spasmodic asthma	1
Chronic bronchitis	9
Phthisis	5
Pleuritic effusion	1
Palpitation of the heart	8
Anæmia from intermittent fever	3
Secondary syphilis	2
Scurvy	2
Tubercular peritonitis	1

164

Number of patients not exceeding 10 years of age			4
From 10 to 20	"	"	56
" 20 " 30	"	"	58
" 30 " 40	"	"	21
" 40 " 50	"	"	18
" 50 " 60	"	"	5
" 60 upwards	"	"	2
Total			164

Females, 130. Males, 34.

This table has been drawn up from well-marked cases selected from a much larger number, in which I have observed the venous murmur, and it shows the sort of cases in which this murmur is commonly met with. They come all under the common head of anæmia, and the separate heads, under which they have been arranged, indicate the most prominent functional derangement, which in some cases might be regarded as the cause of the anæmic state, in others as its effect, while in others again it could not be ascertained whether the anæmia and the functional disorders had a common origin, or stood in the relation of cause and effect. Many of the cases might also have been brought under several of the heads, for there are few well-marked cases of anæmia in which we do not meet with derangement in more than one of the principal functions of the economy. Thus the same case might be regarded by one medical man as a case of chlorosis, by another, as one of dyspepsia, by a third, as palpitation of the heart, and by a fourth, as amenorrhœa; for all these derangements of the system might be present, and might result from one common cause—viz., diminution of the globules of the blood.

In examining this table, the first point which claims our attention is the large proportion of females compared with males. The cases of anæmia in the male sex, with venous murmur, do not, in fact, appear from this table to constitute much more than one-fifth of the total number. This seems to be owing to females being more liable to anæmia, from their blood containing fewer globules than that of men, as well as to the female economy being under the influence of many powerful causes of anæmia which do not exist in the male sex. In addition, it appears to me that the occurrence of the venous murmur is favoured in females by a greater degree of fulness of the venous system, and by greater tension of the integuments from the presence of a larger quantity of cellular and adipose tissue.

We observe that the cases in which there was some uterine

* *Traité Clinique des Maladies du Cœur*, par Bouilland.

derangement formed the most numerous class. There were forty-two of chlorosis, a term which we do not use as perfectly synonymous with anæmia, but to indicate a well marked and clearly defined class of anæmic cases. In chlorosis, we generally find the venous murmur louder, and more perfectly continuous than in any other form of the disease; and this is owing to the proportion of globules being often very low, and it appears to be also in some degree caused by the diminution being associated very frequently with fullness of the vascular system, and tension of the integuments from the cellular and adipose tissues being abundant. Under the head of irregular menstruation are included cases, in some of which menstruation was frequent and profuse, whilst in others it was deficient, or entirely absent. In many of these cases, the anæmia was probably the effect of the irregularity, and not so often the cause of it, as in those of chlorosis. The loss of blood from miscarriage, and from flooding after delivery, as well as prolonged lactation, are very frequent causes of anæmia; and in these cases it is more readily induced from the proportion of globules being naturally lessened by the previous state of pregnancy. In nineteen cases, there was general debility with more or less disorder of several functions, but without any of the symptoms being so prominently marked as to give them a more definite character. Of the four cases of hæmatemesis, there were at least two in which the disease was obviously connected with previous chlorosis, which is a common complication. In twenty-one cases the functions of the nervous system were variously deranged. Anæmic palpitation was noted as the most prominent disorder in only eight cases; but in many others, arranged under the heads of chlorosis, dyspepsia, &c., it was a prominent symptom, though not the most important. In nine cases the bronchial mucous membrane was the weak part, and there was chronic bronchitis. In many cases where the uterine functions were deranged, there was weakness of the mucous membrane of this part, and leucorrhœa; and in some of the dyspeptic cases, the relaxation of the mucous membrane of the stomach was indicated by pyrosis. The occurrence of the venous murmur in phthisis requires to be particularly noticed, as its presence or absence is a matter of importance in reference to the diagnosis of tubercular consumption from chlorosis or other forms of anæmia. Complicated, as not unfrequently happens, with chronic bronchitis, I have sought for the venous murmur in many phthisical patients in different stages of the disease, and the five cases in the table are almost the only instances in which I have succeeded in finding it. I regard, therefore, the presence of a distinct venous murmur as uncommon in phthisis, for in those cases even in which I have observed it, the murmur has not generally been loud and distinct, as in cases of chlorosis or advanced anæmia. Of the five cases in which I have observed it, there were two in which it was distinct and characteristic; there were two others in which it was very slight, (*bruit de mouche*;) and, in the fifth, it was heard only occasionally, and under particular circumstances. This last was the case of a young woman, aged twenty-five, who came under my care, 3rd June, 1844. She was extremely pale, and seemed very anæmic, and had cough, with the physical signs of a tubercular cavity below the right clavicle. She had hectic fever, much thirst, hot skin, pulse 120, night perspirations, and the tongue red at the tip. There was then no venous murmur. The patient was put under a sedative plan of treatment, followed up by tonics, and on the 15th July the severity of the symptoms was very much lessened. There was scarcely any cough, no râles, but still cavernous respiration, and voice below right clavicle, with dulness on percussion. Posteriorly there was bronchophony and some rubbing sound. The pulse was now only 96; she had no night perspirations, and had improved in appearance and in strength from change of air and the use of the medicines. There was slight venous murmur. On the 29th July the pulse was 100, and there was no venous murmur. She recovered flesh and strength during the autumn; the respiratory murmur became natural where it had been cavernous, and her cough nearly left her until Christmas, when there was a renewal of the former symptoms, and in April she came again to me in a worse condition than when I had first seen her, and with a cavity in the same spot where I had first discovered one.

Before we discuss the cause of the absence of the venous murmur in most cases of phthisis, and its occasional presence in others, let us examine what is known of the composition of the blood in phthisis. Andral examined the blood in thirty cases of phthisis, in some of which the tubercles were crude; in others, in a state of softening; while, in a third set, cavities existed in the lungs. He found, in reference to the globules,

that the quantity did not reach the healthy average, even in those cases in which it was just possible to detect the presence of tubercles by means of auscultation. The quantity of globules in this early stage varied generally between 120 and 100, being, however, in most cases, nearer the latter than the former number. In proportion as the disease advanced, he found that they diminished still further, but without falling as low as in chlorosis. In the advanced stage, the quantity varied between 80 and 100, being in only one instance below eighty: in this the quantity was seventy-two, and it was the only case of the thirty in which he examined the blood, where he found a "*bruit de soufflet* in the carotid arteries." Becquerel and Rodier also analyzed the blood in nine phthisical cases, and their observations confirm those of Andral, as to the progressive diminution of the globules, and the increase of the fibrin, in most cases, during suppuration and evacuation of the tubercles. In some cases, however, they found in the early stage the normal proportion of globules.

It would appear, from these observations, that in tubercular consumption there is very generally diminution of the quantity of globules, and, though this is not so great as in confirmed chlorosis, and in many cases of anæmia, it is yet so considerable that we should have expected to have found venous and arterial murmurs very frequently, since we have seen that, though not constantly present where the globules are above eighty, they are still often met with when the quantity is between this and 100, and are even present where it is considerably above the latter point. We must therefore look for some further cause to account for its absence, and it appears to me that this may in part be found in the fact, that in phthisis there is a state of anæmia, not only from the proportion of globules to the other constituents being lessened, but also from a diminution of the total quantity of blood in the system, caused by the excessive evacuations, by perspiration, diarrhœa, and diminished assimilation. It has been observed that a certain degree of fullness of the venous system, with firmness of the integuments, is favourable to the production of the venous murmur. Now, in phthisis, the reverse condition of both is present, and hence, I think, we may in part account for the absence of this murmur. The case which has been detailed seems to bear me out in this view of the matter; for when the patient was first seen, the total quantity of blood in the system, as well as the proportion of globules, must have been much below the standard of health from the progress the disease had made, and from the presence of the night perspirations; when, however, they were stopped, and she began to get better, it is probable that the total quantity of blood in the vascular system, as well as the firmness of the tissues, increased more rapidly than the proportion of globules, and that thus a venous murmur was developed for a time. The diminution of the total quantity of blood in the system will not, however, account for the rare, though not quite so unfrequent, occurrence of the arterial murmur in phthisis, and it would seem, therefore, that further investigation is required in order to elucidate the subject fully. In the meantime, it is a matter of practical value for us to know, that arterial but especially venous murmurs are of rare occurrence in tubercular consumption, whilst, on the other hand, one or both are seldom absent in chronic bronchitis complicated with chlorosis, or the other forms of anæmia.

In the cases of secondary syphilis and scurvy, the venous murmur owed its presence to the co-existence of anæmia.

The preceding facts and observations in regard to the production of inorganic murmurs at the heart and in the arteries lead us to the following conclusions:—

1. That diminution of the globules below the healthy average is the chief cause of these cardiac, arterial, and venous murmurs.
2. That the production of cardiac and arterial murmurs is favoured by the smart and abrupt contractions of the heart, which are produced by nervous excitement, to which anæmic patients are exceedingly liable.
3. That the production of arterial murmurs is, in most cases, favoured by diminution of the total quantity of blood in the vascular system, which renders the coats of the arteries less tense, and thus allows them, with the contained blood, to vibrate more easily than in their naturally tense condition.
4. That the veins being naturally much more flaccid than the arteries, the production of continuous venous murmurs is favoured by a full and tense condition of the veins; by the state of false plethora frequently observed in chlorosis, which consists of fullness of the venous system, and considerable abundance of the adipose and cellular tissues.

ON VALERIANIC ACID,
AND A
NEW SUBSTANCE PRODUCED FROM CASEINE,
AND ON
VINOUS FERMENTATION.

By BARON LIEBIG,
PROFESSOR OF CHEMISTRY, GIESSEN.

Mix thoroughly pressed cheese, prepared from fresh or curdled milk, and freed as much as possible from adherent particles of butter, with an equal weight of hydrate of potass (or highly concentrated hot solution of potass); melt the mixture by the application of heat, and keep it in this state of fluidity until hydrogen gas begins to be evolved, and also ammonia; dissolve the mass now in hot water, super-saturate the solution slightly with acetic acid, filter, and allow the filtrate to cool, when a mass of very fine needles will separate. This mass is very difficultly soluble in cold water, and absolutely insoluble in alcohol and ether; by repeated solution in water slightly mixed with carbonate of potass, and subsequent re-precipitation with acetic acid, the substance of which this mass consists is obtained in crystalline needles of a pure white colour and silky lustre.

The composition of this substance is expressed by the formula $C_6H_9NO_3$; the analyses, however, from which this formula results, require confirmation. This substance, although readily soluble in alkalies, combines with acids; the mother liquor from which it is crystallized yields subsequently, upon further evaporation, a copious amount of LEUCINE.

If the melted mass is super-saturated with tartaric acid instead of acetic acid, and the fluid is subsequently subjected to distillation, a distillate of an acid re-action is obtained; upon saturating this with water of barytes, evaporating the mixture to dryness, and distilling the dry barytes salt in conjunction with phosphoric acid, a colourless, oily acid, and an aqueous acid fluid, possessing the odour, and all the properties of valerianic acid, are produced. Leucine, when fused with hydrated potass, yields ammonia and hydrogen gas, and the residue contains valerianate of potass. The formation of valerianic acid, upon melting caseine with potass, seems, accordingly, to be preceded by that of leucine. Except one equivalent of hydrogen, the formula of leucine expresses the composition of an ether, which consists of one atom of cyanic acid, one atom of oxide of amyle, and two atoms of water. The transmission of the vapour of hydrated cyanic acid through anhydrous fousel oil, causes the formation of a solid crystalline substance, soluble in water and ether; this substance crystallizes readily from aqueous and ethereal solutions, and bears in its external appearance the very closest resemblance to leucine; its solubility in ether, however, distinguishes it from the latter substance.

Long protracted melting of the mixture of caseine with hydrated potass causes the formation of a copious amount of butyric acid by the side of valerianic acid. The salt of silver prepared with the oily valerianic acid produced from caseine, left, upon combustion, 51.62 of silver; this removes all doubt regarding the identity of this oily acid with the common valerianic acid. The crude distillate contained, besides valerianic acid, a volatile substance exhaling the odour of human excrements; this substance reduced nitrate of silver to the metallic state, but it contained no formic acid; the alkaline solution yielded a copious crystallization of oxalate of potass, previously to the super-saturation with tartaric acid.

M. Mulder states, that while acting with potass upon albumine, he obtained two greasy, syrupy substances, which he denominates protide, and erythroprotide. I did not observe the formation of any such substances by the action of potass upon caseine, nor do I believe that either M. Mulder himself or any other chemist will ever produce them again of the same composition which he assigns to them. These substances are simply a mixture of intermediate products, the composition of which alters according to the different state of the temperature, the duration of the action of the alkali upon the albumine or caseine, the concentration of the alkaline solution, &c.

ON VINOUS FERMENTATION.

At page 45 of Vol. xxxvi., No. 1, of Erdmann and Marchand's *Journal of Practical Chemistry*, there occur the following remarks on Subfermentation of Wine, by Dr. Schubert, of Würzburg:—

"Babo communicated to the assembly of German vine and fruit growers at Treves, (1843,) that since 1841 he had applied the subfermentation method to red wines, with excellent success; and that he thought the same method might be applied, with equal success, to white wines.

"I resolved to test Babo's conclusion by experiment; for although in practical matters of this description experiments on a large scale are unquestionably preferable to minute chemical ones, yet the omission of comparative experiments is a defect which cannot but impair the force of Babo's conclusions.

"I left a portion of white grape-must of 1844, to ferment in an open and shallow glass,* at a temperature little exceeding 46 degrees, (in the month of November;) an equal portion of the same must was left to ferment in a narrow-necked flask; but in all other respects in the same manner, and under the same circumstances, as the first portion.

"The deoxidizing action which the vegetable albumen exercises upon the other constituents of the wine, when the access of air is limited, was most strikingly apparent from the simple comparison of the colour of the two samples. The ruddy-brown colour of the must in the narrow-necked vessel had turned to an exceedingly pale yellow, whilst the must in the shallow basin exhibited the colour of beer, and did not bear the remotest resemblance to wine; moreover, the fluid in the shallow glass had deposited 1.10 per cent. of yeast; while that in the narrow-necked flask had deposited only 1.05 per cent. After the termination of the process, I filtered the wine fermented in the open and shallow glass; and upon tasting it, I found it so absolutely insipid and deficient in alcoholic flavour, that I thought distillation altogether useless. This insipidity surprised me the less, as I found that the fluid in the shallow and open vessel had lost 30 per cent. of its volume by evaporation; whilst that in the narrow-necked flask had lost only two per cent., although the fermentation in the former lasted only eighteen days, whilst the process in the latter occupied fifty days.

"In the month of December, I made a similar experiment with must prepared from black grapes. Although the product was in this instance superior to that obtained from the white grape must, yet the red wine produced by subfermentation became turbid in the month of May, and is now becoming acid.

"A wine-grower who lives in the vicinity of this town told me, that he made a similar experiment many years ago, and that the result was so decidedly bad as to deter him from making a second attempt.

"In my first experiment, moreover, the wine fermented in the open vessel, so far from having excreted the whole of its nitrogenous matter, deposited afterwards in a close vessel a considerable quantity of this matter in the course of a few weeks.

"It would be very desirable in future, that the results of experiments made on a large scale should be tested by comparative experiments on a small scale."

To these remarks of Dr. Schubert, I must add the following article, which appeared in the *Bavarian Messenger*, of Munich, of the 30th of November:—"Actual experiments soon proved that Liebig too often allows his skill and ingenuity in syllogizing to overstep all decent boundaries, and that he permits his chemical imagination to soar too boldly beyond the confines of chemical experience. Thus, he asserted, for instance, 'Beer is no aliment;' and this assertion was at once disproved by science, and refuted by the every-day experience of life in our own country. After this appeared another theoretical thesis of his, regarding the preparation of the second and more noble of our national drinks, wine—a thesis tending to level at one blow the practice of a millenium, and, withal, of such exceeding ingenuity and probability, that it seemed almost irrefutable. A valiant champion, however, arose and beat Liebig also out of this field, with the irresistible weapon of experience. The fact that the *objectum litis* is a home-grown and home-made product of our own country, and more still, the circumstance of the conqueror being a Bavarian citizen, induce us to mention this subject in our paper. The following are the circumstances of the case:—Liebig asserted that wine, if left to ferment in the same manner as beerwort, is in Bavaria—viz., in wide and open vessels, and at a temperature not exceeding from 46.4 to 50°, instead of being fermented in the old manner—viz., at a higher temperature, and removed from the access of air,—will acquire in the shortest possible space of time the same maturity and quality which

* The depth of the fluid bore the proportion of 5:7 to the diameter of the surface.

it takes now several years to attain. Mr. Oppmann, Royal Cellar-master at Würzburg, has tested Liebig's theory by the most conclusive experiments, supervised and attested by the most competent authorities in this branch of industry. Mr. Oppmann treated portions of the same must respectively, according to the prescriptions of the old, and of Liebig's new method, and the result of his experiments has proved that Liebig's hypothesis is totally untenable, and that the old method is vastly superior to the new method proposed by this chemist; nay, the wine produced, according to Liebig's instructions, could not bear even the remotest comparison in strength, sugar, and flavour, with that prepared according to the old method. In communicating this to our readers, we cannot help expressing our pleasure and satisfaction at seeing a chemical fable, which, upon the *jurare in verba magistri* principle, was for a moment believed through the whole of Germany, refuted by one of our own countrymen in a manner so able and competent, and so far exceeding the scientific requirements of his station, as Mr. Oppmann has done, more particularly in the last number of Dingler's *Polytechnic Journal*."

I think that the interests of the wine-growers demand that I should offer a few remarks upon these strictures of Dr. Schubert, and of the *Bavarian Messenger*. No one will attempt to deny the very great improvements which have taken place in our own time in the fabrication of wine; very fine wines are produced now in parts which formerly sent only inferior sorts to the market; and extraordinary progress has been made in the choice of the various sorts of grapes respectively adapted for the particular climate of different places; and great improvements have been made also with regard to the cultivation of the vine, and the gathering and selection of the grapes; but with these improvements the vintner has hitherto rested perfectly satisfied. The must gained at so great an expenditure of capital and labour is simply poured into a tub, barrel, or pipe, and abandoned to fate, just as our ancestors did from time immemorial. Whilst all the other conditions upon which the production of a good wine depends are most carefully weighed and considered, the chemical process, by which the product thus improved by cultivation is actually transformed into wine, has been left in its originally imperfect state, although every one admits that the mode and manner of fermentation exercises the greatest influence upon the strength and quality of wine in general. I have called the attention of wine-growers to this defect, and have pointed out to them that the process of fermentation pursued at present is capable of great amelioration. I have endeavoured to induce the producer of wine to apply the sub-fermentation method, which yields such excellent results in the production of beer, to the fabrication of wine. In deciding a question of such vast importance, and which tends to produce a very material increase in the wealth and capital of many countries, it is a matter of perfect indifference whether certain experiments attempted by Mr. Cellar-master Oppmann, or Dr. Schubert, of Würzburg, have proved successful or not; the only point we have to look to is, whether the principle of the sub-fermentation method is correctly comprehended and determined. When this has been done, and when the wine-growers have taken lessons of the beer-brewer, and have clearly and correctly ascertained all the conditions required to produce beer of a superior quality, by the sub-fermentation method—then, but not till then, successful experiments can be expected to be made with wine-must. We must ascertain, first, in how far these conditions, access of air, temperature, size of the vessels, &c., are applicable to wine-must, and what modifications they will require, before we can proceed to form a safe and correct method of sub-fermentation as applied to must. Experiments made so slovenly and with such total want of knowledge as those of Mr. Oppmann and Dr. Schubert, ought not to discourage the more intelligent class of vintners; they ought to persevere in their endeavours to improve the process of fermentation.

Is it not quite absurd in Dr. Schubert to state that the wine which he left to ferment in an open vessel lost thirty per cent. (near one-third of its volume) by evaporation? As if the principle of the sub-fermentation method comprehended evaporation among its essential conditions! Had Dr. Schubert left the very best and oldest wine to evaporate in the air to the extent of one-third of its volume, surely the residue would have been no longer wine, but a stale and nauseous fluid. Leaving altogether out of the question here whether an aqueous and alcoholic fluid, of the strength of our ordinary wines, could possibly lose thirty per cent. of its volume by eighteen days' evaporation in the air, at a temperature of 46.4, unless a pair of bellows be put to work to aid the pro-

cess, I beg to ask Dr. Schubert why he did not use the very simple precaution of covering his fermenting vessel* with a piece of paper, which, whilst fully permitting the free exchange of the air and carbonic acid, would have prevented the profuse evaporation? Dr. Schubert's experiments prove one thing at all events—viz., that must, fermented at 46.4, does not turn acid, notwithstanding the very worst treatment. Had Dr. Schubert's must turned acid, how gladly would this gentleman have availed himself of this additional charge against the sub-fermentation method! *But his must did not turn acid.* Now this is a point of the very highest importance, and calculated to inspire vintners desirous of trying the application of the principle of this method with confidence, since the acidification of the must is the only event that could be apprehended in the case of very weak wines. I should like to know what results and conclusions Dr. Schubert would have arrived at had he tried his comparative experiment on the respective merits of the sub and super-fermentation methods with a quart of beer-wort, taken from one of the Würzburg breweries. I entertain hardly any doubt but that the results of his experiments, if made in the same manner as those which he made with the must, would have led him to pronounce the centenarian practice of the Bavarian brewers a downright absurdity, since, instead of beer, he would have obtained a stale residue, of disagreeable taste, and exceedingly deficient in alcohol.

About nine years ago, many hundred casks of beer, brewed after the Bavarian method at Giessen, and in many other places of the Grand Duchy of Hesse, turned acid, because our brewers were at that time not thoroughly versed in every detail of that method. However, none of them thought for a moment to impugn the Bavarian method, and to ascribe his failure, and consequent loss of money, to defects inherent in the principles of that method.

The writer in the *Bavarian Messenger* labours under a very great mistake if he supposes that it requires judgment, intelligence, and sagacity, to make experiments which fail; such failures as that of Mr. Oppmann prove the very reverse. It is rather strange that the said writer should consider it a matter of most triumphal congratulation, that Mr. Oppmann is really incapable of making experiments according to the rules of sound and scientific investigation; and Mr. Oppmann's Bavarian fellow-citizens have indeed no great cause to be particularly proud of their illustrious disprover of my *chemical fallacies*, although "competent authorities" may vouch for the perfect conclusiveness of his experiments and their results. All this is extremely pitiable, and affords a sad indication of the standing which these "competent authorities" occupy in science.

What we have principally to consider for the present, is to ascertain the conditions which the principle of the sub-fermentation method requires and demands; but not to make experiments at random. Everybody knows how a shoe is made by the shoemaker, and a coat by the tailor, and yet methinks that neither Dr. Schubert nor Mr. Oppmann could manage to make a pair of common slippers or an under vest.

How could these gentlemen expect successful results from their experiments, neither of them possessing the requirements indispensable to attain the end in view, at least their requirements and conditions are as yet not ascertained! What their experiments prove most strikingly is, not the fallacy or incorrectness of the principle, but simply this—that the manner in which they conducted their experiments is not correct, and that a very different way from theirs ought to be pursued. Even this is, of course, a gain for others desirous of trying the new method; nay, I verily believe, were I to give Messrs. Schubert and Oppmann a perfect and detailed method for the sub-fermentation of wine, (as I have not, nor could have done, since such a method does not as yet exist,) these gentlemen would fail. When a physician prescribes a mixture to a patient, and this mixture is prepared by a competent apothecary, and strictly according to the instructions of the physician, the effect produced upon the patient may be properly considered as a criterion of its efficacy: but if a patient altogether ignorant of the medical and pharmaceutical art should himself attempt to prepare the draught prescribed for him, would he be justified in impugning science, or clamouring against his physician, should the effect not answer his expectations? I have been invited by a great many vintners to their respective places, in order to make on the spot experiments which might lead to the discovery and establishment

* For which purpose he seems to have used a small glass, seven inches wide and five inches deep; such we are led to suppose, at least, from the circumstance of his making the counter-experiments with an equal volume of must in a narrow-necked flask.

of a correct sub-fermentation method, which, as I have said, does not at present exist. These gentlemen were willing to afford me every facility for conducting my experiments. I declined their offers, however, since it is not by any means my purpose to improve the wine of any individual proprietor, and moreover, because I thought I had a right to suppose that these gentlemen were themselves possessed of the knowledge and skill requisite for this purpose. But I see now that clear-headed and unprejudiced men, animated by a sincere and earnest desire, and endowed with the intellectual capacity required for such an undertaking, are very rare.

The writer of the article in the *Bavarian Messenger*,—Counsellor Buchner, of Munich,—to judge from the style, feels highly gratified that my advice and propositions should have led to nothing in the hands of M. Oppmann. He should rather have wept with sorrow at this failure, if he had the true interests of the wine-growers and drinkers at heart.

At the termination of his article in *Erdmann and Marchand's Journal*, p. 47, Dr. Schubert favours us with a new method for the production of butyric acid. He recommends for this purpose to keep boiled potatoes or starch paste in contact with meat for the space of from five to six days. This sample is quite sufficient to indicate the extent of Dr. Schubert's chemical knowledge. I cannot comprehend how the editors of so esteemed a journal as that of Erdmann and Marchand could have consented to admit such gross and palpable nonsense into their columns. This method might serve to produce putrid meat, but certainly not butyric acid!

ON EPIDEMIC SCARLATINA.

By J. J. KELSO, Esq., M.D., Lisburn, Ireland.

(Read before the Belfast Medical Society.)

IN taking leave to submit to the notice of the Society the following account of an epidemic of scarlatina which recently prevailed to a very great extent, under a rather severe and fatal form, in Lisburn and the neighbouring country, as well, I believe, as in several other towns and places in this part of Ulster, I shall content myself by simply adverting to some of the more prominent or important features which characterized its history, pathology, and phenomena, together with some of its commonest sequelæ, observing, at the same time, all the brevity consistent with perspicuity. The facts or observations, many of them, which I am about to mention, are not put forward as presenting, in themselves, much that is very peculiar or novel; yet they may prove not altogether uninteresting or devoid of some degree of practical value. These observations, it is but right here to add, have reference more particularly to 200 odd cases of the disease of which memoranda of some kind have been preserved; but that many of these are defective in more or fewer particulars of interest in elucidation of its history, character, and progress as influenced by treatment, and occasionally even the manner of its termination, it were in the last degree culpable, because in opposition to truth, not candidly and explicitly to avow. For instance, did a case terminate fatally,—and I have noted eight deaths,—no *post-mortem* examination could be obtained, for the prejudices of the great body of the people of this country against such a procedure in ordinary circumstances still remain, it is well known, quite unconquerable. Again, for reasons which it is unnecessary here particularly to mention, several of the cases were seen only once, and many not more than twice; in which case, as a matter of course, the after progress of the complaint, as affected by the treatment, could not be otherwise than very generally noted, on account of the very questionable evidence founded in report, granting such report, apart from its general accuracy, to have been always furnished, which it were out of common course almost for a moment to expect. I might, were it to serve any good purpose, easily add to these, other grounds of imperfection in the stock of materials which is to form the substantial part of this paper; but with all these many and important drawbacks, partly unavoidable and incidental to private practice, and in part dependent on personal oversight or carelessness in noting the particulars of cases as they were observed, I would fain hope and believe that the available portion which remains, if properly arranged and considered, will not prove altogether valueless, or unworthy some share of your attention.

However, in the beginning of March last, numerous cases of scarlatina began to present themselves, and before the end of the month, the disease had increased to such an extent, both in town and country, as properly to merit the designation of epidemic. But in the following months of April and May it raged most extensively, attacking not only the poorer

classes in society, but those in more comfortable circumstances; not only the young, but the middle-aged, and, in some instances, even the comparatively old. And although many cases have occurred since, and are indeed now and then still occurring, in the commencement of the latter half of June it began evidently to abate; thus extending altogether, it will be seen, over a period of at least three months. Now, the rather unusual period of the year at which the epidemic made its appearance, challenges here a passing remark. Referring to the common periods of such visitations, Dr. Tweedie says, "Although sporadic cases are met with at all seasons, it (scarlatina) is more prevalent at the end of summer, and in the autumn, than at other periods of the year. Epidemic visitations have been most frequently observed after a warm summer, especially when the heat has been accompanied with continued rains; and when the succeeding winter has been open and mild, the disease has continued till it has been checked by frost. It generally disappears in the spring months,* &c., &c." If this statement be regarded as the correct expression of the results of experience on the point in question, then, in the instance to which I am now taking the liberty of calling your attention, we discover a very remarkable exception. Nor, as intimately related to the appearance and history of this in common with that of all other epidemic visitations, should I omit a passing allusion to the kind of weather by which it was preceded and accompanied. Now the unusual mildness of the last winter season, in this country at least,—during which, by the way, fever of the common continued type prevailed to a great extent in and about Lisburn,—must be in the recollection of you all. March, however, was generally a very severe month; the weather, though dry, being cold and blowing, accompanied almost throughout by intense frost; April was characterized by a greater degree of mildness; and May, the latter part of the month especially, was genial, if not fine, calling into renewed life and activity the different families of the insect as well as those of the vegetable world.

It may not, perhaps, be out of place here, to remind the Society that scarlatina has been regarded very differently by different writers, and a corresponding difference has, as a matter of course, obtained in their descriptions of it. Thus, by the great majority of authors, from Sydenham down to our own times, the more common outward and cognizable symptoms, peculiar as they are, of the affection, have been considered in their ever-varying occurrence, degrees of development, or intensity and virulence, as constituting the essential elements in the chain of morbid actions which go to form the disease; and, in conformity with this view, they are adopted as the basis of arrangement into the several species or varieties under which it has now so long been contemplated. Consistently with this symptomatological arrangement, the disease will be found, as is known, to include these different species, or rather varieties, which I put down as they occur in books:—1. Scarlatina simplex; 2. Scarlatina anginosa; 3. Scarlatina maligna. To which Dr. Tweedie, with equal propriety, has added, 4. Scarlatina faucium.

But, on the other hand, this description of classification, however convenient it may be in some respects, is strongly and not unreasonably objected to by some, as not springing from a consideration of the pathological conditions of certain of the internal vital organs and functions which the disease, in common with the other eruptive as well as non-eruptive fevers, necessarily involves in some degree, and which of right, they contend, should exclusively be regarded in any divisional distribution it may be thought advisable to frame, as most conducive to a proper exposition of the subject. Among the ablest advocates, perhaps, of this particular view, which, at least, it must freely be conceded, is by far the more scientific of the two, are Dr. Hamilton, sen., and Dr. Mackintosh, the latter of whom, in quoting the following passage from the former, adopts it to the very letter:—"It is altogether foreign to my purpose to engage in this controversy, and more so, as the distinction begins to lose ground as our knowledge of the disease becomes more comprehensive and accurate. The time may not be far distant when scarlatina will be received as the generic disease, the full history of which will include the more aggravated symptoms as they occur in scarlatina anginosa and in cyanche maligna, in the same manner as the history of variola comprehends the varieties of the distinct and confluent small-pox."† In consonance with this fundamental position, scarlatina, in common with the other exanthemata, has been regarded as consisting of two great varieties, which have been

* Cyclopædia of Practical Medicine, vol. iii. p. 643.

† Practice of Physic, vol. i. p. 184. Fourth Edition.

respectively named the congestive and the inflammatory, and subdivisions may be made of different combinations of these two.

Now in reference to these two different systems of arrangement, and the respective views on which they are founded, it may be permitted me here generally to remark, that while, in entertaining the subject, however briefly, in any aspect, the practical man cannot well overlook, far less disregard, the merits that may pertain to either, he will, it is to be believed, at the same time, in virtue of that independence of thought which is the prerogative of reason, so weigh with scrupulous exactitude the sum of the evidence derived through his personal observation or experience, as to indicate, as truthfully as may be, its general bearings, in whichever way the balance may happen to preponderate. Satisfied as I am, that the interest of science, which is that of truth, can in this, as in all other cases of a like kind, be thus alone satisfactorily vindicated, it will be my object in the present communication so to review the facts, or observations, if you will, relating to the epidemic under notice, that their general tendency, in whatever direction they may seem to incline, may, in some sort, be rendered self-evident. And in order the better to accomplish this object, I have deemed it expedient to notice them, in the first place, in connexion with the leading and distinctive symptoms of the disease; and, in the next place, in relation to the pathological phenomena displayed.

1. *Fever*.—As usual in this, equally with the other eruptive diseases, whether of a sporadic or epidemic character, the attendant pyrexia varied very much, both in intensity and duration, in the different cases. In the great majority of instances, the fever was characterized by greater or less intensity of the leading symptoms; which either in great measure subsided on the full establishment of the cutaneous eruption, more particularly when this happened to be copious and general, running its regular course of increase and decline; or persisted with alternate remissions and exacerbations, it might be, during the whole period of the disease, and sometimes even for several days after the disappearance of the superficial rash. In this latter class of cases, the efflorescence generally was but slowly and irregularly developed, of a darker hue than natural, and prone, often without evident cause, to sudden retrocession. But the predominant character of the fever may very decidedly be regarded as in some degree inflammatory in the commencement, and up to the development of the outward phenomena, under whatever form, intensity, or extent they happened to display themselves; but subsequently to this, when the pyrexia persisted from any cause, more or fewer of the symptoms expressive of the typhoid type not unfrequently set in, the rash at the same time becoming of a darker colour, and otherwise modified in its progress and decline. Again, in some few cases, typhoid symptoms, in conjunction with those of an inflammatory character, were found to evidence themselves from the very outset, accompanied perhaps by phenomena indicative of congestion in some internal vital organ or structure; in which case, the cutaneous eruption never sensibly declared itself, or only very partially and irregularly, while the efflorescence in the throat assumed a purplish or livid hue, with, most probably, considerable intumescence of the tonsils and other parts there concerned in the inflammation. Generally, as in all instances of a similar kind, the worst and most obstinate cases occurred in the earlier period of the epidemic; and individuals belonging to the poorer classes were, from the circumstances of their life, not only more predisposed to its assault, but less able to bear up under an invasion.

2. *Cutaneous Eruption*.—In the two hundred cases of which I have preserved some account, this symptom was observed to declare itself to some extent only in one hundred and five of them; and although it is impossible for me to say that it did not occur indistinctly and transiently in a still greater number, the probability seems to be rather against the presumption. I always made it a particular point narrowly to inquire after the circumstance, which, from its peculiar and unmistakable character, could scarcely be overlooked or misapprehended by any one; but with the result now mentioned. But be that as it may, of these one hundred and five cases in which the eruption showed itself, in forty-five only, as far as I was enabled to inform myself, was it in any degree copious and general, passing through its successive phases of increase, maturity, and decline, in regular order; while in the remaining number it was found to be more or less partial in its development, persisting for a shorter period than usual, or presenting some other of the several irregularities which, in certain constitutions and states of system, it is so well known to exhibit. As regards what may be termed the regular form

of the eruption, it showed itself, as far as I could learn, on some part, in five cases, in twenty-four hours from the setting in of the fever; in twenty-six, between twenty-four and forty-eight hours; and in the remaining fourteen, between forty-eight and sixty hours. Of the forty-five, twenty-one were males, and twenty-four females: ten—five males and five females—were above ten months and under five years; twelve—five males and seven females—were above five and under ten years; eight—four males and four females—were above ten and under fifteen; five—two males and three females—were above fifteen and under twenty; three—two males and one female—were above twenty and under twenty-five; two—one male and one female—were above twenty-five and under thirty; and three—one male and two females—were above thirty and under forty-five. Respecting these cases, I have only further to add, that they all belonged, with but few exceptions, to that variety of the disease called scarlatina simplex.

With reference to the other, or imperfect and irregular form of the eruption, of the sixty cases in which it was ascertained to exist more or less, twenty-five were males, and thirty-five females:—nine—four males and five females—were above the age of two and under five years; sixteen—six males and ten females—were above five and under ten; fifteen—six males and nine females—were above ten and under fifteen; eight—three males and five females—were above fifteen and under twenty; five—two males and three females—were above twenty and under thirty; two—one male and one female—were above thirty and under forty; two—one male and one female—were above forty and under fifty; three—two males and one female—were above fifty, and under sixty-four. On the deficiency of the eruption, whether accompanied or not by some of the other irregularities before mentioned, aggravating very materially, as it never fails to do, both the general fever and the topical affection of the throat, it is unnecessary for me here to offer any remark, as the fact has been admitted on all hands since the time of Gregory; nor in these instances was there any exception found to obtain as to its general application.

Inflammation of throat.—In none of the two hundred cases was this symptom absent in some degree, either with or without swelling of the tonsils or other parts concerned in the inflammation. But the intensity of this topical phlegmasia, involving, as it always did, not only the mucous lining of the pharynx, but that of the uvula, velum pendulum palati, and tonsils, was observed in all the instances closely to correspond with the intensity of the accompanying pyrexia, appearing, when the fever was mild, a mere febricula, such as most commonly occurred in those cases that were unattended by the cutaneous rash, simply of a rose colour, more or less deep, without swelling or pain in swallowing; but when running higher, and accompanied by the epidemic efflorescence, assuming a purplish, or pretty deep mahogany hue, with intumescence generally of one or both tonsils, and consequent painful deglutition. Again, when the type of the fever happened to change from the inflammatory to the typhoid character, as was not unusually the case, or, which was still more rare, when symptoms of both morbid conditions evidenced themselves together from the outset, affecting, of course, in various degrees the appearance, as well as development and progress of the cutaneous eruption, a corresponding aggravation and violence of the local inflammation never failed (as far, at least, as my experience goes) sensibly to show itself. This was proved very clearly by the much greater depth of hue assumed by the inflamed parts, the fauces in such circumstances usually exhibiting a blackish red or livid colour, studded over, more or less thickly, with variously sized spots of a dirty white or ash-coloured appearance, some of which turned out to be ulcers, the rest being merely fibrinous exudations from the mucous crypts of the inflamed textures. Cases of this kind were, it is unnecessary to say, among the more serious, furnishing by far the larger quota to the table of mortality. Yet sloughing following on ulceration of the throat was, in its severe forms at least, of but very rare occurrence, one solitary instance, I think, having been met with by myself—I say I think, for the individual, a boy of five years, who had been labouring under the disease for nine days without professional aid, was in articulo mortis when I incidentally saw him, and quite unable to permit me to make any examination of his throat; but his breath emitted a fearfully fetid odour, and a mixture of what appeared to be saliva and blood, containing, seemingly, the debris of sloughs, issued in some quantity from his mouth. His parents, who were in very miserable circumstances, informed me that he had been unable to swallow anything besides a little water or milk for the pre-

ceding two or three days. He died, I afterwards learnt, some hours after my accidental visit. On inquiring of some of my professional friends in Lisburn, I find that no case of a similar description had occurred in the practice of any of them during the progress of the epidemic.

Lisburn, Belfast, Jan. 1846.

A SKETCH

OF THE

RELATION OF THE SPINAL MARROW

TO

PARTURITION & PRACTICAL MIDWIFERY.*

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THE Uterus is a muscle,—the largest and most important muscle of the animal economy. It supports the race in the same way that the stomach and the heart support the individual. It is the organ of nutrition and circulation to the species. Parturition, the chief function of the uterus, is performed like the functions of other muscles, under the direction of the nerves by which it is supplied. Those nerves have been beautifully made out by Dr. Robert Lee, and are derived chiefly from the third and fourth sacral nerves, and the hypogastric ganglia. Through its nervous endowments the uterus has the power of associating with itself other muscles, in a certain definite order, for the safe and efficient performance of parturition. But the act of parturition never had been, and never could be, studied properly, as a motor function, until the discovery of the physiology of the spinal marrow by Dr. Marshall Hall.

The Spinal Marrow is the central organ presiding over the motor actions of the uterus.

All the chief physiological uterine motor actions are reflex in their nature.

Other causes of uterine contraction are, *direct or centric spinal action*, the influence of *emotion*, and *muscular irritability*.

Contraction of the uterus from irritation of the mammary excitor nerves, as in the sucking of the child, or from irritation of the cutaneous nerves of the abdomen, as by the aspersion of cold water, are pure instances of *reflex spinal action*. In either case the direction of the motor influence is from the extremities of the incident excitor nerves through the spinal marrow, and then to the motor organ.

Contraction of the uterus from the administration of the ergot of rye is an example of *direct or centric spinal action*. Here the medicine enters the circulation, and its action on the spinal marrow is intra-vascular; the motor influence acts from the spinal marrow to the motor organ.

Contraction of the uterus from fear is an instance of the influence of *emotion*. Emotion may be induced by external objects, as from the sight of instruments; or it may arise within the mind, as from the remembrance of former suffering. In these respects there is some analogy between reflex action and the action of emotion or volition; but emotion and volition are *psychical*, excito-motion is *physical*. This constitutes such an immense difference, a difference so preponderating over the analogies referred to, that there is danger of great confusion in physiology, if the term *reflex cerebral action* (proposed by Dr. Laycock) should come to be generally applied to motions dependent either on emotion or volition.

The seat of emotion is not yet ascertained, but it acts through the spinal marrow and the spinal motor nerves, as would appear from the fact that emotional movements remain in parts entirely paralyzed to cerebral voluntary motion.

Contraction of the uterus from the application of galvanism is an instance of uterine action from *muscular irritability*. Here, the stimulus directly affects the muscular fibres of the uterus.

Volition may increase the action of the expiratory muscles after the dilatation of the os uteri, or it may bring them into action before this part of labour is completed; but the motor forces, dependent on the will, are *accessory*, not *essential* to the process of parturition; delivery may take place in cerebral paralysis with total loss of voluntary motion, the actions dependent on *reflex action*, on *emotion*, and on *muscular irritability*, all remaining perfect.

Delivery may take place in profound coma—many such cases are an record; or in paraplegia from disease in the middle portions of the spinal marrow, as in a case related by Ollivier, when both volitional and emotional action are subtracted, but labour proceeds by virtue of the reflex action and the muscular irritability which remain. It should be mentioned, that in simple coma, only emotion and volition are withdrawn; but in paraplegia from disease in the middle of the spinal marrow, there is also the absence of the expiratory reflex action, the abdominal muscles are now inactive.

In paraplegia from disease involving the whole of the lower portion of the spinal marrow, labour either does not take place, or proceeds with extreme inertia, as in a case related by M. Brachet; here volition, emotion, and all the reflex actions, are absent, and *muscular irritability* alone remains. Patients in this state have nevertheless been delivered by the stimulus of galvanism applied to the uterus itself.

Thus the motor actions concerned in natural parturition admit of an interesting synthesis and analysis; the obstetrician should be as familiar with the simple and compound forms of muscular action as the chemist with elementary bodies and their combinations.

The *type* of uterine action is rhythmic; the pains succeeding each other at regular intervals. The *rhythm* is probably dependent on the spinal marrow, being synchronous with the action of the expiratory muscles, which is undoubtedly reflex in its nature.

The *mode* of uterine action is probably peristaltic; peristaltic action has been observed by Müller in the uterus of the rat, and in the oviduct of the turtle. In the human female, the contractions appear, according to Michaelis and Wigand, to commence at the cervix, to extend from thence to the fundus, and then to pass downwards again towards the os uteri. This is analogous to what takes place in other organs possessing peristaltic action; the heart begins to contract at the auricle, the contraction traverses to the apex, and then returns; in the stomach also, on the authority of Magendie, contraction begins at the pylorus, proceeds to the cardia, and then sweeps back from left to right. The objects to be obtained by this double action in the uterus would seem to be the prevention of the descent of the umbilical cord, the ascent of the arms of the child at the commencement of the pain, in cases when they hang down, and in this way to prevent arm or shoulder presentation, and the prevention of inversion of the uterus. Intussusception of the upper part of the organ, and complete inversion, would probably be frequent if contraction uniformly commenced at the fundus.

The peristaltic *mode* of action appears to depend on the ganglionic nerves. The question may be asked, is peristaltic action anything more than the muscular irritability of parts supplied by the ganglionic system? The uterus contracts so as to expel its contents after death. In the oesophagus, which, like the uterus, is endowed both with *peristaltic* action and *reflex* spinal motion, Dr. Marshall Hall has observed distinct contraction after death; I have also observed the same phenomenon.

The excitors of reflex spinal actions in the uterus are numerous.

First in importance are the incident nerves of the whole length of the parturient canal, from the fundus uteri to the constrictor vaginae.

Irritation of the incident nerves of the ovaria and of the mammae, the cutaneous nerves of the abdomen and general surface, the nerves of the stomach, bladder, and rectum, all excite reflex uterine actions during labour.

A definite order is observed in the phenomena of labour.

With respect to that great problem in physiology and obstetrics—namely, the cause of the coming on of labour at the end of the tenth lunar month of gestation, nothing definite has hitherto been said. In the earliest part of the parturient process, which in my lectures I have been accustomed to call the *premonitory stage*, there is an equable, continuous contraction of the uterus, which exists for some time before the appearance of the periodical contractions. This equable contraction urges the head of the child firmly against the os uteri. What is the cause of this equable contraction? We must look beyond the uterus for the answer; for the uterus attempts to act in extra-uterine pregnancy. I believe the ovaria are the excitors of the first motor action of the uterus. It is well known that the majority of cases of abortion occur at what would have been menstrual periods, and it is equally well known that the entirety of the phenomena of menstruation depend upon the ovaria as their cause. In the human female, labour comes on at the tenth menstrual period from the time of conception; in animals also, as far as my observations have extended, the

* An outline of the present paper was printed in the first volume of Dr. Marshall Hall's "Practical Observations and Suggestions in Medicine."

term of gestation is some multiple of an æstrual period. Now the menstrual periods of the human female and the æstrual periods of animals are alike in this; that in the one case ova are chiefly prepared at these epochs, in the other solely. Further than this the analogy cannot fairly be pressed. It is too much to speak of any moral similarity between the human female and the lower animals in this respect. I consider, then, that parturition in the human female is essentially a menstrual period; but that instead of an ovule being thrown off from the ovary, an ovum is expelled from the uterus, and I compare the lochial to the menstrual discharge. In animals, the phenomena of parturition are more strikingly similar to those of æstruation; there is evidence that a similar state of the ovaria obtains. For instance, the guinea pig and the rabbit will admit the male immediately after delivery, and conception will follow the congress. In the mare also, a few days after foaling is the time chosen for the admission of the male. On these and other grounds I believe the ovaria to be the exciters of the first contraction of the uterus in parturition, but I am engaged in testing the matter experimentally. I shall excise the ovaria in animals which have conceived, and note the results.

The effect of the equable contraction of the uterus first induced, is, as I have said, to urge the head of the child against the os uteri. This is the most excitable part of the uterus, and after a time, irritation of the os and cervix call forth the pains which constitute the commencement of actual labour. The effects of irritation of the os uteri are shown in cases of premature labour induced by irritation in this situation, as by the introduction of a plug, and by certain cases where, from the pendulous state of the uterus, the head cannot be brought in apposition with the os uteri, and labour, in consequence, is put off until this cause of inertia is removed by an abdominal bandage, or the prone position. Irritation, then, of the os uteri must be looked on as a cause, though, in ordinary cases, a secondary cause, of the coming on of labour. I believe the ovarian nerves and the nerves of the os uteri, are as much the exciters of the motor actions of parturition, as the pneumogastric and the trifacial are the exciters of the motor part of respiration.

After the persistence of the premonitory stage of labour for a certain time, actual labour pains commence. The object now to be attained is the dilatation of the os uteri, and I therefore propose to call this the *stage of dilatation*. Throughout this stage, the body and fundus contract periodically. The contractions of the uterus in this stage are not so violent as they subsequently become. This is owing to the contact of the membranes and the amniotic fluid with the os uteri. At the same time, the os uteri and the vagina dilate. This dilatation is effected partly by the mechanical pressure of the membranes and the advancing head of the fœtus, but the os uteri possesses a *positive*, as well as a *passive*, power of dilatation—a dilatation similar to the dilatation of the cardia in vomiting or deglutition. This *positive dilatation* is shown by the extreme suddenness with which it takes place after the existence of previous contraction, and by the sudden contraction which sometimes occurs immediately after the birth of the child, as in encysted placenta. The perinæum, the dilatation of which is *passive*, never contracts in this way. It is also shown by the form of the hæmorrhage in placenta prævia; after the separation of a portion of the placenta hæmorrhage is increased during the pains; if the dilatation were from mere pressure, the hæmorrhage ought to cease during the pains, and come on in the intervals. The direction in which the motor force is exerted in the stage of dilatation is *downwards and backwards*, in the direction of the axis of the pelvic inlet. In this stage of labour the motor actions are purely of a reflex kind, the excitor being the internal surface of the uterus, and particularly the os uteri. The centre of the nervous arcs involved in the uterine actions is in the lower part of the spinal marrow. In natural cases, emotion does not at all influence this stage physiologically.

During the *stage of dilatation*, various extra-uterine reflex actions occur. The actions of the bowels and of the bladder are excited, and in many cases vomiting takes place. At the time of the completion of the dilatation of the os uteri, several rigors affecting the whole muscular system are frequently experienced. Defæcation and micturition have evidently a beneficial purpose in enlarging the capacity of the pelvis; the nausea and vomiting promotes the dilatation of the os uteri, and is a preparation for the expiratory action of the next stage.

In the next stage of labour, the head of the child advances through the vagina to the os externum; this I propose to call the *stage of propulsion*. In this stage, the whole of the uterus

contracts upon the child, but new motor powers are now brought into play. Irritation of the os uteri only excited reflex motor action in the uterus itself, but irritation of the vagina excites both the uterus and the respiratory muscles. The contractions are also more violent, because the liquor amnii has now escaped, and the hard head and body of the child are in direct contact with the excitor surfaces. At the coming on of each pain, a deep inspiration is taken, and during the pain, expiration is protracted as much as possible where the pains are long. They consist, as far as the respiratory system is concerned, of several sudden and deep inspirations, followed by prolonged expirations. At the height of a pain in this stage, the glottis and cardia are *closed*, the abdominal and other expiratory muscles contracted, and the diaphragm inert, as in vomiting. All obstetric writers have taught the contraction of the diaphragm during the pains of this stage; but if it be considered for a moment that the diaphragm is a muscle of *inspiration*, while the parturient action is expiratory, the fallacy of such a view will be evident. It is true that the floor of the diaphragm remains plane during the effort at expiration with the glottis partially or entirely closed, but this is from the mechanical distention of the chest by the contained air, not from active contraction of the muscle itself.

It will be seen, that in the stage of propulsion the direction in which the motor force is exerted is different from what it was in the stage of dilatation. The direction the head of the child has now to take is *downwards and forwards* instead of downwards and backwards. It has to pass through the lower half of the pelvic segment of the circle of Carus, in the direction of the axis of the pelvic outlet. Obviously, a new direction of the motor force was necessary to effect this, and it is supplied by the addition of the expiratory action at this time. The action of the abdominal muscles urges the fundus uteri backwards against the spinal column, and assists in giving the head the proper direction while emerging through the pelvis. The mechanical adaptation of the fœtal head to this progress has often been dwelt upon. Another object effected by the expiratory action is the compression of the uterus, which is thereby excited to additional contraction.

In this stage of labour, the nervous arcs concerned have their centres partly in the lower nodules of the spinal marrow, and partly in the medulla oblongata. There is this analogy between the medulla oblongata and the lower spinal marrow, that in the one are congregated the keys of the motor arcs of respiration, deglutition, and their various morbid actions; in the other, the centres of the motor arcs of parturition, defæcation, micturition, ejaculation, and conception, as far as the pelvic viscera are concerned. It cannot but be considered wonderful that the dilatation of the os uteri should only excite the nervous arc concerned in vomiting, while the dilatation of the vagina should only excite the respiratory arcs. In the stage of dilatation the motor actions are chiefly reflex; but both volition and emotion intervene in the stage of propulsion. The patient desires to press her feet against some fixed body, and to grasp with the hands, so as to increase the power of the expiratory efforts. When the pains are moderate, the woman utters only a prolonged and intermittent groan, owing to the contracted state of the glottis; but when the suffering, produced from the distention of the vagina, is excessive and unbearable, she utters a loud cry. This cry is a motor action, a powerful expiration, excited by the emotion of intense suffering; it opens the glottis widely, and immediately takes off from the uterine system all the extra-uterine pressure. Thus, the glottis may be compared to a safety-valve which is opened by emotion whenever the pressure becomes too powerful to be borne with safety.

In the next stage the child is born, and I have called this the *stage of expulsion*. The birth of the child is effected by the powerful action of the expiratory muscles, with the glottis and cardia closed, and by simultaneous contraction of the uterus and the whole parturient canal. At the moment of birth, the vagina is retracted over the head of the child by the action of the levatores ani, and positive dilatation of the sphincter ani and sphincter vesicæ occurs. The dilatation of these sphincters is partly produced by emotion, and partly by reflex action. It forms a most important provision for the safety of the perinæum. At the moment when this part is subject to the greatest amount of distention, these two sphincters suddenly relax before and behind it. We may thus see a reason for the situation of the vagina between the orifices of the rectum and bladder. Laceration occurs generally in first labours, and at this point primiparous women often suffer from feelings of delicacy. They should always be prepared beforehand for involuntary action of the bowels at this juncture, and impressed with the propriety of not preventing

it by volition, which otherwise they are, from motives of delicacy, prone to exert at this time. A napkin should be placed to receive any fecal matter that may be discharged. The regulation of the glottis by emotion is another provision for the defence of the mother from laceration at this period. At the moment of birth, the woman, affected with uncontrollable agony, gives a loud cry, which, by opening the glottis widely, releases the uterus from all expiratory pressure.

This completes the process of actual labour. The phenomena which follow are so far different, that I propose to treat of them as a *supplemental stage*.

When the body of the child is born, the contracting uterus follows it in its descent, and the action of the uterus, produced by the great excitation of the vagina, is such, that in many cases it at once throws off the placenta, and lodges it in the upper part of the vagina. When this is the case, the presence of the placenta in the vagina, and the irritation of the surface, from which the placenta has been torn, are generally sufficient to ensure, by reflex action, the contraction of the uterus, and to prevent hæmorrhage. The maternal emotions also tend to accomplish this end. The sound of the child's voice affects the action of the uterus. If the placenta does not separate immediately, slight irritation through the loose abdominal walls, or gentle traction of the cord, is sufficient to cause its expulsion. Denman recommended that the placental mass should be allowed to remain a considerable time in the vagina. He supposed that coagulation of the blood, poured out at the moment of the separation of the placenta, was thus favoured, and after-pains diminished as a consequence. But this plan would also act by exciting reflex action, and the permanent contraction of the uterus. At this time a bandage is applied to the abdomen, and furnishes another guarantee against hæmorrhage.

The uterus has now lost its great excitor, by the delivery of the fœtus, but it is necessary that the uterus should be stimulated for a considerable time in order to promote its return as nearly as possible to its pre-impregnated state. This is provided for in nature. The stomach has an intimate reflex connexion with the uterus at all times, but immediately after delivery this is very much increased; everything the patient drinks now excites uterine contractions. The reflex connexion between the mamma and uterus is increased to a still greater degree. The mere sight of the child will sometimes suffice to create the sensation of "the draught" in the breasts, and this re-acts upon the uterus. Drinking fluids also excites the draught, and thus the stomach exerts an indirect action on the uterus besides its proper reflex action. Still more powerful is the act of suckling the child; distinct uterine action is excited on each occasion, and when after-pains are present, a distinct pain is regularly produced every time the infant is applied to the breast. These different sources of excitation continue for some time after delivery, and are sufficient to restore the uterus to the size natural to the unimpregnated state in women who have borne children.

No one can refrain from admiring the successive order in which various excitor powers come into operation during the progress of labour. First, according to my belief, the ovaria excite the uterus, while this organ is defended from the irritation of the fœtus by the liquor amnii, a fluid of its own temperature, a medium least of all capable of exciting that reflex action of which the uterus is so susceptible. Next, the head of the child is brought in apposition with the os uteri, shielded, however, in some measure, by the liquor amnii, until the os is sufficiently dilated to permit it to pass; then, the naked head and body of the child come in contact with the highly excitor surface of the vagina and the os externum successively. After the fœtus has been expelled, the placenta takes up the train of excitation, and this is followed by the gastric and mammary succession of stimulus and action. Not less extraordinary is the gradual augmentation of motor action, from the simple equable contraction of the uterus the day or two before labour, to the grand combination of muscular actions, which marks the final throes that expel the child.

The motor power of the uterus itself, the number of motor organs involved as auxiliaries, and the different forms of muscular action brought into action during its progress, mark the act of parturition as the most comprehensive of all the motor functions of the animal economy. Taking muscular irritability as the basis, we have reflex action, emotion, and volition, every power, in fact, which exists, whether for the execution of contraction or dilatation, all extensively and simultaneously engaged; the end of all being the safe accomplishment of delivery. Well might the philosophic Denman exclaim—"Instead, therefore, of despairing, and thinking they are abandoned in the hour of their distress, all women should

believe, and find comfort in the reflection, that they are at those times under the peculiar care of Providence, and that their safety in childbirth is ensured by more numerous and powerful resources than under any other circumstances, though to appearance less dangerous."

ON THE TREATMENT OF CHRONIC DISEASES OF THE SKIN.

By THOMAS HUNT, Esq. M.R.C.S., Herne Bay.

PITYRIASIS, the third genus in the order squamæ, exists in two forms; the one is a trifling disease, appearing chiefly on the heads of infants, (dandrif,) and generally disappearing spontaneously. It rarely comes under medical treatment. The other, as described by Rayer, is a formidable and often fatal disease, being usually complicated with internal inflammation of a highly dangerous character. No English author with whom the writer is acquainted has described this severe variety.

Ichthyosis, the fourth genus in this order, is a very rare disease, and writers give very contradictory accounts of it. The author has never seen it, but he once saw a well-marked case of psoriasis diffusa, (on a portion of the lower extremity of a gentleman,) which—so said the patient—was pronounced by a hospital surgeon of high repute, "a case of fish-skin disease." The treatment was as enlightened as the diagnosis. The patient was in possession of a prescription, in the well-known handwriting of the same hospital functionary, directing certain articles to be made into pills, with "*Liquoris potassæ arsenitis, quantum sufficit*!" No man can be expected to possess a perfect and practical knowledge of every branch of the profession, but a decent share of humanity (in the absence of common sense) might suggest the propriety of declining to prescribe in certain cases, in preference to playing such tricks as this. This ridiculous story would not have been related, but from the conviction of the writer—a conviction strengthened from sources extraneous to the story itself—that the pupils of this gentleman, who are and have been numerous, (for he is a favourite teacher and a gentlemanly man,) have, to a certain extent, imbibed his own ideas on this subject; and accordingly, whenever they meet with a case of psoriasis, set it down, with the utmost simplicity, ichthyosis. The two diseases bear no more resemblance to each other than variola and urticaria.

ORDER III.—EXANTHEMATA.

Of the six genera in this order, four—namely, rubeola, scarlatina, roseola, and erythema—are essentially acute in character, and limited in duration. There remain, therefore, for our consideration, only two genera—urticaria and purpura.

Urticaria (nettle rash) is a common and well-known affection of the skin. It is usually preceded by pain, oppression, or a sense of weight "like a lump of lead" at the scrobiculus cordis, and often results from eating indigestible articles. Shell-fish occasion it in some persons, and all kinds of fish in others. It is sometimes severe in character, and accompanied with alarming constitutional disturbance. This is the acute form, which requires an emetic, followed by purgatives.

There is, however, a chronic form of urticaria, in which, whenever the skin is warm, it tingles unpleasantly; and isolated white elevations, like the wheals produced by the stinging-nettle, surrounded by a finely-shaded blush, (the form of which is generally destroyed by the finger-nails of the patient,) are to be seen on every part of the body which is covered by the clothes, and occasionally in the neck, face, and other parts where the skin is thin. These wheals will appear and disappear three or four times a day, and may annoy the patient for months or years together.

If this disease exist in an idiopathic form, and cannot be traced to disorder in the digestive organs, or to a febrile condition of the system, it will yield to arsenical treatment, like other affections of the skin; but patients will often endure it for a long time without applying for medical aid, and can seldom be prevailed upon to take a long course of medicine for its cure. Of this trifling disease the writer has recorded no cases, but he has never found arsenic fail when fairly tried under favourable circumstances. The disease is common in children, who usually outgrow it.

PURPURA.

"Purpura, an efflorescence consisting of small, distinct, purple specks and patches, attended with general debility, but always with fever—not contagious." Such is Willan's definition of purpura; but it is now well known that neither "general debility" nor "fever" are necessary characteristics

of purpura. It is to be regretted, that the mistaken views prevailing in Willan's day should have been thus interwoven with a definition framed for posterity. This error has too frequently misled the practitioner, even in recent times, and thus induced a very improper treatment of a disease which is too often accompanied by dangerous or fatal complications. Of the cases which have come under the observation of the writer, certainly not one in four was originally associated with debility. In cities and crowded neighbourhoods, as well as in low and unhealthy spots, the reverse proportion may prevail, but it is all-important that the existence of an asthenic condition of the system should not be assumed without proof. The greatest care should be taken to ascertain the *cause* of the disease, as this will always determine the treatment.

Purpura appears in two forms, the one simple, (purpura simplex,) the other complicated, either with hæmorrhage from one organ or more, (purpura hæmorrhagica,) or with low fever. (petechiæ.) The disease consists in a loss of tone in the extreme vessels, which discharge by extravasation a portion of their contents. This may occur in the skin only, as in the simple form of the disease; or it may occur contemporaneously in the exhalants which open into cavities; in which case the stomach, intestines, lungs, throat, bladder, uterus, nose, gums, or all of them together, may discharge blood; or it may occur in these organs alone, the skin altogether escaping. Under these circumstances it is no longer a cutaneous affection; but it is the same disease, and must be treated on precisely the same principles.

It is rare for purpura to require treatment by arsenic; but when it occurs in its simplest form, without fever, or other complications; when the general health is good and the disorder is obstinate, and continues for months together; nothing is more suited to correct the deranged condition of the capillaries, and to restore their deficiency of tone, than arsenical treatment. And here it would best accord with the plan of these papers to dismiss the disease with a case or two, and proceed to the next order; but the immense difficulty often found in the treatment of the severe and complicated forms of purpura, the frequent fatality of the disease, and the almost uniform failure of the treatment recommended by Willan—these considerations may excuse a short digression on the treatment of purpura hæmorrhagica.

Purpura hæmorrhagica presents itself under two forms, which are strikingly opposed to each other.

1. It occurs as a consequence of improper or insufficient diet, and is often associated with discharges of blood from the lungs. In this case a nourishing diet, with a moderate quantity of port wine and aloetic purgatives, in conjunction with the muriated tincture of iron, will generally restore the patient; but if the bowels are neglected, stimulants and animal food forbidden, and the patient treated for diseases of the lungs, he will sink under it, and either die of phthisis (if predisposed to it) or of general exhaustion. Three cases of this kind have recently come under the author's notice. Two of them were sacrificed to mistaken treatment, and the third, although the hæmoptysis was alarming, recovered under aloetic purgatives, tincture of muriate of iron, port wine, and beef. The patient had not tasted animal food (under advice) for many months previously, although he had been quite well. A few ounces of blood taken from his arm on one occasion, when the pulse became unusually firm and the respiration oppressed, exhibited the buffy coat; but when we consider that the buffy appearance is the result of slow coagulation, and that the blood always coagulates slowly in purpura, we shall surely hesitate before we take the buffy coat as a proof of inflammation, or an indication for a repetition of the bleeding when the state of the pulse does not warrant it.

2. The hæmorrhagic form of purpura far more frequently occurs from hepatic congestion, and then, if treated on the tonic system, may be expected to prove fatal.

The symptoms of this disease are as follow:—

1. An eruption of livid specks or patches, (but these are not necessarily present.)
2. Hæmorrhage from the mouth, nose, stomach, lungs, conjunctiva, fauces, bladder, bowels, uterus, or labia pudendi; or from several or all of these organs at once.
3. Constipated bowels, dark-coloured or pitchy-black evacuations.
4. Pain or oppression, more or less severe, in the epigastric region. Sometimes, also, uneasiness in the head, chest, or back.
5. When the disease has existed some time, the patient becomes emaciated; the lower extremities oedematous; the complexion dirty or dusky, sometimes sallow, and occasionally jaundiced. The liver is sometimes enlarged.

If a patient presenting these symptoms is treated by tonics, stimulants, and turtle soup, it is pretty certain that he will die. If, on the other hand, timely and active doses of calomel and jalap are so promptly and frequently exhibited as to unload the bowels and relieve them of the solid masses of pitch-like faeces commonly present, the patient will probably recover. Cases abundantly demonstrative of these positions will be found in Mr. Plumbe's excellent Treatise on Diseases of the Skin, which ought to be in the hands of every practitioner. The chapter on purpura is invaluable, and supersedes the necessity of illustrating the above views by other cases.

It still remains a problem how to treat cases of purpura with hæmorrhage, when there neither is, nor has been, hepatic congestion, nor other derangement of the digestive organs, nor any previous insufficiency in the quantity or quality of the food. Rayer relates five cases of this kind, all treated by tonics, acids, and generous diet; and some of them by oil of turpentine. Only one of the five recovered.

ORDER IV.—BULLE.

The diseases comprehended in this order involve so much constitutional disturbance, that they are scarcely entitled to rank among the affections under review. They invariably indicate certain morbid conditions of the system;—febrile in erysipelas, cachectic and generally syphilitic in pemphigus, pompholyx, and rupia; which latter Willan has classed among the vesiculæ.

ORDER V.—PUSTULE.

The order pustule contains five genera. Porrigo, variola, and scabies, are contagious diseases, and do not come under our notice. Impetigo and ecthyma, being chronic and non-contagious, will now engage our attention.

IMPETIGO

is "characterized," says Willan, "by the appearance of pyodracia, (small pustules frequently running together and producing scabs.) It is not accompanied by fever, nor contagious, nor communicable by inoculation; occurring chiefly in the extremities."

By the expression, "not accompanied by fever," Willan simply intended to distinguish it from specific fevers, such as small-pox. In the acute cases of impetigo, and even in its chronic forms occasionally, the affection is highly inflammatory, and attended by general pyrexia. When the incrustations are extensively formed, it is not always easy to distinguish it from eczema, lichen agrius, or even psoriasis; but the distinction is of little consequence in practice. It is a disease having precisely the same pathological relations, and must be treated exactly on the principles already laid down for the cure of psoriasis—bleeding and purgatives, with low diet, for the acute or inflammatory stage; arsenic, in decreasing doses, for the chronic stage. It is very liable, however, to assume an asthenic form, and then the sulphate of magnesia, dissolved in the infusion of roses, proves an excellent medicine to commence with; to be followed up by arsenic, with or without bitter tonics, after the bowels have been freely relieved, the skin being frequently cleansed by simple bathing in any form.

A case of impetigo, treated successfully, first by bleeding and purgatives, and subsequently by arsenic, will be detailed hereafter, under the cognomen, "eczema impetiginodes." The writer preferred so denominating it in his note-book, because a limpid fluid was first visible in the primary pustules. Since the period when this case was under treatment, reasons have suggested themselves why it should rather have been designated "impetigo." In the first place, the writer does not remember to have seen a case of impetigo in which, for the first few hours at least after the formation of the pustules, a clear transparent fluid was not discoverable. This suggested the suspicion that the disease was uniformly vesicular from the first,—a suspicion confirmed, if not ripened into certainty, by the observations of Mr. Plumbe, who does not hesitate to describe it as a vesicular disease. The success of arsenic as a remedy for chronic impetigo is strongly attested by writers on the skin. Rayer says, "I have seen a small number of very old and inveterate cases of impetigo, which have only yielded to antimonials and arsenical medicines." And Dr. Green, after detailing three successful cases, treated by the sulphur-fume bath,—which appears to have been more useful in the pustular than in other forms of eruption,—adds, "The Fowler's solution frequently proves a powerful adjuvant in these inveterate cases."

This disease occasionally occurs among the poor, as a result of insufficient food and clothing; and infants imperfectly nourished at the breast are subject to it. The crusta lactea is one of its forms, and will generally yield to preparations of

iron. Local causes will occasionally excite the disease; but under whatsoever circumstances it exists, it does not deserve to be abandoned as incurable.

ECTHYMA

differs from impetigo, as far as relates to its local diagnostic characters, chiefly in the size of the pustules, which are much larger than those of impetigo. They never contain colourless serum, and are always distinctly, and often distantly, separated from each other. The pustules are denominated by Willan, "phlyzacia," (one of the many unnecessary terms invented by that ingenious author for the purpose of rendering his definitions concise, but more calculated to confuse the student than to facilitate the study.)

In a very large majority of instances, if not universally, ecthyma is met with rather as an accidental accompaniment or sequela to other diseases, than as an idiopathic ailment. It often follows small-pox, (which the eruption very much resembles), measles, scarlatina, and other cutaneous affections; it usually complicates inveterate scabies, and occasionally syphiloid diseases. It is almost always indicative of debility and generally decayed health. It occasionally tends to ulceration, especially when it attacks the poor and wretched; and to this class of society the common form, ecthyma vulgare, especially belongs.

The treatment of ecthyma is resolvable into general principles, and must be directed first to the removal of its causes and complications. This done, it will disappear spontaneously. The writer has never had occasion to treat it as a disease per se; and he is decidedly of opinion, that in all cases some deviation from health is discoverable, which has only to be rectified. This deviation may escape notice, and often does. Dr. Green relates a case of chronic ecthyma in a young man "of a sanguine phlegmatic habit, and otherwise in good health," which yielded to smart doses of purgative medicines, repeated daily, with "some attention to regimen," together with the sulphur-fume bath. It is impossible to pronounce upon the conflicting evidence between the two remedial agents which such a case presents, although previous opinion may readily decide the question in each individual mind. Both the internal and external treatment might have had some influence; but it is to be regretted that men having such ample opportunities as Dr. Green has enjoyed, do not furnish the profession with a larger number of cases demonstrative of the success of one remedy at a time. If this had been done generally by all writers on the skin since Willan's time, we should not now have been learning the first principles of cutaneous therapeutics.

Herne Bay, Feb. 1844.

ON CARCINOMA

OF THE

MEMBRANES OF THE BRAIN,

PRODUCING SOFTENING AND ABSORPTION OF CEREBRAL SUBSTANCE OF THE LEFT HEMISPHERE.

By W. BIRD HERAPATH, B.M. Lond., Surgeon, Bristol.

Congestive apoplexy, with paralysis of the right side; rigid flexure of the right arm; coma existing during five days; gradual recovery, and restoration of the paralyzed limbs to their former powers; this state lasted from February until October, 1845.—Second attack came on gradually and steadily, increased in severity during October, November, and December, terminating fatally in February, 1846; vertigo, dimness of sight, loss of speech, paralysis of right side; no palsy of the muscles of expression or mastication; repeated attacks of coma, without appearance of compression or vascular action.

Mrs. Rebecca E—, aged sixty-six, called at my surgery, February 1, 1845, and complained of giddiness, accompanied by pain in the left side of the head, indistinct and misty vision, together with a slight numbness down the right side; the tongue was exceedingly foul, and covered with a thick, yellowish-white deposit; nausea existed, with frequent efforts to vomit; bowels were obstinately constipated; the pulse 80, soft, and moderately full. Attributing these symptoms to the evident derangement of the chylipoietic organs, I prescribed medicines calculated to restore them to a healthy condition, and found, the next day, that most of the symptoms were greatly relieved; however, she still complained of the numbness, but there was no loss of sensation, or apparent want of power in either extremity; both pupils were equally sensible to the stimulus of light. The treatment was continued during the three following days with evident relief, but as the

pain in the head was still undiminished, a blister was applied to the nape of the neck. Shortly afterwards, coma began to develop itself, and on the morning of the 6th, I was summoned in haste, as she had remained in a lethargic state for several hours. I now found a decided alteration in the whole train of symptoms; the pupils were dilated, and no longer contracted upon throwing the light of a candle upon them, even when it was brought as closely as possible to the eyes; she lay perfectly insensible, in a deep apoplectic torpor, and could not be roused in any way; the right arm was rigidly flexed, and although I applied considerable force, it was impossible to straighten it sufficiently to perform venesection; I therefore gave up the point, and took about twelve ounces of blood from a vein opened in her left arm. I then ordered a turpentine enema to be administered. In the evening, as she still remained in the same state, the bleeding was repeated to the same extent, and followed up by a similar enema, but without producing any change in the symptoms. The bowels were freely acted on by the enemata; the evacuations and urine were passed without the slightest manifestation of consciousness; the respiration was sometimes tranquil, but at others it was deeply stertorous; the act of deglutition was performed with difficulty; the left extremities were somewhat sensible to stimuli, but the right were unaffected by any application, and no mental consciousness was exhibited. This lethargic comatose state continued without change during the five following days. I strongly advocated the trial of the longitudinal section of the scalp, and the use of Pritchard's issue, and wished to cup her in the neck; but as her dissolution appeared inevitable, the friends were unwilling for anything else to be attempted. But, to our surprise and gratification, upon paying my customary visit on the sixth day, I found her remarkably improved; she had awakened from her lethargy, and evidently took an interest in the scenes around her: although incapable of answering the anxious inquiries of her friends, she evidently heard and comprehended them. The tongue was protruded in a direct line at my request; it was thickly covered with a dry, dark-brown coating; the teeth were plastered with sordes; and the breath most disgustingly offensive. When asked if she suffered pain, she applied her left hand to the posterior part of the left side of the head, about the situation of the parietal protuberance. The pupils were equally dilated, and perfectly sensible to the effect of light; the power of deglutition was restored, although difficulty was still experienced from the dryness of the tongue and fauces; the right side, though still paralyzed, had lost its rigidity. She now experienced pain when it was either pricked or pinched. A blister was again applied to the nape of the neck, and kept open for some days by poultices. The pain in the head gradually diminished, and under the use of salines and dilute mineral acids all the symptoms improved,—the tongue became clean, the appetite good, the breath free from smell; the speech slowly recovered itself: she gradually regained the use of the right side, and by the end of the month she had so far recovered strength as to be able to sit up, and even to support herself with the aid of a little assistance. On the 12th of March I discontinued my attendance, as she was restored to health, and she fulfilled her usual duties for several months afterwards without any difficulty.

Oct. 11th, 1845.—She called on me again, and then complained of darting pain in the left side of the face, head, and back of the neck; "it affected the sight of that eye also." As the gums were tender and somewhat inflamed, and no other cause was apparent, I imagined it to proceed from a decayed tooth, which I advised her to have extracted: this she consented to, but it did not give the expected relief. Two days afterwards her relatives requested me to see her, as the pain continued undiminished. "The pain took her senses from her," she was rendered "incapable of attending to anything;" "she did not know what she did or said;" she said she appeared "lost." There were no symptoms of paralysis left; she moved about the house as briskly as ever, and the numbness before complained of did not now exist. She experienced a difficulty in directing the right hand to any desired point, and several minutes would frequently elapse before she could find with it the object she was in search of; yet the hand and muscles of the arm all exercised their functions properly, the directive power alone seemed wanting. If she withdrew her attention from that hand, when she held anything in it, she would often let it fall unconsciously; yet sensation was equally good in both her hands and arms. At times, a sudden attack of vertigo would come on, and, unless supported, she would fall to the ground. During the next two months these symptoms became more and more aggravated; her speech began to fail her and her mind to wander:

although perfectly sensible of what she wished to say, she would frequently stop and hesitate as if at a loss for a word; then at others she would use one perfectly irrelevant to the subject, and, endeavouring to correct herself, would only make matters worse in the attempt. She would call things by their wrong names, and get strangely confused. Her right leg began to halt and totter under her; the right arm to hang almost powerless by her side; and in December last she became perfectly helpless; on one side, sensation, however, still remained. The faculty of speech was so much impaired that her friends could understand her only with great difficulty; yet she protruded the tongue in a direct line, and no apparent paralysis of its muscles existed. The face was never distorted, and all its muscles appeared to act properly; the pupils acted as they ought, and no deafness existed. Taking all these symptoms into consideration, together with the gradual and insidious nature of the malady, I gave a decidedly unfavourable prognosis as to the effect of treatment, and felt convinced that extensive disorganization of the brain was going on, but of what nature I could not determine. From the absence of all symptoms of pressure, I thought it probable that the left lateral hemisphere was undergoing a gradual and extensive softening in its substance, and that whatever course of treatment we might adopt, the case was hopeless, and must come to a fatal termination: I contented myself, therefore, in watching the progress of the case, and combating symptoms of deranged health as they arose.

Jan. 19th, 1846.—I was hastily summoned, "as a decided change had taken place." I found that she had been seized suddenly, whilst at tea in her chair, with deep apoplectic stertor and coma, with perfect insensibility; no stimuli would rouse her. I now felt confident that the change had arrived of which I had previously forewarned her friends; and although not sanguine as to the result, I advised cupping upon the back of the neck as the only admissible remedy. She shrank slightly at each application of the scarificator, but no other evidence of sensation was elicited; no material change followed the operation. A brisk purgative was then given; this operated well, but the same comatose state continued during the whole of the next two days; on the third, she opened her eyes and spoke faintly, and then slowly recovered herself so far as to comprehend what was said, but she never regained the power of conversing beyond the use of a few monosyllables. On the 30th of January, she relapsed again into the apoplectic lethargy; leeches were applied several times to her temples, but without any apparent benefit: she lingered until the first of February, when death gently closed the scene, exactly twelve months from the period of her first attack.

Having obtained permission to inspect the head, I found, upon endeavouring to remove the dura mater, that it was firmly adherent to the left cerebral hemisphere, (apparently:) the nature of the connexion at first appeared to be fibrin, effused between the two, but it turned out afterwards to be of a very different kind. A large tumour grew from the dura mater, at the left parietal protuberance, and forced itself into the substance of the brain, pushing aside the convolutions, and by its pressure occasioning their softening and absorption. The tumour was easily separated from the disorganized cerebral mass, even with the handle of the scalpel, and then it appeared modulated and semi-elastic, but soft and destructible: it was inclosed in a thin, serous membrane, proper to itself, continuous over its whole surface; in some places it was almost pulpy, in others, firm and semi-elastic; it was two and a half inches long, two inches broad, and one and a-half deep; its weight I afterwards ascertained to be two ounces. It existed in the middle and posterior lobes of the left hemisphere, and pushed itself into the descending corner of the lateral ventricle. By more careful dissection, it was shown to consist of two portions closely united by a narrow slender peduncle; one of these flat and circular, its diameter the size of half-a-crown and five-eighths of an inch thick in its centre, but dwindling off towards its edges; this portion was developed between the fibrous and serous layers of the dura mater: this was apparently the "fons et origo mali." At one spot it had pierced the arachnoid layer, and formed the peduncle before spoken of; but as its growth was gradual, it seems probable that (like a young brocoli head) it had commenced, and then forced itself downwards between the convolutions of the brain, carrying with it the cerebral layer of the arachnoid, which, as the tumour increased in size, became its investing tunic. The two layers of arachnoid then took on an inflammatory action, fibrin became effused, and thus formed the broad bond of union apparently existing between the dura mater and the brain, the true cerebral mass disappearing by absorption as the tumour increased in growth.

Upon making a horizontal and longitudinal section of the tumour developed in the brain, it was seen to present a mottled, variegated appearance, of different consistency: the harder portions were yellowish-white, and very like crude tubercle as it begins to soften; the more pulpy portions were not unlike softened brain, whilst here and there cellulo-fibrous membrane divided and inclosed the lobules of which the mass was formed. The upper or placental portion was much harder and denser; but its section also presented the nodulated, mottled appearance of the other. The whole character of the substance led me to imagine it to be a medullary carcinomatous growth, and this opinion was verified by a microscopic examination, which Mr. Wilson had the kindness to make for me with his excellent instrument. It distinctly exhibited the cellular nature of the mass, and most of the cells had that peculiar caudate character, considered as indicative of malignant structure. So distinctly marked was this peculiar character, that Mr. Wilson said he had never seen so beautiful a specimen of this variety of carcinoma.

Remarks.—A question of great interest arises from an attentive review of this case. How long had this tumour existed? The remarkably perfect recovery from the first attack of apoplexy would lead one to imagine that no very extensive disorganization of the brain existed at that period, and eight months elapsed before any symptoms of cerebral disturbance again happened. It scarcely appears possible for so large a tumour to have been present during the whole of this period without giving some sign of its existence. It is, perhaps, more probable that the harder portion of the tumour had existed for many months or even years, and that the first attack arose from some disturbance of the circulation in the encephalon, the growth of the more medullary portion having been the cause of her subsequent paralysis and apoplectic death. But even in this view of the case, difficulties occur. Could this immense mass have developed itself in the skull in the four months elapsing between the commencement of her second attack and her death, and could it have occasioned the absorption of the brain in this time? We well know this variety of carcinoma to have immense productive powers in the body; but in the brain it has not the same facilities for rapid development. The skull is already well and closely packed, and would offer considerable resistance to the growth of a foreign substance. Again, the symptoms of pressure on the brain were never strongly marked during the whole case, the paralytic symptoms from the first being different from those resulting from pressure; the facial muscles being quite unimpaired during the whole affection, and the pupils retaining their sensibility even to the last. We return to the former question—Could this mass have existed without any symptoms of its presence having been manifested? M. Carnael says, that "five-eighths of the individuals labouring under organic (carcinomatous) affections of the encephalon present paralytic symptoms: not unfrequently the paralysis disappears temporarily, and this, on several successive occasions, to become eventually a permanent and perfect state." Therefore we see that, much as it may astonish us, this tumour might have existed for months even, without having produced much cerebral inconvenience. The pain, perhaps, is deserving of remark; it might have been used in this case to diagnose the actual situation of the diseased mass, for the patient constantly placed her hand upon the parietal protuberance as the seat of her pain. However, it had frequently a neuralgic character, and would often shoot over the whole of the left side of the head, face, and back of the neck, and it was more than once considered to be neuralgic, and treated accordingly, before the paralytic symptoms developed themselves.

Old Market-street, Bristol, Feb. 1846.

REPORT OF A CASE OF POISONING FROM EATING MUSSELS, (MYTELUS EDULIS.)

By W. WHITE COOPER, Esq., F.R.C.S. Eng., London.

THE record of cases which bear upon disputed points is one of the most important means of throwing light upon those points; and I am therefore induced to publish a well-marked case, which has recently fallen under my observation, of poisoning from the eating of mussels. The mode in which these shell-fish act injuriously upon the human system is still veiled in mystery, and much difference of opinion exists concerning it. The notion entertained amongst the poorer classes, that they derive their deleterious qualities from the presence of copper, is, I believe, acknowledged to be without foundation. Dr. Christi-

son analyzed some of the mussels taken from the stomach of one of thirty people who were severely affected—two fatally so—in consequence of eating those shell-fish, at Leith, in 1827, without being able to detect a trace of copper; and others have met with no better success.

It has been asserted that the unwholesomeness of mussels is the consequence of their being stale. Dr. Christison and Dr. Combe state, that it certainly was not so in the cases which have fallen under their observation: the mussels taken from the stomach of a person who died from eating them, and which were examined by the former of these gentlemen, were perfectly fresh.

M. de Beunie, a physician practising at Antwerp, who has written upon this subject, states that mussels are deleterious in the months of May, June, and July only: my case is one of many which proves the contrary.

Disease in the fish has been suggested to account for the effects in question; but Dr. Christison was unable to determine this point, although there were appearances about the livers of some that he examined which differed from those of apparently wholesome fish.

It has been conjectured that the poisonous properties may be derived from a species of medusa, but I am not aware of any facts which bear out this idea. Certain parasites which at times infest mussels have also been supposed to render them unwholesome; and the notion has been entertained, that the ciliated branchiæ with which they are supplied are the irritating cause; but it has been proved that symptoms of poisoning have ensued even after the branchiæ had been most carefully removed.

Then, as to the question of idiosyncrasy, that some constitutions are peculiarly susceptible to the influence of certain articles of food is well known, and shell-fish seem to be peculiarly obnoxious in this respect. I am inclined to think, from what I have read upon the subject, and from the history of my own case, that many of the instances in which mussels prove pernicious may be referred to this head, although it may be a question whether there is not some other cause than mere idiosyncrasy to explain the symptoms of downright poisoning which at times present themselves.

In fine, the subject is one at present involved in obscurity, but well deserves further investigation, and I trust that the publication of this case will rouse a spirit of inquiry, and lead to the publication of other cases, and the record of interesting facts and observations bearing upon the points which require elucidation.

CASE.—At eleven o'clock on Saturday evening, the 14th of February, a gentleman, aged 20, was brought into my house, who was stated to have been taken suddenly ill half an hour previously. I was informed that he had been attacked with violent pain in the head, and extreme difficulty of breathing, immediately after having partaken of supper, which I was told had been bread and cheese, and pale ale in moderation. Upon examining him, I found his face deeply flushed, his lips purple, his eyes staring, and intensely congested, and the pupils dilated. His breathing was stertorous, and with great effort; pulse slow and labouring, and he seemed partially comatose. With these symptoms before me, I deemed it right to open a vein in the arm at once, and having done so, closely questioned a friend who accompanied him as to what he had been eating, for there was something about the case which struck me as being peculiar. After some hesitation, his friend said, that before partaking of the bread and cheese he had eaten some mussels, and that the symptoms came on about half an hour afterwards. Upon hearing this, I bound up the arm, and immediately administered an emetic of mustard and warm water, with three drachms of antimonial wine, as being the readiest procurable. It did not act immediately, but upon tickling his fauces, the effect was produced most fully, and the stomach completely emptied of a quantity of yellowish frothy matter. The vomiting was encouraged for some time by the drinking of warm water. About twenty minutes after the emetic had been administered, he began to complain of intense itching, and upon exposing his chest and arms, I found that they, as also his neck and face, were of a deep crimson hue, with the wheals so characteristic of urticaria scattered here and there. After the lapse of another five minutes, the spots became much more numerous, and the torment he suffered was excessive. His feet were cold, and he was unable to stand, his legs having no power in them. He complained of numbness about the face and throat, and his lips and face were much swollen, with an intense pricking sensation about the forehead and temples. The oppression at the chest still continuing, I gave him some sulphuric ether in water, which

afforded relief, and I then directed that he should be taken home and put to bed immediately. To have two purgative pills forthwith, and half an ounce of sulphate of magnesia in peppermint water the first thing in the morning.

I saw him at nine A.M. on Sunday, and found that he had passed a restless night, the oppression at the chest and itching continuing until three A.M., when he fell asleep; he complained of intense thirst and extreme debility; the tongue was bright-red at the tip and margins, and furred in the centre; his face was still flushed; pulse ninety, and soft; and skin moist. As he had not taken the sulphate of magnesia, I desired him to do so, and to drink freely of warm tea and barley-water. There was no particular tenderness about the abdomen; all symptoms of urticaria had disappeared, although the face was still swollen and flushed; the oppression at the chest was also much diminished. Saw him again at seven P.M.; he was then much better; the bowels had been freely relieved; he felt more comfortable in all respects, and had taken a basin of arrowroot with relish.

Feb. 16th.—Much better in every respect; has passed a very good night; his tongue nearly natural; pulse eighty, and rather feeble; countenance improved. Mentioned that each of the three friends who had partaken of the mussels had felt weight and oppression at the stomach, on the preceding night, but no further ill consequences.

17th.—Better, but very feeble. I prescribed two table-spoonfuls of a mixture containing sesquicarbonate of ammonia, with compound tincture of lavender, in camphor mixture, every six hours. It is unnecessary to continue a daily account of the progress of the case, but the recovery was slow, from the shock which the system seemed to have undergone.

Upon subsequently inquiring minutely into his sensations whilst the attack was on him, he stated, that for three hours he was perfectly blind, and seemed to have lost all his faculties; he had neither the power of thought nor of memory; the interior of his mouth, his head, and throat, all seemed swelled to twice their natural size, and his eyes felt as if they were starting out of their sockets. The difficulty of breathing he described to be, as if he were drawing his breath through a sponge; the oppression would get worse and worse, up to a certain point, approaching to suffocation; it would then stop, and for half a minute he felt better, then the oppression would come on again, and so it continued, with trifling intermissions, for between four and five hours. His lips felt exceedingly parched, and his saliva viscid and ropy: he did not feel particular uneasiness about the abdomen at any time, nor was there strangury or irritation about the urinary organs.

In addition to the above case, I think it may not be uninteresting to give a short account of some others which I have found recorded in various works.

Vancouver, in the second volume of his "Voyage of Discovery," mentions that several of his men were made very ill by eating roasted mussels for breakfast. An hour afterwards they were attacked with giddiness, sickness, and numbness of the face and extremities: they were desired to row quick in hopes of dissipating the poison. Upon reaching land, after three hours' rowing, one of them fell down; some water was heated but he could not swallow it, and died in half an hour. His lips had turned very black, and his extremities were much swollen. The other men excited vomiting and drank plentifully of hot water, and were fortunate enough to escape with their lives, although they were ill for some days.

Dr. G. M. Burrows, in an able article on the subject of "Fish Poison," in the third volume of the *London Medical Repository*, relates two fatal cases which had occurred in the practice of Mr. Rogers, of Gravesend.

Two young gentlemen, aged respectively nine and fourteen, ate some mussels taken from the bottom of a vessel, but which were dead and tainted. They did not, however, appear ill until the following day, Saturday, when they became sick in the afternoon, and threw up a great quantity of blackish matter. On Sunday they frequently vomited a dark-green fluid, and an eruption like nettle-rash covered the skin, accompanied by intolerable itching; great difficulty of breathing, and tormina, with intense thirst, and swelling of the abdomen and face, followed. The extremities gradually became cold and quite benumbed; the youngest was delirious on Sunday; then comatose, with frequent convulsive contortions of the whole body for some hours before his death: the elder was sensible to the last, and more tranquil: he died on the Monday evening. No post-mortem examination was allowed, and putrefaction took place with remarkable rapidity.

Dr. Combe, in an exceedingly interesting paper, in the twenty-ninth volume of the *Medical and Surgical Journal*, gives an account of about thirty cases which occurred at once at Leith, of poisoning from eating mussels, of which two were fatal. The chief symptoms observed were thirst and heat of the mouth, constriction of the throat, small and weak pulse, breathing natural; surface cool; sensation of tension about the jaws and throat, and numbness about the lips, extending down the arms, which were at times convulsed; and there was loss of power in the muscles of the legs. In some, the secretion of the urine was suspended, in others, it was passed with pain and effort. The mussels were partaken of in several ways, those eaten raw were most virulent in their action, none suffered any ill effects until after an hour or two had elapsed, and then the sensations were those of uneasiness rather than distress or pain, the other symptoms gradually setting in. The poisonous effects were not confined to the human race, as a dog and a cat died from eating some of the boiled mussels. These deleterious fish were all taken from a bar at the dock-gates, made of fir and clamped with iron.

Dr. Thomas, who writes from observation of the effects produced by poisonous fish in the West Indies, says that the face becomes flushed, and the eyes inflamed, attended with a burning heat and spasmodic twitches, which particularly affect the eyes, the sufferers complaining that they are ready to start from their sockets. The symptoms of the case which I have related, resembled, in the main, those which have been remarked in the published cases of poisoning from eating mussels which I have consulted; but it differed from them in several points. Paleness of the countenance seems to be usual; but in my case there was intense congestion and flushing, such as Dr. Thomas describes as accompanying the fish poison of the West Indies. There was muscular debility, the characteristic eruption, and the difficulty of breathing which has been frequently observed; but there was from the first a total absence of pain or uneasiness about the abdomen, nor was there the irritation of the urinary organs which had been remarked in other instances.

The number of mussels eaten exceeded fifty, and the symptoms commenced at the expiration of half an hour,—not of uneasiness about the stomach, but of dyspnoea and cerebral disturbance. Intense thirst was a prominent symptom. The feeling of debility was so excessive, the patient told me, that he lay and shed tears from sheer weakness on the following morning. This feebleness, and the tendency to dyspnoea hung about him for several days, and although naturally a strong robust young man, he has not yet regained his mental and bodily vigour.

Upon reviewing the case, and taking into consideration the peculiar symptoms exhibited, as well as the fact of the other three persons, who partook of the mussels as freely as my patient, having experienced no other ill effects than a fit of indigestion, (which a hearty meal of such food would, I imagine, be likely to excite in any person,) I am inclined to the opinion, that the effects produced are to be referred to some peculiar idiosyncrasy of his constitution rather than to any poisonous qualities inherent in the mussels themselves.

Tenterden-street, Hanover-square, Feb. 1846.

ON THE SUCCESSFUL TREATMENT OF OVARIAN DROPSY.

By WILLIAM ECCLES, Esq., Surgeon to the Royal Free Hospital, London.

I HAVE lately had a patient who has been subjected to Mr. Brown's treatment, and, in justice to that gentleman, I must say that I believe he has been successful in curing her. I mention it, briefly, at this time, because public clamour appears to be directed against his doctrines; and, moreover, in common fairness he ought himself to have the opportunity of stating the case, as doubtless he will, in detail.

The patient was a married lady, about thirty years of age, who had had two children and one miscarriage. She first consulted me in the spring of last year, having previously been under the judicious care of Mr. Knaggs, of Camden Town. When she presented herself to me she had considerable abdominal enlargement, general emaciation, and great depression of spirits. An alterative course of treatment was suggested and adopted, but without any beneficial effect. Dr. Blundell was consulted, as also, subsequently, was Dr. Henry Davies. The opinion of both these gentlemen was, that the disease was ovarian dropsy; but no special treatment was recommended.

In the beginning of December last I was requested to meet

Mr. Brown. His opinion was, that it was a case in which his mode of treatment would be successful. I confess I was somewhat sceptical upon this point; but in the absence of all experience of his plan, I could not so much as venture an opinion respecting it. The treatment, however, was forthwith commenced: mercurial frictions, diuretics, and tight bandaging of the abdomen with a flannel roller, were the means applied. In ten days ptalism was produced, and the size of the abdomen was reduced from thirty-four and a half to thirty-two inches. I am not satisfied, in my own mind, that this reduction in size resulted from diminution of the cyst, as Mr. Brown believes. I would rather attribute it to the absorption of the tissues caused by the salivation, and consequent loss of nutriment; these, however, are matters which may be passed over. Tapping was now performed, and nine pints and a half of fluid were drawn off: the abdomen was again very tightly bandaged, and the diuretic medicines continued.

The case, at this time, seems to be perfectly cured. The lady pronounces herself to be in better health than she has been in for years; she is, consequently, in high spirits, can walk about with ease, and is daily gaining flesh. I have said, the case seems to be perfectly cured; but I am not insensible that these are early days to arrive at such a conclusion. What I mean is, that at present there is not the slightest appearance of the re-accumulation of fluid. I shall watch the case narrowly, and if, at the end of six or twelve months, there should be any indication of a return of the disease, I will, if you will allow me, publish the fact in the pages of *THE LANCET*. I would beg leave, in conclusion, to recommend to my professional brethren the adoption of this mode of treating ovarian dropsy, so that the merits of the plan may be fairly tested. In any cases that may occur in my own practice I shall most assuredly have recourse to it, and I will trouble you with a faithful record of the results, feeling certain that your pages will always be open to the discussion of matters of so practical a nature.

Old Broad-street, Feb. 1846.

CASE OF TETANUS AND PARALYSIS.

By E. BASCOMB, Esq., Surgeon,

RESIDENT DURING TWENTY YEARS IN BRITISH GUIANA.

SARAH —, aged forty-six, a creole of British Guiana, coloured; occupation that of a cook; has hitherto been generally healthy; ten days or a fortnight ago, "joked,"* as she terms it, the sole, about the centre of her foot, with a nail from the hoop of a flour-barrel; beat it with a stick, which is usual among creole negroes, until the part became numb and the trifling bleeding stopped; tied it up with a piece of salted beef afterwards, and continued her usual occupation; felt some slight inconvenience from being obliged to step on her toes, but for the last two days had forgot all about it and walked well.

Sept. 10th, 1844.—Morning, eight o'clock. Awoke in the night, feeling a pain in the instep of the joked foot, and stiffness in the leg; now complains of stiffness about the jaws and rigidity all over the body, particularly along the spine and loins, —in fact, as though she had been sleeping out all night in the wet and open air; has taken a dose of purgative pills without effect, and rubbed the neck and face with Barbadoes tar, and tied up with flannel. Appears greatly excited; temperature natural; skin moist; tongue white and papillæ erect; thirst moderate; pulse 106, full, like a cable; urine scanty and turbid. Bled from arm to sixteen ounces. Croton oil, two drops; oil of spearmint, four drops; spirits of wine, one drachm; distilled water, half an ounce; sixty drops to be taken every hour until the bowels be opened; warm pediluvium for a quarter of an hour, and poultice. Five o'clock P.M.—Medicine all taken without effect; pulse about ninety, less full and softer than in the morning; has perspired freely; slight opisthotonos, occasionally painful, resting on the occiput and heels; when drawn backwards, abdominal muscles spasmodically contracted into lumps or knots, which gives excruciating suffering. Applied scarificator, and glasses nine in number, on each side of the spine, from the neck downwards, for the abstraction of eighteen ounces of blood; then along the course of the spinal column, a slip of leather two inches wide, with pitch edges to secure it, covered with empl. lyttæ, tartrate of antimony, and acetic acid; endeavoured to inject iced water up the rectum, but from the strictured state of that gut, the metal end was forced from the elastic tube. By means of a metal tube, four pounds of iced water, after much perseverance and difficulty, were forced up the intestinal tube. She fancied she felt the

* Stuck or punctured.

cold up to her throat; retained the injection for twenty minutes with much pain, when it came away, bringing with it a quantity of scybala; and enormous gusts of fetid gas; felt relieved. To take one-third of a grain of nitrate of silver in a spoonful of syrup every fifth hour. Twelve o'clock, night.—Feels greatly better; has dozed a little; perspires freely; opisthotonos occurred three times since evening visit; rumbling noise in the bowels. Injected, per anum, four pounds of iced water, which came away with wind, but no excrements; complains of blister on spine; pulse eighty-four. Continue the nitrate of silver; blistered surface to be dressed, and the iced enema to be repeated in three hours if sleep be not induced.

11th.—Morning: Slept four hours in the night; did not take the iced enema; says she feels greatly better this morning; slight spasm in the back once since the night; temperature natural; pulse 84; skin moist; blistered surface discharging and painful; complains of great prostration of strength; tongue coated with brown fur; tormina and flatulency of bowels. To take calomel, eight grains; Dover's powder, ten grains, in syrup; and three hours after, a table-spoonful of sulphate of magnesia, in a cup of weak warm ginger-tea; discontinue syrup of nitrate of silver. Noon: bowels have been freely moved; stools scybulous and dark, exhaling a peculiarly offensive odour; doing otherwise well. Friction by means of flesh-brush over the abdomen. Evening: going on well; complains of hunger. To have bread panada instead of barley-water; perspires freely; no spasm or pain, but feels sore as if she had been beaten; pulse eighty-four. To take Dover's powder, eight grains; calomel, three grains; rhubarb, six grains; with syrup.

12th.—Slept well during night; no return of spasm; complains of great weakness; feels sore all over; blistered surface painful; wishes something to eat. Blistered surface to be poulticed. To have chicken-tea and toast in small quantity.

13th.—From this date she continued steadily to convalesce, and was able to move about and do a little at the fireside on the 18th, having taken twelve grains of sulphate of quinine daily.

Observations.—With reference to the above case of tetanus, (from puncture,) having witnessed, in very many cases, the inutility of the usual mode of treatment by narcotics, mercurials, purgatives, &c., I was induced to try a course founded more on analogy, and the appearances so generally, on dissection, observed in the spinal column.

First, to relieve promptly spinal congestion by local depletion and revulsion; to soothe the nervous system by means of nitrate of silver, which I have for many years prescribed, with almost invariable success, in convulsions in children produced by teething, &c.; and, lastly, to unload the bowels by the sudden application of cold, so effectual in cases of colica pictonum—dry-bellyach—in the West Indies—in the form of an enema, at the same time relieving the spasmodic state of the abdominal muscles; the sedative effects of the cold being ultimately reflected back on the medulla spinalis.

Feb. 24th, 1832.—Capt. J——, an African, came to the colony when a lad; is a short, thick-set, muscular man, aged 64; formerly a boat captain, but from some irregularity of conduct has latterly acted as mate or second in command. Was employed far up the Essequibo river, collecting timbers &c. for building, in a creek overshadowed with foliage, and exposed, while at work, to incessant heavy rains; sleeping on the deck of the boat at night, in the wet and open air. Was seized with rheumatism on his return to the estate, and was treated for the same in the estates hospital for a month or six weeks. While convalescing from the attack of rheumatism, he suddenly lost the use of his lower extremities, then of his upper. For the last seven months has been paralyzed from the shoulders downwards, passing his faces and urine involuntarily. Cannot now raise his hands to his head or draw up his legs, but can slightly move his fingers and toes. Pulse feeble and 96; muscles flaccid; appetite bad; deglutition good; respiration natural, but hurried when talking; urine limpid, and of a light-straw colour; temperature of entire body below the natural standard; bowels sluggish, occasionally requiring the aid of purgatives; tongue coated with white fur, and rough; on attempting to put it out is drawn to the left side. Nothing on carefully examining the spinal column perceptibly wrong, save a pain on pressure over the fourth cervical vertebrae. Complains of pain in the head, extending now and then a little way down the neck; is totally helpless; does not sleep well; starts when dozing; has undergone a variety of treatment for the seven months he has been laid up without relief. Applied the scarificator, and four glasses, two on each side, in the neighbourhood of the pained vertebrae, to the abstraction

of fourteen ounces of blood. Friction to the entire spine with oil of turpentine, from below the scarified points to the sacrum, also the body and limbs, by means of a horse-hair glove. Body to be enveloped in flannel. Ordered the following:—Croton oil, two drops; oil of spearmint, four drops; white sugar, one drachm. Divide into three powders, and take one every second hour until the bowels be moved.

25th.—Says that his head is better; to use his own expression, his "head is not so full." Second dose of powders had operated; otherwise, as at last visit.

26th.—Much the same as yesterday; complains of pain in the head; pulse 86; temperature more natural; bowels not moved since the powders. Abstracted from the nape of the neck twelve ounces of blood, and applied to the part tartrate of antimony, the blister ointment, and acetic acid, in the form of a plaster; to take the remaining powder with croton oil.

28th.—Did not see the patient yesterday; he says, to-day, that his head is quite well; wants to walk; temperature increased; pulse more developed, and 84; powder opened the bowels; slept well during the night; keep the blistered surface on the neck discharging; continue friction, &c.

March 2nd.—Had not visited patient since the 28th, from my having to leave the district in which he resided. Continues, by his own account, to get better. Still paralyzed; complains of neck being very sore from blister; applied four moxas, two on each side along the spine, (not to blistering,) from below the blistered surface to the os sacrum, to which he was almost insensible, feeling but a little warmth. Continue friction over abdomen, extremities, &c.

4th.—Appetite good; temperature natural; bowels open; is now aware when his excrements and urine are passed, but cannot control their exit; applied four moxas as before, of which he is more sensible; induced perspiration; strychnine could not be obtained, and an alcoholic tincture of the nux vomica was ordered as a general tonic, in doses of ten drops, three times in the day.

5th, 6th, and 7th.—Applied four moxas each day, of which he was sensible, and complained of a tingling sensation in the toes and finger-ends; continued the drops; increased to fifteen drops.

9th.—Says that he feels stronger; can, in a trifling degree, draw up the arms and lower extremities; applied four moxas along the spine, which induced profuse perspiration, and caused the patient to roar out; he feels a crawling and excruciating pain down to the toes and finger-ends; the muscles trembling, as it were, during the application of the moxa, made violent attempts to avoid the application. Continued the tincture of the nux vomica, and the application of the moxa, every other day until the 22nd. At each application, complained of great agony along the arms to the finger-ends, and legs to the toes; and could he have had his own way, would not have suffered the moxabustion. From this date, the friction, warm clothing, and tincture of nux vomica, were persisted in, when he gradually became stronger, and began to use his limbs. Came to my residence in the city, where he remained six weeks, and returned perfectly well: he continued so for six years, when I lost sight of him.

Georgetown, British Guiana, 1882.

(Communicated to THE LANCET, February, 1846.)

MEDICAL SOCIETY OF LONDON.

MEETING OF FEBRUARY 9.

ACETATE OF LEAD IN DIARRHŒA.

DR. GOLDING BIRD had lately given the acetate of lead in a case of diarrhœa, the result of fever. The patient was a child ten years of age, and had become the subject of fever from depressing causes. Two of its brothers had died from the fever. The patient was admitted into Guy's Hospital, and eventually became the subject of diarrhœa, which had its origin, it was evident, in ulceration of some of the small glands of the ileum. The child was in a very depressed state, and had petechiæ on the skin and aphthæ in the mouth. Opiate injections, astringents, hot fomentations to the belly, and all the usual means of treatment, failed in arresting the disease. Under these circumstances he determined on giving the acetate of lead in two-grain doses, as recommended by some Dublin practitioners. That dose was accordingly ordered to be given after each motion, until the quantity taken should amount to a scruple, if such quantity were necessary. It was given in simple mucilage and syrup. After four doses had been administered, the diarrhœa was checked, and a figured motion passed. In a second attack, the disease was arrested

by the second dose. He had tried it also in diarrhoea supervening on a case of purpura, with the same good results. The lead acted on the pulse, which before was quick and vibratory, by rendering it fuller and slower.

Mr. HEADLAND believed that Dr. Graves had recommended the lead chiefly in cases of diarrhoea accompanied by tympanitis. Was there such tympanitis in Dr. Bird's case? Mr. Headland then made some remarks on the difficulty and importance of distinguishing at what exact period it was desirable to check the diarrhoea which accompanied or succeeded to fever, as it was so often a salutary effort of Nature to right herself, and terminate the disease. With respect to fever attended by an aphthous condition of the mouth, he had found much benefit from the use of the chlorate of potash.

Dr. THEOPHILUS THOMPSON related a case of diarrhoea supervening on chronic peritonitis in which there was diarrhoea attended with vomiting of a coffee-coloured fluid, and evidence of ulceration of the mucous membrane of the intestines. The acetate of lead, in grain doses, quickly arrested the diarrhoea, improved the pulse, and restored the patient to health.

Dr. G. BIRD remarked that there could be no question in his case of the presence of ulceration. The abdomen was flatulent. He had used chlorate of potash with much success in cases of gangrenous stomatitis.

SCIRRHUS OF THE THYMUS GLAND.

Dr. THOMPSON related the case of a woman, forty-one years of age, who having been subject to frequent attacks of bronchitis, one of which at length proved fatal; the physical signs in the last attack, in addition to those of bronchitis, being chiefly great dulness over the greater part of the chest and pericardium. After death, two or three pints of fluid were found in the pleura of the left side; the pericardium, which was half an inch thick, contained about a pint and a half of bloody serum, was adherent to a thickened pleura, and attached to a large body, which passed into the anterior mediastinum. This body proved to be the thymus gland, very much enlarged, consisting of cells containing fatty matter, and bearing the general character of a scirrhous tumour.

Mr. HILTON observed that it was very rare indeed to find the thymus gland at all at the age of forty. He had seen a case in which there was a general enlargement and consolidation of the cellular tissue of the anterior mediastinum, giving rise to somewhat of the same physical signs as in the case of the President, but in this instance, it was evident that the tumour did not consist of the thymus gland.

Dr. CHOWNE observed that the thymus gland was rarely found after the adult age. He had, however, seen one instance in which the gland was perfect in a young woman.

TREATMENT OF SPINA BIFIDA.

Mr. HILTON inquired whether members had found any plan of treatment of service in cases of spina bifida? He considered the plan which had lately been recommended, of adopting carefully adjusted pressure over the tumour, to be a dangerous practice.

Mr. ROBERTS believed that spina bifida was usually connected with hydrocephalus, and should therefore expect no benefit from the treatment alluded to.

Mr. DENDY reprobated the practice of pressure in spina bifida; meningitis might be the result of the proceeding, as pressure might be exerted on sharp points of the bony cavity. He had seen good done in these cases by carefully-conducted puncture. In three cases of hydrocephalus treated by puncture, idiocy had been the result.

FEBRUARY 16, 1846.

Dr. SCOTT ALISON read a paper on

ARTHRITIS OCCURRING IN THE COURSE OF PARALYSIS.

This form of arthritis had received little attention from physicians, and no notice of it was to be found in any of several standard works consulted for the purpose. It was confined to paralyzed parts, and did not extend to the healthy joints. The author defined arthritis to be inflammation of a joint.

The symptoms were, fullness, increase of temperature, and, in some instances, pain, or tenderness. The knee, the ankle, the wrist, the hand and foot, were the parts most frequently affected. Several cases of this form of disease had occurred in the writer's experience: two were related. A lady, aged forty-nine, who had long enjoyed perfect health, and had never suffered from any form of arthritic disease, was suddenly seized with hemiplegia. A few days after, swelling and increase of temperature of the wrist of the paralyzed side were observed, and, soon after, the knee and foot of the same side

swelled, and became somewhat painful. There was no oedema. There was slight rigidity of the paralyzed limbs. On inspection after death, the brain was found in a softened condition, and the pelvis of the kidney of the affected side was discovered full of small calculi of lithic acid.

A man, aged fifty-four, a house-painter, who had been subject to attacks of gout, was seized with hemiplegia. Soon after this seizure, the wrist, hand, and foot swelled, and became hot. The limbs were somewhat rigid. On inspection after death, the brain was found softened, and a large clot of blood was discovered in one of the lateral ventricles.

Dr. ALISON explained the occurrence of arthritis in the course of paralysis, by showing that the healthy relation between the living tissues and the materials of the blood was disturbed. Two morbid conditions gave rise to this disturbance—viz., a state of reduced vitality of the paralyzed parts, and the presence of exciting and noxious agents in the blood. The reduced vitality of paralyzed parts rendered them less able to resist the noxious action of excitants. In proof of this, various facts were referred to, and the author related two singular cases of the inflammatory red line of the gums following the use of mercury in paralysis of one side of the face, being strictly confined to the paralyzed side of the mouth. The paralyzed parts were, in fact, more delicate tests of poisons in the blood than parts in a state of health.

In proof of the presence of exciting agents in the blood, the gouty diathesis of the second case, and the lithic acid calculi in the pelvis of the kidney of the first case, were adduced; and it was maintained that much countenance in favour of this position was obtained from the fact that a large proportion of cases of paralysis was associated in an essential manner with the blood containing the materies morbi of gout and rheumatism, with the virus of syphilis, the exanthematous and contagious febrile diseases, and with blood containing various poisons taken into the system—such as lead and mercury; and others retained in the system by imperfect depuration—such as urea and uric acid.

Arthritis occurring in the course of paralysis was of importance, less on its own account than as illustrating the pathology of paralysis, and the influence of a diseased nervous system on the vital actions.

Dr. GOLDING BIRD regarded the association of paralysis with arthritis as much more common than the author supposed. He had seen many such cases at Guy's. He referred also to the occurrence of peripheral pains in various parts of the body as an occasional forerunner of paralysis, but of that arising more especially from ramollissement. These pains were sometimes apt to mislead the practitioner. What were called rheumatic pains were often the result of disease of the cerebro-spinal axis.

Dr. L. STEWART believed that Heberden had mentioned the connexion between paralysis and arthritis.

Mr. DENDY regarded the arthritis as the result of the low state of action to which the parts were reduced, and in consequence of which they could not resist the excitements which would prove innoxious in health.

Mr. HILTON thought in all these cases there must be something more than the mere paralysis to explain the production of the arthritis—that, in fact, there must be a gouty or rheumatic diathesis.

Dr. ALISON remarked, that he thought there was good evidence of the presence of disease of the blood in these cases. Arthritis, might, however, be independent of gouty or rheumatic diathesis. He instanced the arthritis which is occasionally consequent upon scarlet fever as proof of the assertion.

Dr. BENNETT remarked, that in these cases the arthritis might or might not be of the gouty character; it would depend on the diathesis. He made some remarks on a form of arthritis occurring in women—not in connexion with hysteria—of a sub-acute character, attended by little pain, swelling, or redness, but accompanied by well-marked evidence of disorder of the digestive functions, associated generally with disorder of the menstrual function. In these cases, colchicum was useless, but attention to the secretions, which might be righted by small doses of blue pill, ipecacuanha, and conium, followed by muriate of ammonia, was the best and most successful plan of treatment.

Mr. PILCHER considered the paper and discussion both pointed to the fact, that debility, from whatever cause, was an excitant of inflammation. It mattered little what was the original cause of the debility. It was not necessary to connect the inflammation with either a gouty or rheumatic diathesis, nor was it necessary that there should be a change in the constitution of the blood, for deficiency of nervous action was sufficient.

THE LANCET.

LONDON: SATURDAY, MARCH 7, 1846.

At the hour of going to press, no "official" announcement had been made by the Council of the College of Surgeons respecting the vote of censure which has been passed by them on the conduct of Mr. LAWRENCE. Consequently, the terms of the "resolution" in which the condemnation expressed by the Council was declared are unknown to the members of the College. The silence thus doggedly maintained regarding the insults offered to the members by Mr. LAWRENCE, makes it appear to the world that the offensive conduct of that person has been adopted by the aggregate body of the Council. Probably it is considered, in Lincoln's-inn-fields, that twelve thousand members of the College are not worthy of receiving an "official" communication from the governing body of their own institution.

It is understood that Mr. LAWRENCE has not yet tendered his resignation.

THE character of the monopoly which has been created and fostered in London by the Council of the College of Surgeons, acting, for many years, in their capacity as Surgeons of the London Hospitals, is tolerably well illustrated in the following paragraph, extracted from an advertisement, issued by the LONDON OPHTHALMIC HOSPITAL, which appeared in the daily papers of Wednesday last. Mr. SCOTT, one of the surgeons of that hospital, having resigned, the profession are here made acquainted with the kind of persons whom the by-laws of the hospital describe as *alone* qualified to fill the vacated situation.

"ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.

"By rule twenty-three, a candidate for the office of surgeon must be a *surgeon of a metropolitan hospital*, or have served an apprenticeship, or be, or have been, a demonstrator of anatomy at a *metropolitan hospital*.—Dated this 2nd day of March, 1846."

The members of the College being thus shut out from important offices in our public institutions, are then taunted with "not being *capable of acting as surgeons*." They are first *injured* by the Council, and then grossly insulted because they have been injured.

WITHOUT attributing to the disease, called SYPHILIS,—that direful plague of the human race,—the mysterious importance with which the more than quackish, or half-cracked followers of HAHNEMANN invest it,—following, in this respect, the erratic footsteps of their visionary master,—we cannot deny that the propagation of syphilis is one of the most potent causes of the deterioration of mankind, and one of the greatest evils, physical as well as moral, to which the human race is liable. Were the disease merely to afflict those persons who have exposed themselves to contagion in the haunts of vice, it might be considered merely a just punishment for moral depravity. But such is not the fact. The innocent victims of syphilis are infinitely more numerous than the guilty; for it is a disease which follows vice and crime down to "the third and fourth" generations; syphilis in the parents being, it is generally considered, one of the chief causes of scrofula, pulmonary consumption, and other fatal and distressing diseases in their children.

Under such circumstances, it will at least be admitted, that it is a question worthy of consideration, whether it may not be wise for a government to adopt measures to prevent the propagation of this malignant and destructive malady, with the humane object of protecting future generations from early decay and death. We are thus guarded in putting the question, because we are well aware that it is the general opinion in this country, that any interference with vicious pursuits, for sanatory purposes, is an indirect sanction of such practices, and is, therefore, to be condemned.

Acting on such views in this country, *syphilis* has been left to itself; it has exercised its ravages on multitudes of the population, unrestricted, uncontrolled. The result is, that in no part of the world, we believe, in accordance with the generally-received opinion of the profession, is there more syphilis, as compared with the population, than in Great Britain; and in scarcely any is the disease seen in a more virulent form. In no country, also, as a necessary corollary, are we likely to find its influence as a cause of consumption and scrofula, and of cachectic diseases in general, more fully developed; these dire affections, according to the philosophical idea of M. LUGOL, being destined to purify the human race from contaminated stock, and thus to prevent its continuous and final deterioration. The difficulty, however, which we should experience in establishing any kind of medical superintendence over the abandoned classes of society, and the moral objection which may be raised, with a certain appearance of correctness, to the marshalling of the vicious, even for general sanatory purposes, is perhaps a sufficient reason why no attempt of the kind has been made amongst us.

In various continental countries, on the contrary, the public authorities have considered it their bounden duty to endeavour, by every means in their power, to arrest the progress of a pestilence, the effects of which on society at large are so deplorable. In their philanthropic ardour, they have not allowed themselves to be arrested by the difficulties and objections to which we have alluded, but have boldly interfered with vicious habits for the humane purpose of protecting the morals and the health of the general population. Nor have their efforts, startling as it may appear, been unattended with success. In the large towns of France, where a vigilant scrutiny has been for some time exercised on women of abandoned character, *syphilis* is very much less common than it was previous to the adoption of these measures, and the intensity of its manifestation is also diminished. This is no doubt owing to a large proportion of the cases falling under the eye of medical men at the onset. But it is in BELGIUM that the authorities have been most active, that the principle of interference has been carried to the greatest extent, and that the most marked results have been obtained. It is more especially within the last three or four years that the attention of the Belgian government and municipal authorities has been directed to the prevention of the propagation of this disease. The measures adopted have been most ingenious, and have been so successful, that the malady has been nearly exterminated in the army,—in all other countries, a great focus of the syphilitic affections.

The sanatory measures which have been adopted in Belgium within the last few years, in order to diminish the ravages of syphilis, may be ascribed to the Belgian Royal Academy of Medicine. Previous to 1842, little or no attention was paid

to the subject, either by the municipal authorities or by government. At the latter end of that year, M. SEUTIN, one of the most influential members of the Academy, proposed that the learned body to which he belonged should formally request of the Minister of the Interior, to propose to the legislature the adoption of regulations *calculated to arrest the progress of the syphilitic disease*. A committee of the Academy, composed of five members, was named to investigate the subject, and after four months' labour, made a very able report through the medium of M. VLEMINCKX. In this report, the absolute necessity of enforcing the five following resolutions was strongly insisted upon:—

1st.—That all women publicly living by prostitution should be subjected to proper police regulations.

2ndly.—That no prostitute should be allowed to walk or stand in the streets.

3rdly.—That in all populous districts there should be one or more medical men, and a commissary, specially intrusted with the superintendence of prostitutes.

4thly.—That the communal (parish) authorities should have additional power to act against prostitutes in general.

5thly.—That all persons attacked with syphilitical disease should be admitted, without restriction or difficulty, into the public hospitals.

These resolutions were adopted by the Academy, after a lengthened discussion. The deliberations, however, had reference, not to the views contained in the report, which were unanimously approved, but to the propriety of the Academy taking the initiative in recommending government to interfere with the functions of the municipal authorities, those bodies not having been consulted on the subject. But the objection was, at last, over-ruled. The intervention of government, however, became unnecessary, the civil authorities at once applying to the Academy for advice and assistance, on hearing of the discussion that had taken place. The Committee was re-appointed, and entrusted with the drawing up a series of rules, embodying the foregoing propositions. The regulations framed by the Committee were at once carried into effect by the civil authorities. They are too voluminous to admit of being printed at length in this place. But their main features may be disclosed by stating that they carry into effect all the views contained in the previous report. Not only is an examination of all prostitutes, twice a week, by competent and well-remunerated medical functionaries, rendered imperative, and every possible precaution taken to ensure its being efficiently enforced, but, in addition, active measures are taken to ferret out every case of syphilis with a view to stop the propagation of the disease.

It is in this latter respect, more especially, that the measures adopted by the Belgian authorities differ from those pursued in France, and in other continental countries. Thus, the medical officers of the venereal hospitals, and of all other hospitals and dispensaries, are requested to ask of their venereal patients the names and addresses of the persons by whom they were infected. These are handed to the police, and when it is possible, that is, when the culprits are prostitutes, they are at once examined, and if found infected, taken to the hospital to be treated. These arbitrary measures, as may be easily supposed, are not susceptible of being carried to any great extent with ordinary patients in civil life, but in the army they have been enforced with the utmost rigour, and

with the most beneficial results. Whenever a soldier is attacked with syphilis, he is taken by a corporal or sergeant before the commissary of police, and obliged—and that before he can be received into the hospital or treated—to state by whom he was infected, or whom he suspects. This system is rigidly and successfully enforced, so that the source of contagion is generally discovered when the diseased person is a soldier. In order to induce the latter to reveal the name and address of the female through whom he suffers, various punishments which were formerly inflicted on them when so affected, such as the stoppage of pay, distinctive marks, &c., have been withdrawn, in favour of those who conform implicitly with the regulation. On the other hand, those who refuse are punished, as also others who delay reporting to their superior officers the fact of their suffering under the venereal disease.

These measures have been so successful, it appears, as regards the ARMY, that it does not exhibit now more than one hundred and thirty venereal cases, on a total of thirty thousand men. Moreover, the number would be even smaller, it appears, were it not that in two towns, Gard and Namur, the "sanatory police" has still to be satisfactorily established. At the same time that the frequency of syphilis has thus evidently diminished in the army, it is also considered to have become less frequent in private life, the number of cases applying for admission into the hospitals having much decreased.

The evident success which has attended the efforts thus made, during the last three years, has, it would seem, stimulated the Belgian authorities to make further exertions in the same direction, and it is confidently expected that the disease will, in the course of time, be reduced to the mere shadow of the previous terrible malady.

It is likewise apparent that France is on the point of following the example of Belgium, by endeavouring to render more perfect its police regulations.

We shall resume this important and interesting subject.

SINCE it was announced by the Government that the Medical Bills were abandoned, a conviction appears to have become prevalent amongst the profession that no well-founded hope of a successful legislation in medical affairs can be entertained, unless there be some general agreement as to the leading principles on which the proceedings of Parliament should be based.

This view of the question has been entertained in THE LANCET throughout the discussion. Often have we emphatically declared that no good Medical Bill would ever pass the legislature if it did not receive the hearty support of a large majority of the professional body.

Strenuous efforts ought to be made, at the present important crisis, to obtain from all the constituted medical authorities statements of their wants in medical legislation. In London, the respectable and influential COMMITTEE OF ASSOCIATED SURGEONS are prosecuting their labours, with a view to accomplish that object in the College of Surgeons of England. The PHYSICIANS ought to take similar steps with respect to their College, and the medical Faculties of the Universities and their graduates would show a prudent forethought by not being idle or inactive at such a juncture. If any of the Institutions have schemes to propose, their intentions cannot be too promptly published. On the contrary, if they have no

suggestions to offer, *that* fact cannot be too speedily known. Whatever may be their intentions or objects, a sense of honour and justice ought to induce the governing bodies no longer to parley or dally with a subject so vitally interesting to humanity and science as the question of medical legislation. Quackery is absolutely rampant, and the respectability, the utility, and almost the existence of the profession, (as a profession) are threatened.

The wise rejection, by the Minister, of the project for establishing a second Apothecaries' Hall, has cleared the ground which had previously been occupied by large numbers of faithful and able reformers, of an obstacle which was suddenly and unwittingly interposed between the intentions of the government and the views of the mass of the profession.

This difficulty having been removed by the determination of Sir JAMES GRAHAM no longer to regard such a project as exhibiting the opinions of any number of the scientific and influential members of the medical fraternity, there is every reason to believe that immediate measures will be adopted in this metropolis, for ascertaining what are really the views of the corporations and the profession generally, relative to the chief provisions of a Medical Bill.

While such a work is proceeding in London and England, ought the profession to remain idle and inactive in Edinburgh and Scotland, and Dublin and Ireland?

On this subject, we admonished the whole body of the profession last year, and now we repeat the admonition. Will they be content to see the medical profession entirely controlled and regulated in London? Will they be content to see only *one* "Council of Health," and that Council always sitting in London? That the registration ought to be conducted in three divisions, is, to our minds, a self-evident proposition, which admits of no refutation, and the force of it cannot be weakened, either by sophistry or argument. The cause of medical science and the protection of medical interests in Ireland and Scotland ought to be objects of as high interest with the legislature as are similar purposes in England. It is not just to either Ireland or Scotland to refuse to the profession in those countries a governing elective Council, and the system of registration for qualified practitioners, as perfectly and as effectively in all respects as any that can be adopted and enforced in England. Out of the Councils in the *three* countries, assuredly a supreme medical Council might be chosen; the departmental bodies being entrusted with the discharge of certain duties pertaining to their own institutions; but measures affecting the profession more extensively being subject to the control or rule of a chief or supreme Council. The registration in Scotland and Ireland could not, with justice to those countries, be conducted in London. This must be admitted.

We would, then, most earnestly impress on the medical corporations of Dublin and Edinburgh, and the members of the profession connected with them, the necessity of at once taking this subject into their most serious consideration. For the medical institutions and profession in each country they ought to devise such a system of government as would enable it most successfully to cultivate the science of medicine—to shield the community against the practices of the fraudulent and infamous quacks—to protect the legally-qualified medical practitioners in the exercise of their legal professional rights, and all just and honourable privileges—offering, at the

same time, to students of medicine, the best rules and regulations for their guidance and government in the progress of their studies.

By whom can such labours as these be so appropriately undertaken as by the governing bodies in Dublin and Edinburgh, and by the many eminent and able practitioners residing in those cities, and in the countries in which they are situated? Thoroughly acquainted with the state of things around them—with all the local conditions and interests—with the effects resulting from the operation of the existing laws—no other persons can be half so capable of executing such a task as themselves. Will they undertake it?—or will they decline to make a single combined effort for their own protection and future welfare? As they all admit that legislation is necessary, how can they, consistently with honour and justice, refuse to make a trifling effort to render it as perfect as possible?

Again, then, do we appeal to the authorities in Dublin and Ireland, and in Edinburgh and Scotland, to awaken from their lethargy, and to take immediate steps towards obtaining for such scheme, as they may deem best for their respective countries, the introduction into Parliament of a Bill which it is hoped will obtain the sanction of Her Majesty's government. Unsupported by the general approval of the profession, no Medical Bill is likely to be enacted into a law; but the rejection even of a *very good Bill* is certain, although approved by the profession generally, if the constituted medical authorities employ all their corporate and public and private influence in opposition to its enactment. Instructive and painful is the lesson which a lengthened experience has taught us on this subject. But on these accounts it is not the less valuable.

The leading matters which the governing bodies of the medical corporations in Ireland and Scotland should be called upon to consider and determine, would be, *the mode of electing their governing medical Councils, and the mode of selecting from them a member, or members, to act in a Supreme Council of Medicine.* The numbers of which the Council for Ireland and Scotland should be composed—the *qualifications* of the members of such Councils—whether they should be *paid* for their services, and *how* paid—the *powers* which should be confided to them—whether the system of *education* should be defined in the Bill, or whether it should be left to be controlled by the General, or by the National Councils—what plan of *registration* it would be best to adopt—whether all legally qualified practitioners should be registered as such, alphabetically, with a description of their qualifications appended to their names, or whether they should be registered, in classes, as PHYSICIANS, SURGEONS, ACCOUCHEURS, APOTHECARIES;—whether practitioners, on receiving their diplomas in *one* country, should be immediately entitled to *practise in another country*, without undergoing any other examination, or being required to pay any additional fees, and if not so entitled immediately, what time ought to elapse before the right should be acquired;—whether practitioners receiving their diplomas in *medicine* should be allowed to practice *surgery*, and *vice versa*;—whether *examinations* should be conducted at different institutions, or carried on by one Board, chosen by the different Colleges, and how the *governing bodies of the Colleges* should themselves be chosen;—whether graduates in *medicine* only, or *surgery* only, should be entitled to register, and, consequently, to practise, without receiving

a diploma from any College of Surgeons, or College of Physicians and Surgeons, or by a joint Board appointed by those Colleges;—whether registered practitioners should be entitled at law to recover charges for attendance and professional services, and for medicines supplied by them to their patients, and whether the dispensing of medicines to their patients should disentitle them to any professional privileges, and, if so, to specify them;—whether the public should be allowed to select candidates to fill public medical offices, indiscriminately, from the Register; or whether they should be compelled to choose from specific classes of practitioners; an accurate description of the diplomas, licences, and other testimonials which should entitle persons now practising in any of the departments of medicine, to be placed on the Register in the first instance; what should be the nature, the mode, and the amount of punishment inflicted on unregistered medical practitioners;—whether the sale of quack or secret medicines should be interdicted, and, if so, by what means; and whether the sale of secret medicines, by legally-qualified practitioners, should subject the sellers to the erasure of their names from the Register;—whether persons carrying on the business of chemists and druggists should be registered, and, if so, by whom;—whether unregistered chemists and druggists should be subjected to any penalty, and, if so, by whom, and what should be its nature and amount;—whether any restriction should be imposed to prevent the present dangerous indiscriminate sale of poisons, and, if so, of what description it should be;—whether, the five-years' apprenticeship clause of the Apothecaries Act being repealed, it would be advisable that pupils should be articulated for any term, such as one or two years, to qualified medical practitioners, and, if so, at what age such an articulated pupilage should commence;—whether there should be any preliminary examination of such pupils, what should be its nature, and by whom conducted; how many examinations should take place before the diploma is granted, and at what period they should be enforced; and whether there should be sessional examinations at the schools and certificates granted for them.

All these subjects have repeatedly been discussed in the Medical Associations of London, and recently they have engaged the attention of the Councils of our Colleges. The opinions of the profession in this country, with regard to the most important of them, are tolerably well known. Can suggestions of this description, embodying almost all the points of interest in medical education, government, and practice, be submitted to the notice of the profession in Ireland and Scotland, with a knowledge of the fact, that a Bill, relating to the entire subject, is to be introduced into Parliament during the present session, without exciting in those countries the gravest attention?

HOSPITAL REPORTS.

LONDON HOSPITAL.

A boy, aged about 14 years, riding on a gate, was capsized, and falling on his hands, produced a dislocation of the radius forwards.

WHEN brought to the hospital, the following were the symptoms:—The forearm was semiflexed and semiprone, attended with inability either to extend or flex it completely, or to render the hand more or less prone; a twisting and flattening of its upper part; and the head of the radius could be perceived in front of the elbow-joint, and opposite the upper part of the coronoid fossa of the humerus, and a depression in its normal

locality. On attempting forcibly to flex the forearm, a peculiar and very characteristic interruption was produced, by the head of the radius striking against the humerus, between its condyles. The tumefaction and pain were comparatively little.

Reduction.—Counter-extension being made from the lower part of the arm, the forearm was gradually extended from the hand, held as in shaking hands, supination being at the same time attempted, and assisted by pressure with the operator's thumb against the upper part of the radius: in a few seconds the dislocation was reduced. Flexion and extension could then be made by the patient himself, who was anxious to exhibit his recovery of power, and not the slightest reappearance of dislocation was perceived on his so doing.

The joint was then confined on an angular splint, and spirit lotion applied. Very little inflammation ensued, and in a month from the time of the accident he was discharged, the forearm at the time being strong, and perfectly symmetrical.

Remarks.—This case presents a remarkable contrast with the generality of those on record—first, as regards the reduction, which was so easily effected; and secondly, in the absence of that great tendency to re-dislocation, said so commonly to exist in these cases.

DREADNOUGHT HOSPITAL SHIP.

STRANGULATED HERNIA.—OPERATION.

CASE 1.—*PHILIP F*—, aged fifty-four, was admitted 24th December, 1845. Strangulation commenced on the morning of the 22nd. There has been hernia in the same situation for about twenty-five years, never entirely reducible, and on several occasions he has suffered temporary incarceration. No stool since the 21st; symptoms very urgent; severe pain across the navel; frequent vomiting; tenderness and pain in the tumour; pulse frequent; great anxiety and restlessness; loud complaining of the feeling of tension and fullness of abdomen. On the 20th he was attacked with pain and sickness; pain continued to increase so as to be very severe on the 22nd, when the vomiting became more frequent and the distress more urgent. Tumour large, rising above Poupart's ligament, which is indistinct, from a quantity of loose subcutaneous tissue. The swelling appears to consist of two equal portions. At the internal and inferior part the integument is reddened and tender to touch. A feeling of fluctuation is conveyed to the finger, as if this were a small glandular abscess situated on the hernial protrusion. The whole swelling is remarkably tense—no impulse is conveyed by coughing. After a very short trial of the taxis the operation was proceeded with. A long incision was made obliquely across the front of the tumour. The thick adipose tissue was carefully divided down to the sac, which was found to be separated into two equal portions, by a band of fibrous tissue, very distinct, when the sac was partly uncovered, much resembling a large bubo, consisting of two glands in a state of suppuration. The surface of the sac was smooth, tense, very thick, and firm; it could, however, be nipped up distinctly from the contained parts, except quite at the inferior and internal angle opposite to the external reddening. It was opened where it could be nipped, and the incision was carried across the whole length. The sac was found to be remarkably thick; the contents, on opening it, appeared to be omentum only, adhering slightly to the interior of the sac. On separating these attachments, and raising the omentum, there was discovered a knuckle of intestine, two inches in length. The colour of the intestine was a deep mottled purple, with the surface covered by a fibrinous exudation; no appearance of gangrene. The stricture was divided upwards and inwards, and the intestine was drawn down a little; as the portion immediately above the stricture was found uninjured, the knuckle was returned. The large, long portion of omentum, which was firmly adherent to the upper and outer part of the neck of the sac, was cast off. The divided surface did not yield a single drop of blood. In a former case, detailed in *THE LANCET*, 26th August, 1843, the omentum was left adherent, and perhaps occasioned vomiting, by bringing down the stomach. The two edges of the wound were brought together by suture, wet lint applied, and then a large sponge, retained by a bandage. Forty minims of Battley's solution. Catheter used; fomentation to the leg.

25th.—Passed an excellent night; bowels freely opened; quite comfortable; pulse 90, soft; skin natural.

29th.—Has gone on without any bad symptom. Towards evening he has had usually a good deal of flatus with acceleration of pulse. This disturbance was always relieved by two grains of opium, which he has taken nightly. He does not

now require it. The abdomen is free from pain or tenderness; natural to the feel. Copious suppuration at the wound; no pain; to eat rice-pudding.

30th.—Going on well. Passed scybala after enema. No pain either in the abdomen or wound. The inflammation has greatly subsided. Copious discharge.

February 4th.—Discharged. Cure uninterrupted.

ERYSIPELAS OF LEG AFTER PISTOL SHOT.

CASE 2.—James G.—, aged twenty-two, was brought in drunk, on Jan. 10th, 1846, having shot himself in the foot, while practising in a shooting-gallery at Greenwich. Not having full command over his finger, he had pulled the trigger in lifting the pistol. The ball entered the right foot, shattering the edge of the cuneiform bone, and lodged in the sole, immediately beneath the cuticle, whence it was easily extracted. It appeared to have divided the dorsalis pedis, as there was considerable hæmorrhage, readily, however, restrained by a piece of lint in the wound.

11th.—No pain, no inflammation; water dressing; a dose of house medicine.

12th.—No complaint; a loose fragment of bone removed by the lower wound.

13th.—Some inflammatory appearance in the foot; very little pain; no sign of suppuration; no disturbance.

14th.—A severe rigor last night, followed by sickness, and painful swelling of the femoral glands; red lines extending up the inner side of the leg and thigh; the foot rather more swelled, not tender nor painful; wounds were freely dilated; twenty-four leeches to the course of the lymphatics; constant hot fomentations to the foot, spirit lotion to the thigh; feels feverish; pulse 108.

15th.—Pain and swelling in the thigh diminished; less swelling of foot; slight purulent discharge from the wounds; fancies himself better, but looks ill; eighteen leeches.

16th.—Delirium; pale and sallow; swelling and pain diminished; one or two faint red streaks in front of the thigh; no hardness in the course of the absorbents; a diffuse red patch in the lower part of the leg, not continuous with the foot, which is very little swelled, with but little suppuration. Another fragment of bone removed from the upper wound. The bones injured appeared to be the two internal cuneiform. Pulse 130, small; fomentation. There was a free incision made down to the bone, but no pus. To have a draught every night, containing a grain of muriate of morphia, spirits of nitre, and camphor mixture.

17th.—Rather better, more collected; a drachm of laudanum instead of the morphia.

18th.—Much the same; no delirium; copious suppuration from foot.

20th.—Erysipelas of the whole limb; not much swelling. The fascia was divided, but there was no pus.

23rd.—Much worse; died.

25th.—The body was examined. The viscera were healthy; some slight adhesion of one lung, and a small collection of pus at the junction of the clavicle and sternum, not penetrating the pleura; the bone in one place was denuded of cartilage; there was pus in the interstices of the bones of the foot surrounding the wound. The ball had passed between the bones towards the front of the cuneiform, and on its inner side. There was no displacement; the edges only torn. All the bones in contact with the ball were slightly injured.

DISLOCATION OF THE FEMUR INTO THE FORAMEN OVALE.

REDUCTION.

CASE 3.—Robert H.—, aged thirty-seven, was admitted Nov. 20th, 1845; brought at night with his right leg dislocated. It was done an hour previously, by being struck by a crane, while standing with his legs apart. The symptoms very distinct. Abduction of thigh and aversion of knee; depression in the situation of the trochanter, with great pain on motion; a strong muscular man. He was placed in a hot bath, and bled to faintness; then laid on a mattress on the floor; a bandage was passed round the left side of the pelvis, and fixed at some distance opposite, and at right angles; a padded belt was passed round the dislocated limb, as high up as possible, and fixed to pulleys on the other side on a line with it. On tightening the pulleys, the knee was kept well down; the leg used as a lever, and reduction effected in about a minute.

Dec. 8th.—Discharged.

CASE OF INJURY INFLICTED ON THE CIRCUMFERENCE OF THE NERVOUS SYSTEM, WITH SOME SHOCK AT THE CENTRE.

CASE 4.—W. T. G.—, aged fifty-one, admitted Aug. 26th, 1845, was employed, the day before, bearing a cask in over the hatchway, and using great force: this was expended in preci-

pitating him into the hold, for the cask turned round. He lighted upon his head, which he struck against a barrel; and then his body was struck on the right side against some iron bars. One or two ribs were broken, and the shoulder severely hurt. He felt the pain of the blow, which bent the head forward and shook the vertebræ. He was picked up, and made to sit. He then went to Guy's Hospital, but was not taken in. Next day—it being the taking in—he went to St. Thomas's Hospital, where he was cupped on the side, and then sent to the Dreadnought Ship.* He was put to bed, and fomentations were employed. About a week after, the fracture was discovered, and a flannel roller employed. Kept his bed for three weeks. The roller confined the arm to the body so that the loss of power and sensation was not discovered. Afterwards, all the fingers were found to be numbed, and the arm could not be raised. The shoulder was leeches, and two belladonna plasters applied; a plaster of galbanum to the back, and afterwards blisters—one to the neck, and another, afterwards, to the loins.

Feb. 5.—For the last three weeks he has been subjected to the galvanic battery. In a few days he recovered sensation in his fingers, and then the use, partially. The little finger and inner side of the next were differently affected. Indeed, the affection of the nerves distributed on the right upper side of the body is partial. The man cannot lift the humerus, and complains of an occasional burning pain about the outline of the deltoid. There is no displacement of the vertebræ, and no pain felt on touch through the whole line. The nails stopped growing, but have now commenced again. Here the injury was inflicted on the termination of the nerves, producing loss of motion and sensation. There is no symptom of paraplegia, beyond a frequent desire to make water.

The galvanic apparatus is one of Weiss's, very portable and compact. The shock is very powerful, so as not to be borne for a minute by a healthy person.

COMPOUND FRACTURE OF THE THIGH, ATTENDED WITH ERYSIPELAS, AND FORMATION OF PUS; BENEFIT OF WINE IN LARGE QUANTITY.

CASE 5.—Peter C.—, aged thirty, was brought to the ship on the 28th of October, 1845, with the left thigh broken at the lower third, with a communicating wound, about half an inch long, on the inner and anterior aspect of the thigh, done two days ago. He had fallen into the engine-room of his vessel, and got entangled in the machinery.

The wound was dressed with lint, dipped in compound tincture of benzoin; bandage, and long splint; no pain, swelling, or inflammation occurring. The dressings were undisturbed, and the splint unremoved, till November 14th, when he complained of nausea and general uneasiness. On removing the bandages suppuration was found to have taken place to very little extent, the wound being filled with granulations, and the surrounding integument reddened; redness, diffuse and erysipelatous. Liston's splint, with the many-tailed bandage, was applied, so that the limb could be dressed without moving it. No retraction; very little union.

November 16th.—General erysipelas extending up and down the thigh; feels better in his general health; tongue with a dry streak; an ounce of wine every two hours.

18th.—Feels better; tongue dry, furred, and brown; erysipelas stationary at the anterior superior spinous process of ilium; inguinal glands slightly enlarged.

20th.—Erysipelas now increasing downwards over the knee. Much reduced himself; pulse 96, soft, undulating; tongue dry and brown; teeth covered with sordes; four stools. He has taken during the last twenty-four hours an ounce of wine every hour.

21st.—Discharge from wound continues healthy. No more erysipelas. Was attacked last night with vomiting after taking food. This has continued at intervals with purging; tongue not so much furred, moister at the edges; pulse soft, 94; sleeps a good deal.

22nd.—Wound going on well; some fresh erysipelas around it; the pulse and tongue indicate improvement; vomiting ceased; the ten-grain solution of silver caustic applied to the erysipelas, which, on the 23rd, had subsided. Wound and discharge healthy.

24th.—Wine, two ounces every two hours.

25th.—Four stools; complains of being light-headed; wine, two ounces every hour; opium, one and a half grains every night.

29th.—A large collection of matter was discovered in the calf of the leg, situated beneath the fascia, dividing the gas-

* It may be observed, that patients are kept a long time in the Dreadnought if there be any prospect of a return to health; though, generally, they are discharged as soon as cured.

trocnemius from soleus; matter very thin, fetid, and discoloured; two incisions made down to it; water-dressing changed twice a day.

December 1st.—Wound in the thigh nearly well; abscess in the calf discharges freely; pus healthy; a more stimulating dressing, and a small abscess in the groin, below Poupart's ligament.

March 6th.—He left the ship.

A MEDICAL BILL.

To the Editor of THE LANCET.

SIR,—In all the plans hitherto adopted for procuring a combination of professional men in the cause of medical reform, there have been so many difficulties to contend with, that I am not surprised at their failure. It is not, however, necessary for me now to enter into an explanation of my opinions. I have only to repeat a suggestion made to you some months back,—a suggestion to which you then kindly lent your aid. I again solicit your assistance, and should you approve of the accompanying address, which I, an humble member of the profession, offer to my brethren, you would oblige me by giving it a place in your journal.

I cannot but feel that if you present a Bill to the House having the objects you have described to us, and at the time carry your journal in your hand, containing the names of the bulk of the profession, a stronger or more forcible petition could not be presented to Parliament.

I am, Sir, your obedient servant,

Wandsworth, March, 1846.

JOHN GROVE.

AN ADDRESS TO THE MEDICAL PRACTITIONERS OF GREAT BRITAIN AND IRELAND.

By JOHN GROVE, M.R.C.S. Eng., L.S.A., Surgeon to the Wandsworth and Clapham Union.

GENTLEMEN,—Early, during this session, Mr. Wakley has told you he intends bringing in a bill for the better regulation of the practice of physic and surgery.

His scheme, of which you have been in possession for some months, offers you everything which an enlightened mind could suggest or desire. If this scheme should be enacted into law, you would be emancipated from the professional bondage under which you have so long laboured, you would shake off the trammels and ignominy of hybrids or professional traders, your legitimate position would be obtained, and you would stand before the world, as you ought, a body of upright, intelligent men, having a title worthy your calling, a character worthy your title.

He has told you his intentions some months since, and I doubt not he is ready to take upon himself the arduous task of framing, and bringing in, a bill for an object which has hitherto baffled all who have encountered it.

Let us, then, for once, be unanimous; let us give Mr. Wakley and his measure all the support and encouragement in our power.

To the elder members of the profession who have attained any eminence, I say, that very few of you have not, at some time or other, received your due meed of praise in the pages of THE LANCET. To the Editor of that journal, in many instances, much of your success is to be attributed; he has extolled you when you deserved praise; the public have by him been taught to seek your professional assistance, by having their attention directed to your particular attainments; and for this, I say, he deserves your gratitude and esteem.

To those who are rising into eminence, I say, he will award you your deserts, and assist you in your honourable and praiseworthy exertions; perhaps even he has already breathed on you the vitalizing influence of editorial encouragement.

To the junior members of the profession, I say, in Mr. Wakley you have a veteran for your champion, who knows the difficulties of his position and the obstacles he has to overcome. Place implicit confidence in his generalship and integrity, and be contented to serve in his ranks; he will not lead you to a defeat, but bring you off victorious, if you will but fight with him faithfully.

To all of you, collectively, I say,—when you have had professional differences, when you have been threatened with new oppressions, when you have wanted an advocate, Mr. Wakley has ever been your impartial friend, the steady upholder of your privileges, and your eloquent pleader.

I tell you, through him, your only representative in the House of Commons, you must make your 20,000 voices heard; through him alone will they reach the government in harmony.

If you speak thus, you will find listening ears, attentive minds, and willing hearts, for your cause. To this end let the Editor of THE LANCET, when he brings in his Bill, carry with him a petition, containing our legion of names, with the cause we advocate; no other matter should be inserted.

What petition, I ask, could possibly carry such weight as this? It would be a permanent record, moreover, of the unanimity, perseverance, and determination of medical men in 1846.

I have a firm conviction, if this were done, that our great medical reformer would soon be enabled to say that his labour had not been in vain.

ASSOCIATED SURGEONS, FREEMASONS' TAVERN.

WEDNESDAY, MARCH 4.

At a meeting of the committee,—G. BOTTOMLEY, Esq., of Croydon, in the chair,—the minutes of the former meeting having been read, the honorary secretary stated, that in compliance with the resolution passed at the last meeting, he had written to the gentlemen named as delegates to the council. That a request was then made, through the president, for an interview with the council, which was readily acceded to, and on the 30th of January the meeting took place, of which a report was given in THE LANCET of February 7th; that as yet no information had been given by the council as to the probability of their agreeing to the suggestions contained in that memorial, but that there was reason to think the subject was still under discussion.

The Secretary stated, that since the presentation of that memorial, one numerous signed* had been forwarded to the council from the surgeons of Bath, and that the surgeons of Gloucester had petitioned her Majesty to the same effect.

The Treasurer reported that he had received the following additional subscriptions to the funds of the Association, besides several smaller sums:—

Mr. Vallance, Brighton	£ 5 5 0
Mr. Edgar Barker	3 3 0
Mr. Erasmus Wilson	1 1 0
Mr. Kendrick	1 1 0
Mr. Duckworth Nelson	1 1 0

Resolved, That the best thanks of the Committee be presented to the above gentlemen for their liberal subscriptions.

The Secretary reported, that on applying to Mr. Churchill for the account due for advertisements inserted by the Association in THE LANCET, he had received a note, stating that the Editor had directed that no charge would be made for them.

Moved by Mr. ABRAHAM, seconded by Mr. LEWIS, and resolved,—That the best thanks of the Committee be presented to Mr. WAKLEY for his liberality in giving insertion to the several advertisements referred to free of expense.

A discussion then ensued as to the propriety of passing a resolution condemnatory of the late exhibition at the College, in the course of which both the Orator and his Oration were freely canvassed, and the Committee were unanimously of opinion, that as a vote of censure had already been passed by the Council on that indecent attack on the members of the College, and that as it is with the Council as a body that this Association has alone anything to do, it would not be desirable that any formal notice should be taken of the subject by this Committee.

The question was then mooted, whether it would be desirable that the Committee should take part in the endeavour to establish a Faculty of Medicine, as proposed by some other of the Medical Associations; but it was generally felt that as this Association had been instituted expressly for the purpose of endeavouring to obtain for the Members of the College of Surgeons enfranchisement in that institution, the Committee would not be justified in taking part in any attempt which might interfere with that object.

The Committee separated at a late hour.

THE BRISTOL MEDICAL SCHOOL.

To the Editor of THE LANCET.

SIR,—The points at issue between the Bristol Medical School and myself are few, but they each require a straightforward reply. The Committee "express surprise, &c.," I contend, not only that I have a right, but that it is my duty, to prefer a charge upon the authority of my pupil. My professional brethren in this city look with very great interest to

* We will print this document in the next LANCET.—ED.

the settlement of this question, and they also wonder how the faculty can excuse the denial contained in their letter of Dec. 22nd, which was positive and without any qualification; that denial has not been withdrawn, so that at present I may, from my renewal of the charge, be supposed to have committed a wilful and deliberate falsehood.—I therefore call upon them, as men of honour, either to withdraw their denial, or otherwise to confirm it by proof taken from their own books: should they fail to do so, they must necessarily place themselves under that stigma which at present attaches to me. The animus exhibited in Mr. Prichard's letter is exceedingly amusing. When I sent my first letter to the school, charging the lecturers with the omission of two lectures, with their dates, they turned to the register to see if my pupil had been regular in his attendance. In the same book they might have noticed their own omissions, but they did not wish to see them. When they had found what they wanted, they then "believed my allegation to be unwarranted." Such an attempt to injure that pupil in the eyes of the public is indeed mean. In justice to him I will state, that his certificates for the past two years run thus:—seven courses of lectures, very diligently attended; three diligently attended, and two attended.

I am, Sir, your obedient servant,
St. James's-square, Bristol, March, 1846. J. G. LANSDOWN.

THE "RENEGADE ORATOR."

Among the numerous letters we have received on the subject of the flagrant "Oration" has been one from which we extract the following passage:—

"If the ground on which the Hunterian Oration is delivered be not hallowed, the occasion ought at least to have been so. Amidst all the differences of the profession it formed a little oasis, wherein, whatever their opinions might otherwise have been, men could meet in the enjoyment of common sentiments of united feelings; and all alike join in admiration of the genius, and gratitude for the labours, of John Hunter.

The place and the occasion has been desecrated by the delivery of one of the very worst Orations, as such, that I ever perused;—by the revival of excitement, which was gradually subsiding into something like patient consideration of our grievances, and by insult and abuse, so coarse and ungentlemanly, as to be, I should think, wholly unexampled. It may be proper, perhaps, to wait a little to see how the Council will dispose of a case so disgracefully special."

THE OUTLAWRY OF SURGEONS.

To the Editor of THE LANCET.

SIR,—You have not yet sufficiently noticed a certain proposition of the Council of the Royal College of Surgeons of England: if it were a harmless display of their vanity and folly, it certainly would not deserve to be mentioned in your valuable publication, and might safely be left, like other simple absurdities, to be laughed at. I allude to the new-fangled project that Fellows of the College shall not be enabled to recover fees for surgery and surgical attendances. Now this is an unbusiness-like, and would prove an injurious by-law, as the unprincipled part of society will thereby obtain another advantage over their professional attendants, of which they possess too many already.

Now we can suppose this by-law to be made with no other notion than the ridiculous one of elevating themselves and their newly-made fellows to the imaginary rank of physicians: but, although between physicians and the public the established custom of receiving fees is a proper one, yet it cannot so well apply to surgeons, as it will manifestly appear, on a little consideration, that the circumstances under which the attendances of the two are required, do in reality differ as much as the services rendered. When a general practitioner is in attendance, the caprice or vanity of some of the patient's friends may induce them to urge a physician being "called in;" and except when the practitioner himself is anxious for such a step, it is almost a voluntary act on their part. But with regard to surgical services, (especially the purely surgical services on which the Council plume themselves,) the case is widely different. In the majority of instances a surgeon is sent for when some bodily injury has been sustained—when surgical assistance must instantly be had—and, notwithstanding the apparent good circumstances of the patient, he may be one of those unprincipled scamps who live by cheating all they can, in what this sort of people call "keeping up their respectability;" who, in fact, pay as few bills as possible, and

their medical man's more rarely, if at all, than any others: the accident has occurred, according to their ordinary talk, "at really the most unfortunate time possible," and for a very good reason no fees are offered to the Fellow who, in the alarm and hurry, has been summoned to attend: so he continues for weeks, and perhaps for months, in some or other such labour and work as follow: strapping, plastering, bandaging, splinting, or bleeding, leeching, fomenting, poulticing, artery-compressing, blood-staunching, lint-dosseling, flesh-cutting, hair-clipping, skin-sewing, joint-reducing, limb-extending, bone-setting, sawing, or clipping, with various other manual operations, besides prescribing; and after all this the Fellow is not to have the power of legally enforcing payment as heretofore! He may be, and doubtless will be, choused out of his hardly-earned recompense by the absurd regulation of his own College! Civilly, and with polite excuses at first; but rely upon it, that the equally civil and polite requests of the pure surgeon for payment, will be met, at last, with jars and exultations.

It is also much to be regretted, Mr. Editor, that these "doings" have not been without their effect, reverentially be it spoken, in another place. It is said that the Master and Court of Assistants of the Worshipful Company of the Barber Surgeons have been thereby excited to a rather vexatious display of rivalry; boasting, and with truth, that their Charter was granted them by the same many-wived monarch who conferred such valuable privileges on the Royal College of Physicians; and in imitation of their quondam brethren, the now Royal College of Surgeons of England, they intend, also, to apply for an amplification of their Charter, that they may be styled, henceforth, the Royal Company of Barber Surgeons of all England,—that they may constitute themselves and their hangers-on, and two or three hundred smart curly-headed young fellows just out of their apprenticeship, whom they may please to nominate, into a sort of aristocracy, to be called "Pure Barber Surgeons," who are to be distinguished from the commonalty, who are pediculi and porrigo, and sell perfumes and crystallized pomatum, and with respect to whom there shall be also a distinguishing regulation, that they shall receive the fees for hair cutting and powdering, curling, and dressing, together with shaving, &c., instant, and that none of them shall be able to recover charge for purely tonsorial services.

Jan. 1846.

ARISTOGENES.

THE BRISTOL ASSOCIATION OF SURGEONS.

THE MEMORIAL from this Association, forwarded to Messrs. MILES, BERKELEY, and WAKLEY, for presentation to Sir JAMES GRAHAM, has been received. Sir JAMES has appointed this day, Saturday, March 7th, for seeing the deputation and accepting the Memorial. This important document has been signed by nearly one thousand members of the College of Surgeons.

NEWS OF THE WEEK.

INSANITY AND QUACKERY.—Who can expect that imposture and quackery will meet the proper punishment of their sins, when such insane puffs as the following, extracted from the advertising columns of *The Times*, of Jan. 17th, are allowed space in influential public journals? How extravagant is the reliance which the quacks place on the gullibility of the English public, when such an absurdity is expected to find geese amongst them for its authors to pluck:—

THE ACKERLEIAN PURIFICATION of the BONES, as liquifying the chilled marrow by flame-light electricity, causing reflow of joint-oil lubrication, for stiffened joints, ossific gout, rheumatism, cancer'os' and ulcer'os' contractions, without confinement or alteration of diet. Sun-like expanding, as in plant animal physiology, the nervous fibrils—these respirative tubes being incorporeal for aereal circulation, giving cartilagen'os' expansion for sleep.—5, S— street, Piccadilly. Consultations, 6 to 8 a. m. and 11 to 1 p. m.

WILLIAM LAWRENCE.—The bust of this person, which had for some time previously occupied a very prominent position in the library of the Royal Medical and Chirurgical Society, was, previously to the anniversary meeting on Monday last, removed and taken out of sight of the members. This act of the Council of the Society was spoken of as indicating a proper respect for their constituents by many of the gentlemen present.

GUY'S HOSPITAL DINNER.—The annual dinner of the gentlemen educated at Guy's Hospital, and their friends, was held, on Tuesday last, at the London Tavern. Mr. Cock presided. Upwards of one hundred and fifty gentlemen sat down to a most excellent dinner, the arrangements of which had been confided to Dr. Lever. Dr. Paris, as President of the College of Physicians, Mr. Samuel Cooper, as President of the College of Surgeons, and Mr. Bacot, as Master of the Society of Apothecaries, were present as visitors. After the usual loyal toasts, and those more immediately connected with the hospital, the College of Physicians, in connexion with its President, was given, and drank with much applause. Dr. Paris, in returning thanks, alluded to the present disjointed and unhappy condition of the profession, and stated his belief that disagreement among the various branches of the profession was calculated to do serious injury to all connected with it. He trusted that the differences at present prevailing would soon be adjusted. Dr. Babington, who rose to propose the next toast, was received with much enthusiasm; but as soon as it was known that the toast was the College of Surgeons and its President, there was, for a few minutes, a strong demonstration of disapprobation, with a silence upon the part of those who felt that a convivial meeting was not the place in which to evince feelings of a hostile character. As soon as Dr. Babington obtained a hearing, he reminded the gentlemen present that this was not a political meeting, but one for conviviality and enjoyment; the stewards did not invite the President of the College to be received in that manner. He reminded the guests that there was scarcely a surgeon or a pupil who was not indebted to Mr. Samuel Cooper,—for who had not derived instruction from the "Surgical Dictionary!" This allusion to the personal character of Mr. Cooper as an author was received with much applause. In rising to reply to the toast, Mr. Cooper assured the gentlemen present, that he for one had always been on the liberal side in the Council: he was gratified to inform them, that the liberal members of that body were increasing in number, and that he believed and trusted that arrangements would soon be made, by which the discontent which at present prevailed among the members of the College would be removed. (Cheers.) The Society of Apothecaries was given, in conjunction with the Master, Mr. Bacot, and the toast was received with considerable applause. In his speech on returning thanks, Mr. Bacot informed the assembly that the Worshipful Society was fully aware that the Act of 1815 was not consistent with the wants of 1846; they knew that the five-years' apprenticeship clause was unjust and absurd. In regard to lectures, he believed that if the regulation was made that anatomy should be attended first and midwifery last, it was of little moment how or where the pupil got the information which qualified him for passing his examination. He assured gentlemen that the Society was by no means anxious to give up their power; and if they did, they were desirous that it should be to those who could carry out liberal views in regard to the profession. He concluded a speech, in which he alluded to his appointment as Inspector of Anatomy, and his resignation of Examiner in Surgery to the University of London, amid much applause, and almost immediately after left the room. The toasts in reference to the medical officers and Chaplain of the hospital were drank with much enthusiasm, and the conviviality was kept up to a late hour. All the arrangements were excellent.

APOTHECARIES' HALL, LONDON.

Names of gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, 26th February, 1846:—Charles Henry Dunhill, Pontefract, Yorkshire; William Henry Parsey, Chelsea; James Mackie, Heighington, Durham.

CORRESPONDENTS.

An Old Friend, (Barnstaple).—It is not illegal for a surgeon to write a recipe. He might even legally write a recipe without being a physician, surgeon, or apothecary. A student must have been engaged six years before he can be admitted to examination.

Medicus.—An examination would be necessary. The fee is 17l. 9s.—the requirements for education examination, the same as those for licentiates.

Mr. Hunt.—We regret that there should have been any delay in the publication of his papers. Mr. H. will find one of them in the present number of *THE LANCET*; the others will be published shortly.

Mr. J. B. Bryant, of Bridge Row, Lambeth, asks whether there might not be a meeting of general practitioners called, for the purpose of passing

a resolution of refusal to meet Mr. Lawrence in consultation. It is quite natural that the suggestion should be made by thousands of the members of the College; and the members would be lost to all sense of proper feeling, if they were not animated by a spirit of just resentment towards Mr. Lawrence for the gross insult which he has directed against them. The calumniator is so fallen in professional estimation, that his conduct is not of sufficient importance to be made the chief business of a public meeting. In the individual resolves of the members of the profession, the libeller of his brethren will find, unless we are much deceived, an adequate measure of punishment.

G. A. ought to consult a respectable surgeon. Nearly all the works which have been published on the subject are the productions of extortionate and fraudulent quacks.

The same answer will apply to T.

A Subscriber to The Lancet.—Yes; he is eligible. The regulations were published in *THE LANCET*, in April, 1842.

Dr. J. A. Wilson (Dover Street) shall receive a private note respecting his communication.

At which of the medical societies was the paper on Galvanism read?—This question is proposed to our correspondent at Pentonville.

R. R.—If you place yourself in the hands of a quack, your pocket will be plundered, and your constitution ruined. The work in question is not regarded as the production of a qualified medical practitioner. Consult a respectable surgeon.

SIR,—The Mr. F. C. Ladbury, "Surgeon," &c., Wednesbury, whom you mention, in *THE LANCET* of Feb. 28, as certifying to some quack medicine, is a druggist, *et preterea nihil*. I enclose my name and address in confidence, and am, Sir, yours respectfully,—DELTA.

We could discover in the bill headed, "Tunbridge Wells," "Chalybeate Waters," &c., no reason why the correspondent who sent it considered that the document should be noticed in our columns.

The printers could not read the manuscript of *Pharynx*. It is not sufficient that compositors should be enabled to guess at the subject of a communication. Every word should be written legibly.

Poisoning by Prussic Acid.—Mr. J. H. Horne refers G. C. H. to "Christison on Poisons," for an account of the trial of Freeman for the murder of Judith Baaswell. Fortunately for Freeman, (he adds,) the trial took place in the year 1829, instead of 1846.

The "new and important invention," mentioned by Dr. Silvestri, being a patented process, the account of it can only appear in our advertisement columns.

To the Editor.—SIR: May I be permitted to ask, through the medium of your columns, the proportion of *argent. nitrat.* used in the *ung. arg. nitr.* in cases of blennorrhagia? It is a remedy often mentioned by various writers; but no one states the strength at which it ought to be employed, and it is not to be found in any Pharmacopoeia. In irritable strictures of the urethra, I have on two occasions found the powdered caustic mixed with liquefied white wax, in the proportion of ten grains to half a drachm of the wax, and a piece of this, when cool, inserted into the orifice of a gum catheter; that is, one of the old-fashioned ones, what may be termed a single eye, of very great advantage. Can any of your readers inform me whether they have tried this plan, and what the results have been? I believe it would be useful in cases of partial stricture from indurated glands, or enlarged lacunae. Your obedient servant, A. P. I. Mar. 2.

The letter of Dr. Locock will appear in the next number of *THE LANCET*.

The note of Dr. T. H. Barker, (Bedford,) was not incorrectly addressed, if it was sent to the gentleman he has named; but no such communication has been received, either in Bedford-square or at *THE LANCET* office, in Princes-street. If he will take the trouble to write again, his letter shall be attended to.

If *One of the Insulted* had subscribed his name for publication, his note should have been inserted. But it is evident that such a declaration as it contains would fall feebly and uselessly from the pen of an anonymous writer. We hope, however, that our correspondent will act upon his intention, and personally influence his neighbouring brother practitioners to follow his example.

An Apprentice.—It is the duty of the master to treat his apprentices as persons who are to be members of a liberal profession. He ought, occasionally, to take them to his patients, and explain the cases and the principles upon which the remedies are employed. Moreover, it is essential to their mutual advantage that kindly feelings should exist between the instructor and the instructed.

The paper of Mr. BUTLER LANE, (Ewell,) shall be published.

A Subscriber.—On referring, he will find that, since the 3rd of January, there have been two supplemental numbers of *THE LANCET*, containing forty pages each; the regular numbers, as he is aware, consist of thirty-two pages each. The existing arrangement, by which advertisements are excluded from the bound volumes, renders it necessary that the advertisements should always consist of an equal number of pages—as four, six, eight, &c. No additional charge is made for the supplement.

Communications have been received from—Mr. W. Jones, (London); Mr. Stokes, (London); Mr. Forsyth; a General Practitioner; Mr. Henry Jones, (Bristol); Dr. John Mayne, (Edinburgh); Dr. Nicholson, (Lincoln); Mr. Thomas Inskip; C. E. B.; a Surgeon, (Portsmouth); Mr. Thompson; an Insulted General Practitioner; Mr. Hilton; Mr. W. Bovill, (Brighton.)

CLINICAL LECTURES

ON THE

PRINCIPAL FORMS OF INSANITY,

DELIVERED IN THE MIDDLESEX LUNATIC-ASYLUM
AT HANWELL.

BY JOHN CONOLLY, M.D.,

PHYSICIAN TO THE ASYLUM.

LECTURE XII.

Treatment of insanity complicated with general paralysis.—Remarks on the impending alterations in the disposal of incurable lunatics; and on the restraint system.

THE lecture last delivered to you was devoted to a description of insanity complicated with general paralysis. As you have again this morning seen and conversed with several patients labouring under this complication, your own observation must have left you sufficiently impressed with its peculiar features to render it unnecessary for me to remind you of them. I pass on, therefore, to the subject of the treatment proper in these cases.

The treatment of a malady which there is so much reason to consider incurable in all its stages, can, of course, be only of a palliative character. What is doubtless true of many diseases is especially true of most of the maladies affecting the mind,—they are but the beginning of death. Some portion of the nervous system has had its vitality impaired beyond the possibility of restoration. The first infirmity may seem slight, but it is the first step of an inevitable decline. The consequences may be mitigated, and the progress of the disease for a time retarded, but the life of the part which has sustained the lesion cannot be renewed.

M. Bayle, being of opinion that the character of this combination of insanity with general paralysis was in its commencement acute—an opinion which he believed to be supported by the results found on examination after death,—considered that it demanded active measures. I believe the conclusion to be erroneous, and I am convinced that the practice founded on it would be dangerous. M. Calmeil advised bleeding in certain cases; but I am quite satisfied that bleeding would, in the majority of cases, hasten the downward progress and the fatal event, and I doubt its being serviceable in any case of this kind, in any stage. It does not seem to me that M. Calmeil's cases show the general good effects of it. There is no evidence of acute disorder in the first stages of the malady, and when acute symptoms come on in later stages, active treatment is quite inadmissible. In every case the mental malady seems to begin insidiously. A man goes on performing his ordinary duties, and merely shows a slight change in his conversation, becoming paradoxical and maintaining arguments of which the absurdity would before have been evident to him. To this slight change succeeds some inaccuracy in matters of business, and then, perhaps, extravagance in expense, or imprudence in speculations ensue. In some cases an epileptiform fit marks this part of the progress; in many no such fit occurs: but ideas of grandeur and wealth are found to prevail, and the speech becomes slightly affected. One cannot imagine bloodletting indicated in any part of this progress, which seems to be that of some slowly supervening change in the brain. It may be chronic irritation, sub-inflammation, interstitial deposition; but it is not an acute disease. A slow disorganizing process is set up, which active measures have no imaginable tendency to check. A flushed face, a full and heavy eye, a body apparently well nourished, and an excited manner of talking, must not deceive you into the belief that the patient can bear the free loss of blood. His weak pulse, his flaccid muscles, his feeble gait, the vague expression of his countenance, and his want of all sustained energy, are not indications of a state in which reduction is required. In all the cases in which I have heard of its being resorted to, the evidence of its effects was unfavourable. In the only two cases in which I have myself known a full bleeding practised, in consequence of violent epileptiform paroxysms coming on, with a threatening of apoplexy, the patients were at once reduced to a condition of great debility of body and total imbecility of mind, and they never recovered from this state. In one, that of a man in the prime of life, and apparently of full habit, it was very long before the power of readily replying to any question was restored; he never spoke rationally afterwards; delusions sprang up in his mind which had not

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existed before; in a few months a short reaction followed, with a kind of fatuous vivacity; on this state apoplexy supervened, and death. The other case was that of a female patient, who, after being bled, lost the power of speaking for nearly twelve months. There appeared to be no power of rallying, and she never rallied more.

But although general bleeding seems to be inadmissible, the application of leeches to the upper part of the forehead, or behind the ears, is often productive of relief from some of the troublesome symptoms, and allays particular excitement; and the advantage may be pursued by the application of a blister behind the neck. An occasional dose of the compound powder of jalap is also a useful medicine, seeming to relieve the patient from some part of his oppression. The immediate benefit derived from these simple measures is occasionally so marked as to give rise, in those inexperienced in the character of the disorder, to a belief that it is almost cured; but the improvement is unfortunately only temporary. Supposing that there is in this state a congestion of the membranes and periphery of the brain, shaving the head, and applying counter-irritation to the scalp would seem to be reasonable indications of treatment; but I cannot promise that much benefit will follow such measures. Nor am I at all disposed to advise applying blisters to the extremities, and to keeping them long open, in a malady in which there is such a tendency to gangrenous ulceration of the extremities; and I have too little faith in the efficacy of moxas, or of the actual cautery, to recommend such severe applications. Setons, also, I believe to be, in this disorder, utterly useless.

I have sometimes thought the patient's state temporarily improved by the administration of a few grains of the mercurial pill and of the powder of squill, as advised by Dr. Baillie, in cases of hemiplegia, giving, at the same time, twice a day, a draught of the infusion of calumba or cascarrilla, with the addition of an alkali. In one case, in the incipient stage, the patient improved so much when taking a preparation of iron as to be well enough in mind to leave the asylum. I have known only one or two other cases of general paralysis in which the mental amelioration permitted removal. The reasonable indications of treatment would seem to be to moderate cerebral excitement, and to prevent or remove a superabundance of serum in the cavities of the brain, or an alteration in the consistence of the brain manifested by its firmness being generally increased. These indications will be seen to rest on the appearances found after death; but we want indications for some earlier treatment, and control over the first excitement of the nervous system.

It may be in our power, for a time, and to a certain extent, to fulfil the simpler indications; but I can only again repeat to you, that our hope of accomplishing this is extremely limited; for over organic changes in the brain, or its membranes,—over alterations of consistence, or thickening,—and even over effused fluids in the cerebral cavities, we can scarcely expect to exercise any influence.

I believe no form of malady is more hopeless. In a practice of twenty years at Charenton, M. Royer Collard never knew a case of complete cure, and although Esquirol seems to have met with two or three exceptions, Calmeil does not seem to have met with one. I have not heard of the progress of the patient, a woman, who recovered when taking iron; but in all the other cases which I can recollect, amounting, I think, to three, in which the patients became sufficiently comfortable to be discharged from this asylum, the subsequent course was unfavourable: the aptitude for employment of any kind was lost, and the patients grew worse more quickly than they probably would have done if still subjected to the salutary superintendence of the asylum. One or two returned so much altered for the worse, that we scarcely knew them again. An example of a like kind forms the subject of the twentieth case recorded by M. Calmeil. The rapidity of the progress of mental and bodily failure when the patient is exposed to irregularities, or neglect, or inappropriate management, and the constant alleviation which good and proper treatment affords, make the management of this malady, even although it is admitted to be really incurable, highly important.

These are among the cases which will be sacrificed to the prevalent rage of parochial authorities, and, I grieve to add, of the commissioners in lunacy, for providing cheaply for incurable cases, with an impression that because they are incurable they require little care. Miserable food, carelessly supplied, indifferent beds, crowded dormitories, scanty attendance, insufficient clothing, the absence of proper warmth, and the old substitute for all care—restraint, will be so far economical that the lives of these victims will not be inconveniently

prolonged, and the parish officers will sooner be relieved of the burthen of them. For less than ten shillings a week these poor patients are provided with every comfort, in county asylums; but the workhouses will provide for them permanently for half that sum. Many of those to whom these lectures are addressed may have some of these cases under their care, and although it may be in circumstances which exclude many proper appliances of treatment, I entreat them to remember that in this world these unfortunate incurables have no friend but the medical practitioner. I entreat you to remember, that the honour of your profession, and your own duty to God and man, will be best consulted by your becoming the steady advocate of these patients, and of all the wretched lunatics about to be kept attached to workhouses. Remember, that the avowed motive for removing them from the county asylums is economy—a motive always to be suspected, and generally a mere mask of avarice and selfishness. Examine, before you discontinue your visits to Hanwell, the food, the bedding, the clothing of these patients; look at their day-rooms and sleeping-rooms. Everywhere you will find comfort; but nowhere will you find extravagance. You will see the poor paralyzed patient sitting in an easy chair, out of which he cannot well fall; in the summer, in the pleasant air of a garden, and in winter, by a cheerful fire. You will find that his clothes are warm, and dry, and clean; that he has a sufficient quantity of wholesome food, carefully cut up for him if he requires it; that as long as he can walk he is led about by careful attendants, and that when he can no longer walk, he is attended to like a child. He lies in a decent bed, or, if his state requires it, in a padded room; as the infirmities of his malady accumulate upon him, every needful restorative is administered, and every variety of simple and sick diet; he is protected from accidents, and screened from all roughness and violence; and although utterly helpless, he is safe and even happy. All this costs the parish less than ten shillings a week; the food, the clothing, the medicine, the attendance, the superintendence. But this is thought to be too much; and it is boasted that all may be done for about one half of that sum. How it will be done, it is not difficult to imagine; by what compendious retrenchments no one can doubt. Melancholy beyond expression will be to me the day, if ever the day comes, when these poor creatures, and our other incurables, are carried off in a body, to be more cheaply provided for. In the thirty years that have passed since the horrors of the old Bedlam were laid open, and the murders of the York Asylum made known, no such measure as that now meditated has disgraced the treatment of lunatics; and in this their menacing distress, I say again, and I beg you never to forget it, medical men can alone befriend them.

There are no cases of which the whole course depends more on the treatment. Some of the patients whom you have seen in the asylum, fully exemplify how life may be prolonged and comfort preserved by care, and by the avoidance of all excitement. In private practice, examples may sometimes be seen of the singularly bad consequences resulting from the relaxation of a proper regimen for a few weeks. These examples occur when the apparent improvement of the patient leads to his getting possession of his liberty. It is then instantly seen how ill able such patients are to take care of themselves. They live in the most irregular or intemperate manner; travel restlessly about; meddle with all kinds of matters in which it is possible for them to mix themselves up; become involved in disputes and quarrels; and all this is followed by an alarming aggravation of the symptoms of their insanity, and of the general paralysis which accompanies it; so that many months are required to bring the patient back into a less disturbed state, and sometimes he never quite recovers the effects of his excesses.

It should always be kept in mind, that in this form of malady there is a want of power to bear any strong impressions, physical or mental, with impunity. To stimulate or to lower the patient may be equally hurtful; and exciting passions must be as carefully excluded from him as those which depress. If general bleeding must be admitted as sometimes seeming indispensable for the prolongation of the patient's life, I fear it will always be followed by dementia. It is equally in vain to attempt to stimulate a brain which is irretrievably injured. I have known attempts made to stimulate the nervous system in these cases by the administration of the tincture of cantharides, but it appeared to me to hasten the fatal march of the disease, causing the speech to become more hesitating, the movement of the hands and feet more imperfect, and the mind more excited and visionary. Indeed, on cantharides, or strychnia, or electricity, or any supposed direct means of permanently stimulating the muscular move-

ments, in this or any other form of paralysis, I have scarcely any dependence. I have watched the effect of strychnia in many cases of paralysis, in hemiplegia, in paraplegia, and in the paralysis of the insane, which now occupies our attention, and the effects have been uniform; it seems always to increase the patient's appetite, and to produce some mental excitement, and, after a time, to stimulate the nerves of motion, and to produce sudden muscular jerks and twitchings, sometimes almost sufficient to throw the paralytic man out of his chair, but it never produces any increased power of making voluntary movements. It rouses the machine, although incurably out of repair, but regular actions can be performed by the machine no more. This is a mortifying illustration of the vanity of rational medicine; but one cannot suppose that strychnia, or electricity, or any of the stimulants of the materia medica, can renew the supply or regulation of the nervous energy, suppressed at its mysterious source.

I am of opinion, also, that even the stimulus of baths of different kinds must be cautiously resorted to in this form of malady. The shock of the shower-bath is objectionable, and even the stimulus of the warm bath may be prejudicial. If a moderately warm bath, or a tepid bath, is taken, cold applications should at the same time be applied to the head.

But although medicinal applications exert so little power over this malady, it is surprising to observe the general improvement of the patient, and the evident retardation of all the symptoms, when his state receives daily and efficient care. A large pauper asylum affords great opportunities for confirming this remark. The patients, if well nourished, grow fat, and become very manageable. They require the comfort of warmth, and without great care they become much worse in severe weather, being then more than usually liable to those fits of temporary stupor which are incidental to the malady; and they fall rapidly into a state which appears hopeless. With warmth and care, however, and nourishing food, and porter, or wine, they rally again and again even from this state, as well as from the prostration which ensues on the epileptiform seizures to which they are liable. Thus, although all the functions of life have a constant tendency to fail, life may be long preserved; and with life—as you may have remarked in the wards—a considerable degree of comfort. It is wrong to say that such a state of life and such a degree of comfort are not worth preserving: if once that admission is made, we shall be driven to concede, that there are a thousand conditions of health in which life is less worthy of being preserved.

In G. T—, now lying in the male infirmary, you may appreciate the importance of such care as is bestowed on these unhappy cases in the asylum. He lies in bed almost without the power of moving, and quite without the power of turning. Numerous gangrenous ulcerations have spontaneously appeared in his lower limbs, and on his back: he complains of nothing, feels nothing; says he is much better, and is satisfied that he shall soon be well. You well know what daily, hourly care is requisite in such a case, not only for the preservation of life, but to prevent the patient's body from becoming a mass of offensive disease. With this care the patient's condition is made endurable; and his bedroom can be entered without nausea and disgust: without such care, a few hours would make it unapproachable. The ulcerations become limited in extent, and even heal, with careful treatment. This treatment comprehends great surgical care, an anxious attention to the patient's diet, and the incessant observation of cleanliness. Various kinds of beds become also requisite for the comfort of these patients; and you find that the air-bed is most employed by us. Again I must remind you, that by the regulations of the late Act of Parliament, these cases will probably all be consigned to the workhouse, or to the new and cheap asylums to be attached to them. If, in such places, any of the care which I have mentioned should unfortunately be wanting, abundant opportunities will be afforded of observing how soon life is extinguished in this form of chronic disorder.

"The great expenses of a lunatic hospital," say the commissioners in lunacy, "are unnecessary for incurable patients: the medical staff, the number of attendants, the minute classification, and the other requisites of a hospital for the cure of disease, are not required to the same extent. An establishment, therefore, upon a much less extensive scale, would be sufficient." This unfortunate opinion of the commissioners—which can only be accounted for by the want of practical acquaintance, in the majority of them, with insanity—has sealed the doom of these patients. Every sentence in their Report of 1844, bearing on this particular point, contains an error; and of these errors the fruits are about to be reaped.

They have given a direct and express sanction to arrangements, including deficient medical care; a deficient number of attendants, a neglect of classification, and of all the requisites for the cure of disease, which, in relation to the incurable, are requisites for the alleviation and comfort they now enjoy in asylums. Of all this alleviation and comfort they are to be deprived. The means of exercise, and occupation, and amusement, are pronounced unnecessary, and will, of course, not be provided. Cleanliness cannot be maintained with a small number of attendants. The diet will be of the poorest description. Classification being neglected, and the attendants being few in number, restraints will be employed to a great extent. Noise and confusion, almost banished from the wards of well-managed asylums, will again pervade them, and make them places to be visited with feelings of fear and disgust. The patients cannot plead for themselves in this sad change of treatment; but an eloquent mortality will soon speak for them: and it is to be hoped that the public eye will not be withdrawn from their condition.

It is not, however, the pauper lunatic alone, when affected with this form of malady, who is exposed to an aggravation of it by neglect. In some private asylums, such patients are always secured in a chair by day, and sleep in a strait waistcoat at night. They consequently become more irritable, and take opportunities of revenging themselves on their attendants. This leads to their being kept constantly in severe restraint. Where patients are placed, as they too frequently are, in some detached private residence, and entirely under the direction of attendants trained in the old methods of treatment, they usually pass all their time in restraints: the temper becomes spoiled; the patient cannot possibly attend to cleanliness; and his condition changes very rapidly for the worse in every respect, and becomes most distressing to himself. In this state, a return to his home is deemed quite out of the question; and yet I have known instances in which, this treatment and its consequences having been unsatisfactory to the friends, they have made the experiment; and by forbidding the use of restraints, and every kind of rough usage, the patient has greatly improved, becoming observant of cleanliness, calm in his manner, and easily managed. Among the subjects of this malady, and of the defective treatment now alluded to, I have known some, in the educated classes of society, whose talents, accomplishments, and public services, had previously made them the objects of admiration and of honour—persons useful to their country, and of whom their families were justly proud. This fatal malady, far less kind than death, leaves the victim living, yet strikes all such qualities at once quite down. But the affliction is increased an hundred-fold when the patient is subjected to the control of coarse and ignorant attendants, who, forgetful of all the little alleviations that kindness might effect, and untaught as to the mitigation that ensues from abstaining from all force and rudeness in the management of the malady, consult their own ease at the expense of the little comfort remaining to the patient, suppress his excitement by making him afraid of them, and for faithful care and attendance, substitute the restraint-chair, the leg-lock, and the muff.

Among the works of high authority in our day on the subject of insanity, that of Dr. Jacobi, of Siegburg, translated by Mr. Kitching, under the superintendence of Mr. Tuke, of York, has a principal place. It is melancholy to see in such a work, introduced to the English reader under such auspices, a chapter almost wholly devoted to recommending, as a part of the necessary apparatus of an asylum, a revolving chair, in which the insane victim can be carried through a hundred revolutions in a minute; of which, however, the strange recommendation is, that it only produces nausea, and does not induce sleep. It is true, that both Dr. Jacobi and Mr. Tuke condemn the bath of surprise, and withhold all assent from the plan of drawing up a frightened patient as high as the roof of a church; but their qualified approbation of any approach to these barbarous modes of treatment is calculated to do great mischief. Every brutal superintendent can refer to such authorities, and sneer at the philanthropy which is called morbid, because it discountsenances torture. In the work of Dr. Guislain, of Ghent, already spoken of, and also in his "Treatise on Insanity," you will find many representations of various devices for controlling the violent and securing the helpless. The time is fast approaching in which such representations, and the relics of the instruments of restraint, such as are now scattered about the lecture-room, will only be referred to as curious illustrations of that physical control of the insane which preceded the control exercised by intelligent and watchful minds. Then the "excellent" strait-waistcoat, praised by Jacobi, will be as little known in any asylum as it is in

this; where I am happy to say that I do not think there is an attendant who knows how to put one on; with the exception of a few attendants trained in old asylums and not selected by myself. So also the sleeves of "cow-hide leather," and the muffs,—instruments which so modified and exasperated the character of madness as to make the old asylums the image of hell,—will be turned from with all the disgust which, I confess, the very sight of them inspires in myself. I know that all these instruments were daily employed to prevent poor paralytic patients from being troublesome; they were debarred, as much as possible, from the use of their muscles, and this was not unfrequently effected by placing them in restraint-chairs, of which I now show you a model; forty of these disgraceful inventions having been broken up six years ago, and now constituting the floor of the large carpenter's shop in the asylum. The ulcerations, the horrible uncleanness, the extreme violence of patients subjected to these restraints, are admitted by Dr. Jacobi; but the restraint-chairs are still the subject of his praise. I consider the use of any of them as unnecessary and unjustifiable in any case, and am of opinion that no superintendent or attendant who cannot do without them is fit to be entrusted with power over a lunatic.

When we abolished the use of restraints at Hanwell, it was strongly urged by the advocates of restraint, that the chairs were at least indispensable to the paralytic. You have to day seen five or six of the worst cases of paralysis in the male infirmary; all these patients were sitting in low, large, easy arm-chairs, and all comfortable, and all safe. If I were to put these afflicted people into restraint-chairs, they would soon present a very different spectacle. Galled and irritated by their confinement, they would become sullen or violent; and whatever power of motion was left, would be employed to relieve the repressed irritability; the feeble hands would be employed and bruised in striking the board before them, or any one passing by; the feet would be exerted in kicking the chairs, filling the whole ward with noise; and the voice would seldom be heard except in scolding or in imprecations. In reading M. Calmeil's cases, one is struck with the frequent mention of excessive violence in the conduct of the patients; the extreme deterioration of all the faculties in the advanced stages; and, generally, the short duration of the patient's life. Death seems generally to have taken place within one year, or a year and a half; and certainly the majority of our paralyzed lunatics live longer. I am inclined to ascribe these circumstances to peculiarities which, twenty years ago, existed in all asylums, when the life of such patients was literally passed in close restraints, in coercion-chairs, or in bed. The 22nd and 24th of M. Calmeil's cases especially illustrate these remarks, and in the relation of several others I find my suspicions justified. At Hanwell, it is quite certain that violence is less frequently a feature of the malady than it was six years since; and, except in cases of approaching death, the patients are not seen to be reduced to the miserable animal condition read of in the older descriptions.

The dependent and forlorn state of these patients appeals to us for a more commiserating treatment. All the noble uses of life are at an end with them; their ruined minds, lost faculties, the vain hopes which delude them even on the brink of the grave, their necessary isolation from all former objects of affection or interest, their feeble powers of locomotion, their difficulty in making any want or wish known, their childish helplessness and childish fretfulness; with all the increasing afflictions of their surely progressive malady—inability to move without help, loss of control over the sphincters, painful ulcerations, death-like coldness, paroxysms of grief, delirium, and fever, and every imaginable complication of misery,—all exclude every comfort except that which is the result of kind, continual, patient, and most compassionate care. This care did not exist, cannot exist, with restraints; they were the wretched substitutes for it, and they too often superseded all habits of compassion altogether.

FOREIGN DEPARTMENT.

M. MALGAIGNE ON ANEURISM IN THE INGUINAL REGION.

The *Journal de Chirurgie* for January and February contains an interesting case of inguinal aneurism operated on by M. Malgaigne. The narrative of the case is followed by some valuable remarks on aneurisms of the inguinal region in general, the most important of which we reproduce. We may here notice that M. Malgaigne's case is only the fourth in which the external iliac artery has been successfully tied in Paris.

M. G. A—, a barrister, thirty-one years of age, consulted M. Malgaigne, in December, 1843, for a tumour situated in the left groin. Thin, but of good constitution, he had always enjoyed perfect health. Many years before, he had had in the same region a bubo, which suppurated without leaving any trace. Eighteen months previously, being in Belgium, he committed slight excesses in drinking, and, more especially, abused his muscular strength in moving casks of beer; he himself was of opinion that this was the origin of his disease, although nothing appeared at that time. Having returned to Paris, one day, after using considerable exertion in swimming, on his return home he experienced an uneasy sensation in the groin, and on placing his hand on the region, recognised a small pulsating tumour, about the size of a nut. As it gradually increased in size, he applied over it a hernia bandage, but without any favourable result. At one time he was told by a medical man that it was a bubo. The tumour gradually increasing, and interfering with walking, he applied leeches to it with slight, but only momentary, benefit. When M. Malgaigne first saw him the tumour was very voluminous, reaching from the level of the anterior and superior spinous process of the ilium superiorly, to three fingers' width below the iliopectineal eminence inferiorly, and occupied the entire width of the crural arch. It was the seat of very strong pulsations, perceptible to the eye as well as to the touch. The tumour was uneven in some parts, covered by a thin layer of tissues, and not remarkably swollen. There was no oedema of the foot; the heart and viscera were quite healthy. The mind, however, was much affected by fear of the future, the patient having latterly read surgical works in reference to his disease.

The existence of the aneurism having been ascertained, M. Malgaigne operated on the 11th of February, 1844, assisted by MM. Lisfranc and Guersant; the bowels had previously been relieved. Before the operation, an endeavour was made to compress the aorta and iliac arteries, by pressure with a seal or finger, merely with a view to ascertain whether this means of arresting hæmorrhage could be resorted to by the assistants, in case it should occur after the operation; but the attempt was vain, owing principally to the contraction of the abdominal muscles. M. Malgaigne thus describes his operation:—

"I first made an incision, which, proceeding from the tumour, ascended upwards and inwards so as to fall three centimetres externally to the umbilicus, according to the plan described in my 'Treatise on Operative Surgery.' The skin and fascia were divided; then the aponeurosis of the great oblique. As the heart, aorta, and iliac artery, were pulsating very strongly, in order to prolong the incision of the aponeurosis into the tumour, I raised it with the finger, which rendered this stage of the operation secure. Then separating the internal oblique and transverse muscles, and pushing them back, I separated also the peritoneum, raised the muscles on the index and left medius, and incised them between the two fingers, in the direction of the external incision, but not by any means to the same extent. Then, laying aside the scalpel, I carried the right index externally in the iliac fossa, followed the muscles as far as the internal edge of the cavity of the pelvis, and, to my great surprise, did not find the artery. I thought I was deceived, and again passed my finger along the same way. Not finding anything, I passed the finger down into the pelvis, and at last felt the artery pulsate, but at such a depth, that, without depressing the integuments, my finger was entirely concealed in the wound. The artery appeared to me flexuous, and to have made an angle to dip into the pelvis. On passing the finger further in, I thought I felt the pulsation of the internal iliac; but without stopping to ascertain whether such was the case, I seized the artery on the curved finger, and compressing it between the thumb and the index, arrested all pulsation in the aneurismal tumour.

After having satisfactorily ascertained this point, I at first endeavoured to separate the artery by its internal side, but without success. I raised it easily enough with the vein and the cellular tissue, but as soon as I tried to insinuate the finger between the two vessels, the whole mass escaped. After in vain attempting to separate the artery from its connexions, either by means of the right or the left index, I determined to try to separate it from the external side, which I found was much easier. The artery was at an enormous depth, but having succeeded in seizing it on the curved right index from its external side, with the nail of the left index I was enabled to scrape through the cellular tissue which united it to the adjoining parts.

Having thus separated the artery, the ligature was easily placed on the artery by means of Sir A. Cooper's needle. Before this instrument was withdrawn, the artery was clearly shown flattened upon it, healthy, and merely accompanied by a nervous

filament, which we thought it useless to cut. The ligature was composed of four waxed threads, which were separated, and tied as two ligatures. All pulsation had ceased in the tumour; the operation had lasted eight minutes. Although the muscles had been but slightly incised, the peritoneum showed itself at the wound. It was pushed back and the integuments were united superiorly by a band of diachylon plaster an inch and a half in width. A second band, of the same width, was placed inferiorly, leaving the wound between the two free, to the extent of half an inch. It was in this free space that the ligature passed out. During the operation there was no arterial hæmorrhage, nor were any enlarged or indurated ganglions found. The quantity of blood lost was so slight that it scarcely reached the sheet on which the patient was lying.

The result of the operation was very satisfactory. The tumour diminished considerably at once, and the limb retained its natural heat. The following day slight febrile action supervened, the pulse rising to 112, but by the fifth it had fallen to 88. On the sixteenth day the ligature came away on gentle traction being exercised. The progress of the cicatrization was slow, and retarded by the suppuration of the sac, which necessitated the formation of a counter opening, but it had taken place completely by the beginning of May; indeed, on the eleventh of that month M. A— was able to recommence pleading. Since then the general health has become much improved. The limb is nearly as strong as it was before the appearance of the aneurism, and does not swell after long walks, although it is impossible to perceive the slightest pulsation in the popliteal artery. An important fact is, that there does not appear to be the slightest threatening of hernia, although M. A— does not refrain as much as he ought from physical efforts.

M. Malgaigne, after narrating the above case, enters at some length into the pathology of inguinal aneurism: from this part of his essay we extract the following remarks—

"Aneurism of the inguinal region may be termed an affection of the masculine sex, as of sixty-eight cases which I have analyzed, including my own, there is only one which refers to a woman. It is the third of Abernethy's. The age in fifty-six cases in which it is noted, is as follows:

2 patients were	24 years of age
7 " "	27 to 30
11 " "	30 " 35
11 " "	35 " 40
14 " "	40 " 45
2 " "	45 " 50
3 " "	50 " 55
4 " "	55 " 60
1 patient was	65
1 " "	75

These figures indicate the age of the patient at the time when he came under the observation of the surgeon, and not the exact period of the appearance of the aneurism. This date is omitted in many cases: in thirty-nine cases in which it was noticed we find that the disease began—

3 times from	22 to 25 years of age
4 " "	26 " 30
5 " "	30 " 35
7 " "	35 " 40
11 " "	40 " 45
9 " "	45 " 65

Generally speaking, an aneurism in this region does not long exist without alarming the patient, and necessitating an operation: in some cases, however, the period is lengthened. In forty-eight cases in which the side is mentioned, in twenty-five the aneurism appeared at the right, and in twenty-one at the left; in two cases it appeared on both sides at the same time.

In the above case, can the bubo which preceded the disease be considered to have caused it? The same antecedent—a bubo which had previously suppurated and cicatrized—is found in various cases. In others, indurated ganglions have been met with around the external iliac artery, and have considerably increased the difficulty of the operation. Out of twenty-eight cases in which the cause is examined, in fourteen, the patients attributed the disease to an effort in raising heavy weights; in six, the cause appeared to have been a direct blow on the groin; in one, the aneurism was occasioned by a gun-shot wound, at first cicatrized; in one, by efforts of coughing; in one, by a forced march; and in another, by a fall during a wrestling-match: lastly, in the four remaining cases, the determining cause remained unknown.

In considering, on the one hand, the frequency of the accidents thus given as causes, and the excessive rarity of aneurisms of the groin, one is led to ask if really these causes alone can have sufficed to produce such results, and if we must not admit some special predisposition. This predisposition is manifest with those individuals who present two or three aneurisms at the same time, or who only get well of one to die of another. But such cases are exceptions to the general rule, and more rare than is generally thought. In the very great majority of cases, the aneurism has been single, and has not reappeared after the cure. M. Malgaigne says, that he has in vain sought for the indication of any particular temperament. Some were thin and weak, others strong and robust. Most had previously enjoyed good health.

AN ADDRESS

DELIVERED BEFORE THE

ROYAL MEDICAL & CHIRURGICAL SOCIETY OF LONDON,

At the Anniversary Meeting, held on Monday, March 2nd,

By **W. F. CHAMBERS, M.D., K.C.H.,**

PRESIDENT, PHYSICIAN TO THE QUEEN, ETC.

GENTLEMEN,—I need scarcely remind you that this Society, like some others founded on similar principles, was established for the promotion of science, by the collection and public reading of essays on medicine and surgery, and the *vivâ voce* discussion of matters connected with the science and practice of every branch of our profession; and that the essays and commentaries collected and published by such associations as this, have this advantage over the contents of the ordinary journals of the day, that they are not only selected for publication by gentlemen of known respectability and eminence in their several departments, but that, by the constitution of our Society, it must happen that the weight and character and faithfulness of the contributors and contributions are placed in their just light before the Society, and, what is much more important, before the profession at large. The success which has hitherto attended our labours could not have been secured without the mutual confidence and perfect harmony which have subsisted, and the frequent intercourse which has been for so long a period uninterruptedly sustained amongst us.

This, then, gentlemen, being the essence of our institution, and our intercourse being founded on these views, it is not unreasonable, after having for many years taken counsel together, for the improvement of our own knowledge, and, I trust, for the benefit of society, that we should sometimes avail ourselves of an occasion for counting our members, and passing in review before us the several characters and qualities of those who are no more, as materials for sober reflection, and not allow those we have so long cherished as our associates, to disappear from the scene of their activity and usefulness, without one passing glance of affectionate retrospection.

Of those who have earned the melancholy right to stand in the obituary of the year, I will first name Dr. ROBERT WILLIAMS, to whom I feel myself bound by the ties of early professional friendship, as well as by those of common academical education. After the usual scholastic course, he was sent to Trinity College, Cambridge, where, although it was not his lot to be distinguished by high university rewards, yet he was known throughout his academic career to be one who was highly cultivated and accomplished, given entirely to literary pursuits, and cherished by the most distinguished of his contemporaries, many of whom have since filled high stations in the service of their country.

After graduating in physic, he betook himself to the medical schools of this metropolis, adding himself chiefly to the opportunities of professional improvement afforded by St. Bartholomew's Hospital; and he subsequently became one of the physicians to St. Thomas's, which office he held till his death. To the duties of this office were added those of lecturer on the theory and practice of medicine. These duties he continued to execute with great zeal, until the germs of the disease which has now deprived us of him, began to interfere with his activity, and blunt the edge of his energies—an effect which, I doubt not, long before it was suspected of affecting him, had masked the vigour of a most active and talented mind with a supineness of manner and movement which it was impossible for those who had the pleasure of his acquaintance and friendship not to observe and lament.

But that his apparent supineness was not congenital or natural to him, but the effect of subsequent circumstances, is

proved by a fact which is not perhaps known to many of us, that, at the early age of fourteen, having been taken by his uncles to North America, whither they were called by business as merchants, he passed through the perils of shipwreck on an island on that coast, which nearly cost him his life, and I am credibly informed, that throughout the voyage, and during the time of the greatest danger, his zeal, fortitude, and agility, were the theme of general admiration, and very mainly contributed to the ultimate safety of his fellow-voyagers and himself. As I have just now said, he was a man fond of science and devoted to literature; and the tendencies of his mind, in whatever department of knowledge it was engaged, were very peculiar. In the study of history, which was one of his favourite pursuits, it was his habit chiefly to occupy himself in analyzing the campaigns of great generals, both ancient and modern, and acquainting himself with all the occurrences and events which bore on successful warfare, and all the errors and omissions which led to the defeats of the unsuccessful. In fact, I doubt whether he was unacquainted with the strategic history of any period of the world.

It will be readily believed that a mind of this enthusiastic cast was not exactly fitted for the dull and often repulsive realities of the study and practice of medicine; perhaps, however, I ought not to say the study of the science, for I believe he had never been deficient in his application to the pursuit of medicine as a science, as was sufficiently evinced by his elaborate work on the "Elements of Medicine;" but his mind was not, I think, calculated for prosecuting its practice with success. He had, in truth, little faith in physic; nevertheless he could not be said to be idle in therapeutic research, for he had early imbibed a strong opinion in favour of the efficacy of specifics in the cure of disease, so that he was always more or less engaged in seeking them and applying them to his practice, and he was sanguine in the belief that in good time we should discover specific remedies for many maladies which are now considered irremediable, and that even phthisis pulmonalis itself would bow its head to the power of some agent derived from the animal, mineral, or vegetable kingdom. I wish I could say that the researches of our late friend and president had been as successful in these investigations as his zeal and benevolent perseverance richly deserved.

In alluding, however, to his failures in the search after specifics for the alleviation of human suffering, I must not omit to say, that in one instance, at least, he was eminently successful—I mean, in the investigation of the uses of the iodide of potassium in cachectic diseases, particularly those in which the bones and periosteum are the seats of swelling and pain. These he showed to be under the peculiar influence of this powerful agent, with a degree of clearness and fidelity which has left little more to be said on the subject.

It is worth while, however, to remark, that since Dr. Williams published his remarks on this salt, and mentioned seven or eight grains, given thrice daily, as its average dose, many of those who have fairly tried this agent have come to the conclusion that this is too large a dose to be safely prescribed in all cases; and this is consonant with my own experience, and I believe I might quote some of the most eminent of my colleagues as agreeing in this opinion. I do not mean to say that much larger doses are not daily given, without injury to the patient, but that two grains given twice or thrice a day will serve every purpose which the salt is capable of effecting, and that in particular constitutions (like those who are subject to the erethism of mercury) an idiosyncrasy exists, which may, after a very short use of larger doses, cause extreme prostration, and fatal syncope. I have myself seen more than one instance of a fatal result from full doses of it. In one of these—a case of ovarian tumour of a very moderate size, and attended with no danger whatever previously—the patient had taken five grains thrice a day for a very few days. But to return—

Those who recollect Dr. Williams occupying this chair, need not be reminded of the good sense, urbanity, and talent, with which he uniformly discharged his duty, whilst the friends who saw him and knew him in private life, bear testimony, with one voice, to his domestic and social virtues, to his candour, justice, and universal philanthropy.

The next name which presents itself to us in the catalogue of those who have finished their mortal course in the past year, is that of Sir MATTHEW TIERNEY. Mr. Stanley, our late President, in his elegant notice of Sir Henry Hallford, touched on the art of conciliating the attachment of the eminent and powerful, "principibus placuisse viris," displayed by that most successful physician, who, he justly remarked, had, during a great portion of his life, formed, as it were, a fast link of union between the profession and the court.

Sir Matthew Tierney affords us a striking proof that there are more paths than one to the honourable distinction which his late colleague had achieved for himself. The latter, starting from the academic shades of Christchurch, and associating through life with those who had been the companions of his youth, participating in their classic pursuits, and imbibing the refined tastes and feelings of the most accomplished amongst them, seemed to be early identified with the aristocracy, and to find the doors of the court opened to him the moment he applied for admission. Sir Matthew Tierney, also, during the active portion of his life, enjoyed, in a very high degree, the favour of the court, and the confidence of those who moved within its precincts. His path to eminence was, however, cleared by himself; he made his way, step by step, to those distinctions which seemed, as it were, to be thrust on his co-partner in courtly honours. It is not my intention on this occasion to encroach much on the province of the biographer; it will be sufficient to say that his accidental residence at Brighton with the regiment of which he was surgeon, introduced him to the heir-apparent, who, attracted by his manners, and his skill and decision in practice, contributed to his elevation (within an unusually short period of time) to a high station both in the profession and in society.

Time will not allow me to dwell much longer on the history of this eminent physician. There was, however, one anecdote related of him some years ago, which, as it strikingly illustrates his professional qualities, and involves also an important point in medical ethics, I think worthy of being mentioned on the present occasion. I will relate the anecdote, as it was communicated to me by a gentleman who was an eye-witness of the facts:—It happened, on the morning of the accession of George the Fourth, that his majesty was seized by a violent inflammatory cold, for which he was attended by one of his physicians, who, thinking he had relieved him effectually, and being himself summoned out of town, left the king, with an injunction that he should not permit himself, on any account, to be bled. Unfortunately, however, towards the evening the inflammatory symptoms increased, and Sir Matthew Tierney, on being called to his assistance, immediately decided on the necessity of venesection, a measure which was objected to by the king, and some of those who surrounded him, on the ground of the strong opinion given against it a few hours before. Sir Matthew, however, respectfully, but steadily, insisted on the measure, and the obvious and signal relief experienced from it by the patient fully justified the determination of the physician, and firmly established his character as a man of sound judgment, and no ordinary decision.

Now nothing, I think, can show in a more distinct light than this case, the inexpediency of leaving a patient, with any prohibition as to subsequent treatment, when we are obliged to resign him into other hands; an expediency which involves the safety of the patient, our own credit, and the credit of the science we profess: aggravating, in truth, very unjustifiably, the responsibility of your successor, who, if he be not a man of strong nerve, may, by the weight of authority, be brought to hesitate about a measure which it is of vital importance to the patient to have executed without delay or modification.

But however this may be as to others, this incident was certainly of great advantage to the subject of our present notice, in establishing his high character as a skilful and resolute physician, amongst those whose good opinion it was most important to him to conciliate and secure.

I must not omit to say, that Sir Matthew had by this time been created a baronet, and adorned with other decorations, which, however humbly they may stand before the world in the scale of such distinctions, are considered by the rulers of this great country (which owes so much to the successful cultivation of the arts and sciences) as quite sufficient to satisfy the ambitious aspirations of men of the most distinguished professional or scientific eminence.

Sir Matthew Tierney lived after this time to an advanced age, in riches and honour, cherished by his friends and patients, and most esteemed and beloved by those who knew him best. He died at Brighton, in October last, from an attack of gout, by which he had been much afflicted, having just attained the 70th year of his age.

It has been well observed by the learned author of the "Medical Portrait Gallery," that the next subject of our notice, Dr. JAMES JOHNSON, through a long and chequered life, seems to have offered an exception to the dictum of the poet, "haud facile emergunt quorum virtutibus obstat res angusta domi." Dr. James Johnson, by birth an Irishman, was educated in Ireland, and spent in that portion of the United Kingdom his earlier years, making the fullest use of what

might be called very slender helps to learning and science; but he used them with a degree of success which few who have had the most ample means of accomplishing themselves have attained.

It is not my purpose to follow our late friend through all the difficulties he encountered, and all the kindness he experienced (on account of the manner in which he mastered those difficulties) from his superiors in the service which he had chosen as the arena of his early professional labours. It will suffice to say that, after having served his country in almost all parts of the world with great zeal and credit, he collected in a volume he now published, the results of his experience as to the character and treatment of the diseases of the East, where he had been occupied in very arduous professional duty for three or four years.

This work, his celebrated treatise "On the Influence of Tropical Climates on European Constitutions," which was published in 1812, has passed through many editions between that year and the present. I have a right, therefore, to call it deliberately, his celebrated work, for time has already sealed it with a permanent reputation. It is a work displaying the most distinct views of disease and the utmost perspicuity as to the means by which those views were to be carried into practice; and though it was evidently the effort of one who was not used to the artifices and technicalities of composition, yet very soon after its publication it became almost the textbook for medical practice throughout India, both on land and at sea. Indeed, its most remarkable feature was one which does not certainly belong to all medical works—namely, that, like the "Processus Integri" of Sydenham, and Pemberton's "Treatise on the Abdominal Viscera,"—although by no means waiving the consideration of the pathology or theory of disease,—it at once teaches the tyro in medicine, if called on to treat the diseases described in it, to act on its instructions with almost as much confidence and safety as if the author were present as his living instructor.

But however successful this first effort of authorship, it was followed by one of Herculean character, which, although well-known and much valued by the profession, did not, in my humble judgment, secure him a tithe of the credit and praise in this country, which the magnitude of the attempt, and the complete success with which it was attended, so abundantly merited. I need scarcely say, I allude to his undertaking, alone and unassisted, the conduct of the *Medico-Chirurgical Review*, and being often himself the author of every original article in each number. This work had, as we all know, deservedly a most extensive circulation both at home and abroad, in the new as well as the old world.

Dr. Johnson, however, although largely occupied in practice, and contributing his full share to the medical literature of the day, was not a mere professional author; for he found time for the publication of some very lively works, chiefly of travels, all tending more or less to our improvement in the physiology of man, and the modes in which such knowledge may best conduce to the health and happiness of his fellow-creatures.

Dr. Johnson's manners were plain, but breathed much kindness of feeling towards his patients, and perfect openness and candour towards his brethren; but I cannot better sum up his character than in the glowing language with which filial affection has inspired the author of the short memoir of his life and writings just published. He says, "If we look back on Dr. Johnson's career, we cannot but deem it a successful one. He started in life without money, friends, or education. By his energy and talents, he worked out for himself education, a profession, reputation, and a competency, if not a fortune. He gratified his tastes while he raised his position: fond of observation, he saw a large portion of the globe; and happy in describing what he saw, his writings were a source of emolument and honour. By taste, by circumstances, he was the child of literature, and literature was to him most bountiful: his name was noised abroad by his popular writings. His fame will live with his standard works. Ambitious of a good rather than a great name, the general regret that waited on his loss proves that that ambition has been gratified. If he dreaded anything, it was the decrepitude and childishness of declining years: he was spared both; he practised his profession as successfully as ever within a week of his death. He did not worship wealth, but he desired a sufficiency: he obtained it, bequeathing to his widow an easy independence, and to his children what will sustain, though not debauch their industry. What he prized above all things was integrity and honour; and he has left a name which is synonymous with both."

Dr. JOHN WAREBURY offers, in the accidents and incidents

of his life and character, a singular antithetic parallel to that of the physician whom we have just now commemorated. Dr. Johnson laboured through poverty to riches; Dr. Warburton was born and nursed in competency, and grew up and lived and died in opulence, presenting throughout an eminent example of youth unallured by wealth into idleness or vice, but spent in the due cultivation of his mind and faculties, so that, besides possessing himself of the ordinary education and accomplishments of an English gentleman, he became a considerable proficient in mathematical science, which the high degree he took at Cambridge sufficiently testifies. Having completed his general education at that university, he devoted himself to the studies of his profession in this metropolis, and turned his mind particularly to the treatment of the insane. This at length led to his election to the office of physician to St. Luke's Hospital. There he laboured most heartily in his vocation, and distinguished himself not only by exemplary kindness and attention to the patients, but also by the most anxious solicitude for the amelioration of the institution itself.

We all know, gentlemen, with regard to the legal evidence of insanity, what difficulties it involves, and how hardly and coarsely the members of our profession are often treated when called on, in courts of justice, to discuss popularly, and yet metaphysically, the boundaries of soundness and unsoundness in the human mind. It is but fair to suppose that he had, in his long life, a due share of the embarrassments which such cases present to the mind of the conscientious physician. But such were his skill, discretion, and presence of mind, that we have no instances on record in which he did not acquit himself, not only blamelessly, but with the praise of unimpeachable uprightness and honesty. In short, he always appeared to me to be of that class of which we happily can enumerate so many in our ranks, who, without any great brilliancy of career, contribute largely to the sustenance of the character of this country for sound and sober good sense, and the highest moral and intellectual purity.

Dr. Warburton lived in comfort, in the exercise of all the social virtues, attaching to himself a large circle of distinguished friends, and enjoying the advantage of having conciliated the regard and approbation of one of the most eminent men who have been enrolled amongst us. I need scarcely remind you, that he was the friend and son-in-law of Abernethy.

With Dr. THEODORE GORDON, one of our vice-presidents, of whom death has prematurely deprived us, I had the pleasure of being intimately acquainted, and can speak with great sincerity and satisfaction of his gentle, unassuming, and retiring manners, combined with very considerable medical lore, and great skill and decision in the application of his knowledge to practice. He had spent his youth and the flower of his age in the medical department of the army; and it is remarkable, that though from his habits and dispositions he was eminently qualified for the occupations of civil life;

"Though peaceful olive nodded o'er his crest,"

"Fronde super galeam et felici comptus olivâ;"

and girded on only for the benigner purpose of administering to the sufferings of his fellow-soldiers, it was his extraordinary lot to have been in the midst of more deadly combats and frightful carnage than many of those whose lives have been dedicated to the profession of arms. In the 18th year of his age, after finishing his education at Aberdeen and Edinburgh, he entered the army in 1803. He first served in Hanover, and afterwards followed his regiment (the 91st Foot) to Portugal. He was present at the battles of Rolicca and Vimiera, and narrowly escaped with his life in the latter engagement; and after being present at the battles of Salamanca and Vittoria, the affair of Burgos, the siege of St. Sebastian and the passage of the army into France, (on which occasion he was severely wounded on the head and neck,) he accompanied the Duke of Wellington from Brussels in his triumphant progress to Paris after the battle of Waterloo. Here he laboured in his benevolent vocation amongst the wounded French at the military hospital of St. Louis. On the re-establishment of peace he returned to his country, and having passed through labours and dangers on actual service which would have entitled him, had he been anything but a physician, to the most dazzling honours and envied distinctions which a nation can bestow, he was rewarded for his long and able services by being appointed Deputy Inspector of Hospitals, and Professional Assistant to the Army Medical Board Office, in which latter position he laboured (and it was no mean labour) till within a few weeks of his death. He died at Brighton in the fifty-third year of his age, and the examination, post mortem, verified the previous diagnosis of his medical friends, by exhibiting his lungs extensively dis-

eased, and the right side of his heart dilated and much attenuated.

We have also to lament the removal of another individual from our ranks by that merciless disease which we see every day grasping the most intelligent and the most interesting of our fellow creatures, and against which the expedients of our art are almost powerless; I allude to Dr. HOCKEN, a young physician of great promise and very early reputation. Born in the west of England, he settled in London, having attached himself to St. Bartholomew's Hospital, where he prosecuted with great praise his medical and pathological pursuits, devoting himself at first very much to subjects connected with ophthalmic disease, but afterwards extending the range of his studies to matters of general interest. Amongst the fruits of his labours in the cause of medical science, I may particularly mention his "Treatise on the Comparative Effects of Mercury and Iodine in Specific Diseases," and his "Observations on Endocarditis and Pericarditis," efforts highly creditable to his precocious talents, and giving us an earnest of future eminence and success, never, alas! to be realized; for he was removed from us by his early death (in the twenty-fifth year of his age) at the house of his brother, in Cornwall, whither he had retired by the advice of his medical friends, as holding out the only prospect of arresting the progress of the malady with which he was already too surely and too fatally affected.

There are some more names in the long list of the losses of the last year to whom I grieve to say that our time does not allow me to do justice, but whom I cannot pass by without a few words of recognition.

Amongst these I would first mention Dr. WILLIAM FERGUSSON, an army physician of distinction, who, after long military service, retired to Windsor, and practised there, with great acceptance and credit, to a very advanced age. Of his industry and talents he has left to this Society abundant proofs in the second, fourth, and eighth volumes of our Transactions. His first paper was one "On the Mercurial Treatment of Dysentery." This was followed by a very able and interesting treatise "On the Malignant Venereal Disease in Portugal," and in the eighth volume he published his "Inquiry into the Origin and Nature of the Yellow Fever in the West Indies," in which he generally agrees with the opinions of Dr. Bancroft as to the absolute non-contagiousness of yellow fever, differing from him altogether, however, as to the Mediterranean fever, which he considered, also, to be miasmatic, and not contagious.

Of Dr. MORRIS PRITCHETT, a naval physician, and licentiate of the College of Physicians in London, whom we have also lost within the last year, it should be recorded, that he, in the year 1841, accompanied the expedition to the Niger and the western coast of Africa, in her Majesty's steam ship, *Wilberforce*, in which, under his care, the mortality was unusually small; and after his return, he published an excellent treatise on the African fever, which he traces altogether to miasmatic influences, and treats with purgatives, full doses of calomel and James's powder, and quinine.

To this list must be added the names of WILLIAM TUDOR, Esq., long an eminent and well-known practitioner at Bath,—of Dr. JOHN ROBE, who, after filling every subordinate office in the medical department of the army with great credit, attained, before his death, to the rank of Deputy Inspector of Hospitals,—and, lastly, of our most respectable associate and neighbour, Mr. JOHN WALLIS LAMBERT.

A very few days ago I thought I had prepared myself to notice, however imperfectly, all the losses this Society had sustained during the last year, when I was astounded by the information that our late friend and colleague, Sir GEORGE LEFEVRE, was no longer amongst the living. His history may be very shortly given. He was born at Great Berkhamstead, Herts, and received his medical education at Edinburgh, (where he graduated,) as well as in London, where he attended, with great assiduity, the practice of the borough hospitals. He was first a licentiate, then a fellow of the Royal College of Physicians of London, and after a few years, becoming attached to the household of an opulent Russian nobleman, at his instance he resided at St. Petersburg, and was for many years physician to the British Embassy at that Court. For this service he received the honour of knighthood by patent, when, after winning the respect and regard of the British residents at that metropolis, as well as many of the Russian nobility, and realizing a competency, he determined to return to his native country, (with the results of which resolution we are all familiar in his various works,) and spend the remnant of his days in the leisurely practice of his profession, in literary pursuits, and in the society of his friends,

of whom he had secured a large and much-attached circle. But alas for the views, and resolutions, and anticipations of mortality! He returned to England, indeed, and for some time seemed delighted with his own position in the profession and in society in general, which, from his cheerful mind and manners, he seemed well calculated to adorn, when all his vital energies began to fail him, and those who saw most of him observed that he was daily more and more cherishing hypochondriacal feelings; these, a gradually increasing uneasiness in the region of the heart tended to aggravate, and caused at length an attack of fever and cerebral irritation, which were the obvious causes of his unexpected decease.

He had wrested, some time previously to his death, from a medical friend whom he prevailed on to examine him, the fact that the heart was embarrassed by slight thickening of the mitral valve. On this occasion he called on me, and expressed his horror at the discovery which had been made, in terms so much out of proportion to the actual evil, that I thought it my duty to press on him the slightness of the defect, and its comparatively mild character; for it was evidently one of those cases (as was proved by the post-mortem examination) of chronic endocarditis in which the valves become thickened by slight inflammation, perhaps of an arthritic character, rather than by the ossific diathesis with which we are familiar in old age, a distinction well worked out in Dr. Latham's last very able and useful "Treatise on Diseases of the Heart." But it was in vain to reason with him on the subject, for he would not be comforted. From this time he failed rapidly in health, and never recovered either his bodily strength or his intellectual vigour. I was well acquainted with him, and from the circumstance of his having married a relation of mine, enjoyed a degree of intimacy with him which afforded me much satisfaction; he was, in one word, a most amiable member of the profession and of society. His cheerfulness, indeed, in the midst of domestic misfortunes of no ordinary intensity and bitterness, was most remarkable, whilst his kindness to all around him, and especially to a large circle of relations, who depended on him for advice, comfort, and countenance, was sufficiently testified by the profound grief with which he has been lamented by them. But I need not enter at any greater length on these melancholy considerations. I would endeavour rather to lead your minds to the recollection of his kindly and benignant qualities,

"Purpureo spargam flores;"

and in concluding this tribute to his memory, leave you reposing rather on the contemplation of the brighter traits and amenities of his life, than of its shadows and misfortunes.

It only remains that I should congratulate the Society on its thriving condition, and thank you, at the same time, for the patient indulgence with which you have accepted my inadequate attempts to do justice to the duties you have imposed on me, by placing me in this chair,—especially that duty which has devolved on me this day,—and to offer you all, individually and collectively, my best wishes for your future success and prosperity.

ILLUSTRATIONS OF ULCERATION AND INDURATION OF THE CERVIX UTERI.

By J. HENRY BENNET, M.D.,

LICENTIATE OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON; OBSTETRIC
PHYSICIAN TO THE WESTERN GENERAL DISPENSARY; ETC. ETC.

CASE 9.—*Ulceration of the uterine neck in a young married woman without family; symptoms obscure.*

On the 5th of June, 1845, I was consulted by Mary W—, a young married woman, aged 23, respecting her menstruation, which had been totally absent ever since her marriage, that had taken place about a year previous. She was of small stature and light make; her health had always been delicate. She had not menstruated until eighteen, and then the catamenia were deficient in quantity, and irregular in their manifestation. She had been, on several occasions, two or three months without their appearing. Whether menstruated or not, she experienced but little uterine pain at the catamenial epoch; merely slight pelvic weight and uneasiness. She had been several times under medical treatment for amenorrhœa, but without much benefit. She was then residing in a healthy locality on the sea coast, and living well. On her marriage she came up to

London. The catamenia, which had appeared regularly for some months previous, at once stopped, and she thought at first that she had become pregnant; but no other change subsequently taking place, she was obliged to discard the idea. Her general health remained tolerably good; she had little or no uterine pain at the epoch at which she ought to have been unwell, and therefore did not for some time attach much importance to the absence of the catamenia. Within the few months, however, which preceded her application to me, she had experienced a good deal of pain in the lower part of the back, and had felt weak and disinclined for exertion, which induced her to apply for advice. On questioning her, I found that she had experienced of late a little pain in the right inguinal and in the lower part of the hypogastric regions, and that she had been also labouring under very slight leucorrhœa. The general health was not much impaired; the appetite was tolerable, and she slept well. She was, however, pale and weak. Finding symptoms of inflammation of the cervix thus present, although rather obscure, I pointed out the propriety of submitting to an efficient examination. Both she and the husband being very anxious that the uterine functions should be restored to their integrity, if diseased, I met with no objection.

On examining per vaginam, I found the cervix high up, rather retroverted, and swollen, but not more resistant than natural, rather less so, indeed. The os was more open than is usual, and presented around its circumference a slight local induration. The uterus was not at all enlarged, or painful on pressure. On introducing the speculum, I found the upper part of the vagina slightly congested, the cervix larger than natural, of a florid red hue, and presenting around the os uteri an ulceration about the size of a sixpence, covered with minute granulations. This surface I touched with the nitrate of silver. I then prescribed slightly astringent injections, rest in the horizontal posture, an occasional laxative, and light diet. The application of the lunar caustic was at first, as is usually the case, followed by a slight increase in the leucorrhœal discharge, which then almost entirely disappeared. It was repeated at intervals of five, eight, or ten days, until the latter end of July, when the ulceration had completely healed, and the cervix had recovered its natural colour, consistency, and size. She felt stronger and better, and had long been free from hypogastric and lumbar pain. At the beginning of July, all local irritability having disappeared, and the patient being still weak and pale, I commenced the administration of the sesquicarbonate of iron, half a drachm a day. I also directed my attention to the catamenia. As it was about the time of the month at which she was formerly unwell, I told her to apply, during one week, night and morning, a large mustard poultice to the inside of each thigh, to be retained until the skin was quite red and painful. I made her also take a warm hip bath for twenty minutes or an hour, before going to bed. This measure did not appear to give rise to any irritation of the ulcerated cervix. The following month, (August,) I repeated these agents; and on the third day the menses appeared,—rather scantily, it is true,—lasting a couple of days. I then advised her to spend a month or two with her relations at the sea-side, which she did. I saw her two months afterwards, on her return to town. She had, by my directions, continued the iron, and resorted to the same means as before, at the following monthly period, with the same success. The third month, the menses appeared naturally. She was stronger, had gained colour, and felt quite well. I have latterly seen her, and learned that the menses subsequently stopped, and have not returned for the last three months. She stated, that finding herself well in other respects, she had not thought it worth while again to apply for advice, or even to resort to the simple means which had previously succeeded.

Remarks.—This is one of those cases of slight inflammation and ulceration of the cervix, evidently the result of marriage, of which I have elsewhere given several examples, and which are, in my opinion, the probable cause or origin of those much more serious forms of uterine inflammation which we occasionally meet with in females more advanced in life, who have had no family. A careful perusal of the symptoms which this young woman presented will show how slight and how obscure they are, and how necessary it is to be thoroughly acquainted with the pathology of the uterine diseases which I have described, to recognise them in such cases, and to prevent their gradually increasing, and eventually undermining the health and constitution of those who labour under them. It is more especially with a view to fix on the mind of my readers the faintness and obscurity of the symptoms of inflammation and ulceration of the cervix in females who have never conceived, that I have divided these uterine inflam-

mations into two forms—that which occurs in women who have never conceived, and that which occurs in women who have conceived. The complete stoppage of the catamenia subsequently to marriage, apart from pregnancy, is rather singular, especially when we recollect that the general health was not impaired. Their return, whilst she was under treatment, may have been partly owing to the action of the caustic on the cervix uteri. Although the symptoms indicating uterine inflammation only became apparent some time after marriage, I believe that it originated, in all probability, immediately. The existence of these inflammatory affections of the cervix in young women recently married, appear always to be accompanied by sterility.

The next case which I shall narrate is one of a much more serious nature, in a woman who had had a child; but the cause of the local uterine inflammation appears to have been the same, as will be seen.

CASE 10.—*Ulceration and inflammatory hypertrophy of the uterine neck in a married woman, not caused by parturition, complicated with severe dyspeptic symptoms.*

On the 1st of October, 1845, Hannah L.—, aged twenty-nine, of fair complexion, and rather robust stature, the wife of a sailor, applied to me at the Western Dispensary. She appeared pale and out of health, and stated that for some months her digestion had been very bad, that she had had great pains in the stomach and abdomen, and had been gradually losing strength. On questioning her, I ascertained the following details:—Until within the last year or so her health had always been very good; she had menstruated early, and continued to be so, easily and regularly, until she married at the age of twenty-four; she nearly immediately became pregnant. The labour proved natural and easy. She subsequently soon rallied, and remained well, as far as she can recollect. She does not remember whether she had any leucorrhœal discharge or not. Her husband went to sea soon after her confinement, and remained away several years. He returned about six months ago, and remained at home two or three months, when he again went to sea. It was about this time that her attention was first vividly drawn to the presence of a vaginal discharge, although she believes that she had suffered more or less from it for some months previous. About this time, also, the catamenia became painful; she experienced pain in the back and in the abdomen; became costive, lost her appetite, and had cardialgic pains. The dyspeptic symptoms gradually increased in intensity, so as soon to mask all others. For the last two months she had suffered considerably from cardialgia, acid or tasteless regurgitations, oppression at the chest, cephalalgia, and general debility. It was to these symptoms more especially that she drew my attention; but on questioning her minutely, I found that she had likewise pain in the lumbar and hypogastric regions in the interval of menstruation, a sensation of pelvic weight and bearing-down after walking, and a rather abundant yellow vaginal discharge. The existence of inflammatory disease of the cervix being, therefore, next to certain, it became necessary to further investigate the case.

On examining digitally, I found the cervix rather low down, within less than two inches of the vulva, voluminous, congested, and rather indurated; the cavity of the os was open so as to admit the end of the index, and presented the soft fungous sensation of an ulcerated surface. The middle-sized conical speculum revealed a large hypertrophied cervix, the seat of an extensive ulceration, covered with bleeding granulations, and secreting a great quantity of muco-pus. The hypertrophy of the cervix was evidently of a sub-acute inflammatory nature; there was not much pain experienced on pressure; there was a decided sensation of pelvic weight after standing or walking. The uterus did not appear to be inflamed or enlarged; there was no retroversion of the cervix. Considering that the disordered state of the general health was merely the result of the persistence of the disease of the uterine neck, I cauterized freely the ulcerated surface with the pernitrate of mercury, and ordered tepid hip baths, astringent vaginal injections, and rest in the horizontal position, merely prescribing for internal administration a mixture containing small doses of the sulphate and carbonate of magnesia. I also recommended light diet, abstinence from stimulants, and rest in the horizontal position.

On examining this patient a week later, I found, as is usually the case, that the irritability of the ulcerated surface had much diminished, as also the inflammatory congestion of the vagina, and of the uterine neck. The hypogastric and lumbar pains were likewise less, but the dyspeptic symptoms remained as intense as before. This continued to be the case

for the first three weeks of the treatment, which was continued on the same principle, the ulcerated uterine neck being cauterized every week or ten days, either with the pernitrate of mercury or the nitrate of silver. About that time, the cicatrization of the ulcerated surface commenced at the circumference; the abdominal pains, at first so severe, nearly entirely disappeared; and the purulent vaginal discharge became much less abundant; the cervix had also become less voluminous, and softer. The dyspeptic symptoms, which had been but little modified hitherto, now began to ameliorate, the tongue appearing cleaner, the acid regurgitations and cardialgia ceasing, and the bowels beginning to act naturally. A mixture containing carbonate of soda with compound infusion of gentian was substituted for the former one, and the local treatment of the uterine inflammatory affection continued in the same manner as before.

From this time the case progressed gradually towards a cure under the above treatment, until the 4th of December, when I found the ulceration perfectly healed. The inflammatory hypertrophy of the cervix had disappeared, leaving the cervix still rather voluminous, but perfectly soft, and free from congestion, the mucous surface again presenting its natural pale rosy hue. The uterus had also risen considerably in the pelvis, the cervix no longer lying low down in the vagina, as when the patient was first examined. There was no vaginal discharge, and the hypogastric and lumbar pains had been entirely absent for several weeks. All dyspeptic symptoms had likewise given way; the complexion was no longer pale and wan, and the patient again presented the appearance of health; she felt stronger and better in every respect. Discharged cured.

Remarks.—In the above case I think the inflammatory and ulcerative affection can scarcely be traced to the confinement which had occurred four years previous to the patient's applying to me. Not that an ulceration may not exist in a semi-latent state for a much longer period, merely indicating its existence by leucorrhœal discharge, lumbar pains, and disordered general health; but I do not find, in the account she gave of her state of health during the years that followed the labour, any decided evidence of the existence of uterine disease. Moreover, the hypertrophy of the cervix was merely inflammatory, there was no general deep-seated chronic induration of its tissue, which would probably have been the case had the inflammation and ulceration immediately followed parturition, and existed for four years. It appears much more probable that the disease commenced on the return of her husband from sea, six months previous to her applying at the dispensary: in this case the cause would be similar to that which not unfrequently occasions uterine inflammation in young married females within the first months of their marriage. The most prominent feature in this young woman's state when I first saw her, was the intensity of the dyspeptic symptoms, which had gradually increased ever since the first appearance of the leucorrhœal discharge. In ordinary practice the leucorrhœa would have merely been considered symptomatic of disordered digestion and of general weakness, and the dyspepsia would have alone been treated. I am, however, so accustomed to find dyspepsia complicating inflammatory diseases of the cervix, that I always carefully inquire into the state of the uterine functions when I find any indication of digestive disorder in married females. In the numerous instances in which I have thus ascertained the co-existence of uterine disease and confirmed dyspepsia, I firmly believe that the uterine affection has been the primary one, and that the dyspepsia has been merely symptomatic, as in the above case. So convinced am I of the above fact, that in such cases I generally attach but little importance, and pay but little attention, to the dyspeptic symptoms, merely regulating the diet and the state of the bowels, knowing full well that they will diminish, and finally disappear, as the uterine disease progresses towards a cure. Sometimes I resort to the medicinal agents usually administered in dyspeptic cases—alkalies, bitter and tonic infusions, &c.; but it is more with a view to satisfy the patient, than with the idea that any very great benefit is likely to be derived from their use.

In the case of Hannah L.—, the connexion between the uterine disease and the dyspeptic symptoms, as cause and effect, is very strongly marked. She had never suffered from dyspepsia until attacked with uterine symptoms, and with a vaginal discharge, and then it gradually increased with the uterine disease, diminishing and disappearing as the latter got better, and was finally cured. The form in which the disease of the uterine neck presented itself, and the manner in which it gradually gave way to treatment, offer nothing unusual,

well illustrating, however, the principles which I have elsewhere laid down. I would merely call attention to the marked subsidence of the general and local symptoms as soon as the inflammatory irritability of the cervix had been subdued, and the cicatrization of the ulceration had commenced. The duration of the treatment was not very great,—two months only,—considering the amount of disease that existed at the onset. Here, again, we see the beneficial influence on the course of the disease, of the absence of the husband. The cure may be considered perfect, as there was no induration of the cervix left behind.

Cambridge-square, Hyde-park, Feb. 1846.

ON EPIDEMIC SCARLATINA.

By J. J. KELSO, Esq., M.D., Lisburn, Ireland.

(Read before the Belfast Medical Society.)

HAVING glanced at the more prominent features of the epidemic, in reference to its external and more distinctive symptoms, I am, in the next place, in conformity with the plan proposed, equally briefly to notice it in its pathological relations. The pathological states which the affection is now generally considered to involve in some degree, are, as already intimated, either congestion or inflammation, acute or sub-acute, of some of the internal vital organs or structures: hence the division of the disease into the congestive and inflammatory forms.

With respect, then, to the *congestive* form of the disease, this, in its pure and unmixed state, is regarded as of but rare occurrence. It is described, permit me to remind you, as commencing with oppression and very considerable debility, preceded or accompanied with rigors. The face is pale; the features are somewhat sharp; the eyes appear less prominent in their sockets, and lustreless; the extremities are cold, while the body is over hot; the pulse generally is soft, feeble, and labouring; and the tongue is coated and shrunk in appearance. If the patient complain, it is of the universal prostration and headache, together with the oppression at the chest and the difficulty of swallowing which he experiences. The fauces, moreover, may appear swollen and of a dark colour, with or without ulcerations of an ash-coloured and indolent appearance. Dr. Mackintosh (whose description, in substance, this is) says that he has witnessed such appearances in one individual of a family, while other members of it had the disease in its ordinary form. Similar appearances, too, have displayed themselves on the sudden retrocession of the rash from any cause; while, on the contrary, congestive symptoms have been found to disappear on its free re-establishment on the surface—circumstances which, to his mind, seem to prove its common parentage with that of the other or inflammatory variety of the disease. Now, without offering a word of comment on the doctrine, which seems to be among the best established in medicine, that the same exciting cause, whatever it really may consist in, which is capable of giving rise to any one form (or variety, if you would rather) of the disease, will equally surely originate, under given but by no means well understood circumstances, another or either of the rest; it will be sufficient for me in this place to remark, that this description of the pathological condition under notice applies, in strictness, to very few, if any indeed, of the 200 cases noted. The following, perhaps, may be considered as an instance of this, and certainly it was the best marked of any which I witnessed.

May 19th.—To-day I was requested to visit J. J.—, a boy of five years of age, who presented the following symptoms:—The face is pale; countenance expressionless; and the eyelids droop languidly over the eyeballs, as if he were going to sleep; he is roused with some little difficulty, but can be made to give no account of his feelings; occasional sighing. The skin covering the body is rather hot and dry, while the extremities, both upper and lower, preserve, perhaps, their natural warmth. The pulse is 96, small, but not very weak; the respiration is 26 in the minute, and somewhat oppressed; the tongue is furred, and presents a somewhat mottled appearance from the injection of its papillæ; bowels costive. His illness, I found, commenced with chilliness, followed by increased heat of surface, and some feverishness, two or three days since; but the tendency to somnolence, with the general prostration of the bodily powers, set in only on the preceding evening. Two leeches were ordered to be applied to each temple, and a purgative of jalap and calomel to be administered; diaphoretic medicine; in the evening, a warm bath.

20th.—Not so dull or depressed since the application of the leeches, three of which only bled; skin more hot, and there is

some faint indication of eruption on chest; bowels still acting from the medicine; thirst; pulse 100.

21st.—No appearance of rash to-day, which, if it existed, has receded. Appears more stupid, breathing seems oppressed, and there is some cough. Chest sounds natural on percussion, but on the right side, in front, mucous and sub-mucous râles are discoverable; countenance still continues pale and void of expression; three or four motions since yesterday of a dark-brown fluid, and very offensive matter; tongue coated with a whitish matter, but moist; skin more moist, but feet feel rather cold. Arrow-root for diet, to which a little wine is to be added. A teaspoonful of the following mixture every four hours:—Carbonate of ammonia, ten grains; camphor mixture, one ounce; cinnamon water, two ounces. Mix.

It is unnecessary to give the further reports of this case; suffice it to say, that he made a slow, but perfect recovery.

Here then, if I mistake not, is an instance in which congestion to some extent evidenced itself,—first, within the head, and, next, in the lining membrane of the lungs and bowels. The tendency to drowsiness, and disinclination to reply to questions in connexion with the general symptoms, was indicative of the first; the evident oppression at the chest, together with the cough, and mucous and sub-mucous râles discoverable in the right lung on auscultation, was significant of the second; and the tendency to relaxation of the bowels, after their being moved by the aperient, rendered the existence of the third all but certain.

But, on the other hand, the *inflammatory* form, either alone, or complicated with more or fewer of the symptoms of congestion in the lungs and alimentary canal, was found to be of very common occurrence indeed. The annexed description of this particular form—which is substantially that supplied us by Dr. Mackintosh, by whose premature death science sustained a serious loss—is so applicable to two-fifths, perhaps, of the severer kind of cases noted, that it may be regarded, in the main, as a pretty correct representation of the phenomena which they presented. The rigors with which it is ushered in are soon followed by increased heat of surface, restlessness, anorexia, thirst, and sleepless nights, with weight at the chest or head. The tongue is loaded with a brownish or yellowish fur, the edges and tip presenting, at the same time, a more or less intense degree of redness. But among the earliest, if not the very first, of the symptoms, is soreness of the throat, which is found to be either considerably inflamed and swollen, or of a dusky hue, with but little swelling; ash-coloured ulcerations being not unfrequently discoverable after a time, though exudations of coagulable lymph, which are still more common, may, on careless examination, be easily mistaken for them. The topical inflammation, however, is rarely, if ever, confined to the organs about the throat, but descends, implicating more or less severely the mucous membrane of the larynx and bronchia, as clearly evinced, not only by the hoarseness, difficulty of breathing, cough, and sense of constriction at the chest, which in some degree display themselves, but by the results of auscultation. There is, besides, sometimes delirium, especially at night, and occasionally some symptoms of coma appear. Nor should it be forgotten that the disease may first be announced by the cutaneous eruption; but this is the exception to the rule, occurring only in the mildest description of cases.*

However provocative of remark this important and interesting part of the subject may be, the length to which this communication has already extended unfortunately forbids its indulgence, and I hasten on to remark upon the remaining topics proposed for a brief consideration here—namely, the sequelæ of the disease. These were rather numerous; but, as most important, I shall content myself in simply adverting, in this place, to the three following:—1. Anasarca; 2. Rheumatism; and 3. Bronchitis and Broncho-pneumonia.

1. *Anasarca*.—Of the different sequelæ mentioned, this, as is usual, was by far the most common. But with regard to the frequency of its occurrence, I am, for reasons already adverted to, quite unable even to hazard a conjecture. Of one thing, however, there can, I think, be little doubt, that in many instances—the great majority, perhaps—it manifested itself under the mildest possible form, thus requiring little, if any, treatment beyond the employment, it might be, of aperients. As to its predominant character, speaking generally, the few memoranda relating to this sequela which I have by me, go very decidedly to show that this was essentially inflammatory—a view which is further borne out by the results of treatment. But the inflammatory nature of scarlatina anasarca has for a length of time been generally admitted, and acted

* Practice of Physic, vol. i. p. 185, fourth edition.

upon most successfully in practice—a fact with which you are all, of course, quite familiar. However, there is another point connected with this particular after-affection, of too great moment not to demand a passing allusion: I refer, as you will anticipate, to the very decided change so commonly manifested in the qualities and constitution of the urine. The chief and most important element in this change consisted, I need scarcely say, in the presence of albumen, often in great excess, as indicated by the usual tests; and (as discovered by some rude analyses which I instituted) the marked deficiency in the animal principle of urea, which generally accompanied the display, in excess, of this abnormal ingredient of the secretion, is a circumstance too important not to be worthy of record. Another part of this change consisted, as is not uncommon, in the presence, often in great abundance, of globules, giving to the urine, when shaken in the vessel in which it might be contained, a blood-red appearance; and on the fluid standing at rest, settling down with the phosphates, which often evidenced themselves in unusual abundance. I shall only further add, that the urine in these cases was always found to be acid, and generally, perhaps, of rather high specific gravity, from 1020 to 1030.

2. *Rheumatism*.—The fact of rheumatism, generally of a mild and sub-acute, but sometimes of an acute character, not very unfrequently succeeding to an attack of scarlatina, either alone or complicated with anasarca, has not been noticed, as far as I am aware, by any author, with the exception of Dr. Golding Bird, in a paper contained, if I mistake not, in one of the recent volumes of the *Medico-Chirurgical Transactions*. Yet, however it may be accounted for, in the epidemic under review, it was anything, certainly, but of unusual occurrence. It is quite true, that in most cases, perhaps, the symptoms indicative of its existence were extremely mild, leading the individuals who experienced them either to pass by the annoyance which they might occasion without observation, unless questioned on the subject, or, if complained of, to regard them in any other than their true light. But in some other cases, matters assumed a different aspect, as the following instance will serve to exemplify:—

August 3rd.—To-day I was requested to visit a girl, named Sarah A.—, aged sixteen, who had been seriously indisposed for some three or four days previously, from feverishness, attended with pains in several of her larger joints. Her condition then was briefly as follows:—Reclining on her back in bed, with her head and shoulders considerably elevated, and the better to facilitate respiration, which was hurried, and performed not without some distress, she exhibited symptoms of peevishness at my unexpected presence, declaring, with much emotion, that she would have no medicine, or permit anything to be done for her; but on being somewhat reassured, she said that the painful state of her joints was the chief source of all her sufferings. The knees and ankles, as well as the shoulders, elbows, and wrists, she stated to be equally affected; and on examination, they were found (the knees, shoulders, and wrists especially) to be considerably puffed and tender on pressure, but there was discoverable no sensible discoloration. On attempting, at my desire, to draw up either leg, she cried out for very pain in the knee and ankle joints, declaring her inability to do so; nor could either arm be stirred or lifted up beyond a very limited extent, on account of the intense pain which the effort occasioned in the several large articulations of the extremity. Her right knee and left shoulder-joint, she says, first became affected five or six days since, in consequence, it is believed, of cold and wet, to which she was then exposed. In a day or two afterwards, the left knee and right shoulder and elbow joints became also implicated, since which the other articulations mentioned have partaken of the affection. Moreover, the face, hands, feet, and legs, up to the swell, exhibit evident oedema, and pit freely on pressure; the skin is intensely hot and dry, but not apparently rough; the tongue is red and rather glazed anteriorly, while posteriorly it is deeply coated with a yellowish-brown fur; there is intense thirst and anorexia; the pulse is 100, and of tolerable strength; respiration thirty-four, and, as already hinted, performed with some distress; no pain or uneasiness at the region of the heart; the chest in front sounds well on percussion, but sonorous and mucous râles are discoverable by the ear on both sides; the impulse of the heart is strong and too extended, but the sounds exhibit nothing abnormal. It is, however, but right to mention, that on account of the extreme irritability of the patient, and her inability of allowing herself to be moved to any extent, so satisfactory an examination of the chest as was desirable could not be obtained. There exists, besides, some fulness at the epigastrium, which feels tender on pressure. The urine is high coloured, becoming, on standing some time,

quite thickish, and depositing a copious dirty-white amorphous sediment, soluble, in a great degree, on shaking the containing vessel. On examination, it was found to be acid, and of specific gravity, 1012; it was also found to be highly charged with albumen, affording a copious precipitation on the addition of either of these re-agents—a solution of the muriate of mercury, muriatic and nitric acids; as well as readily coagulating on the application of heat. On evaporating two ounces by weight, an extract of two scruples and a half was obtained; on dissolving this in half an ounce of rectified spirit, (sp. gr. 930,) and filtering, then evaporating slowly to two drachms, and adding to the concentrated solution an equal quantity of nitric acid, some impure crystals of nitrate of urea (?) were obtained. Again, on mixing equal parts of the urine and nitric acid in a watch-glass, and setting aside for some hours, fully two-thirds of the mixture became converted into a crystallized mass of a deep amber colour. With reference to the previous history of this girl's case, I found, that about three weeks before, whilst absent from home, she had suffered from an attack of scarlatina, attended with sore throat and cutaneous eruption to some extent; that, in consequence, she had been confined to her bed for about three days; and that she had afterwards made a pretty quick recovery, and felt well enough up to the period when she was exposed to the cold and wetting, which, as before stated, had been about a week previous to my visit. After some persuasion, ten ounces of blood were abstracted from the arm, and a warm bath advised in the evening. Take, compound powder of ipecacuanha, half a drachm; calomel, eight grains; calcined magnesia, one drachm; mix, and divide into four powders, one of which was ordered to be taken night and morning, as well as a table-spoonful of the following mixture every four hours:—Solution of the acetate of ammonia, two ounces; camphor mixture, three ounces; solution of morphine, thirty drops; antimonial wine, three drachms; cinnamon water, three ounces; mix.

The distance from town at which this patient resided, and a pressure of business at the time, prevented me from again visiting her; but the almost daily reports which for some time I received of her, were progressively favourable; and in the course of three weeks she had so far recovered as to be able to go out of doors: in a month she called in to say that she was quite well.

Besides the well-marked rheumatism of which this case was a very striking example, it is not a little remarkable, from the circumstance of the age (sixteen) of the patient at which the anasarca displayed itself, puberty being generally considered exempt from such an occurrence. I know of no similar instance having been recorded, with the exception of that related by Dr. Wells, whose patient, you will recollect, was seventeen.

3. *Bronchitis and broncho-pneumonia*.—The next and last of these sequelæ calling for more especial allusion in this place, from its not uncommon occurrence, is that which is prefixed to this paragraph. It is a generally accredited statement, if I am not far mistaken, that in each of the eruptive fevers, the mucous membrane, either of the lungs or of the alimentary canal, is the primary and chief seat of the disease, the nature of which is inflammation more or less acute and extensive; that of the lungs principally, if not exclusively, in small pox and measles; while in scarlatina, urticaria, roseola, and miliaria, that of the stomach and bowels in some part is chiefly, if not solely involved. Now, if this statement be regarded as the true expression of prevailing opinion on the subject, it will not, I make bold to say, be found to conform generally with the results of personal observation in reference to the present epidemic, whether we regard the disease itself, or the after-consequences of it. The not uncommon occurrence of symptoms of bronchitis, or broncho-pneumonia, both general and physical,—or, as people now love to say, subjective and objective,—during the progress of the disease, has been already hinted at, when applying to several of the graver cases of it which occurred. Of the general description of the inflammatory form submitted to your notice in a former part of this essay,—and of the genuineness of this application, there can, I think, be no doubt,—and the fact of the not unfrequent manifestation of similar symptoms, and, therefore, of a similar affection of the pulmonary mucous membrane, as an after-affection, certainly seems to me to be rather singular, but, nevertheless, to be equally well founded. I have by me notes, more or less extended, of several well-marked instances in which inflammatory action in the lining membrane of the bronchi, or in that of the bronchi and air-cells together, became lighted up in the system at a greater or less distance of time after the subsidence of the primary affection, abstracts of some of which I had at first determined on furnishing, by

way of illustration of the general statement; but I have so far exceeded the limits originally assigned myself, and have drawn so largely on your patience, that I feel compelled, not without a strong sense of their many imperfections, to bring these remarks now to a close. I shall only further add, that as some points of interest connected with the subject have been necessarily passed over altogether unnoticed, while others have been only glanced at in passing, it is not improbable that I may take up their consideration at some future opportunity.

Lisburn, Belfast, Jan. 1846.

ON THE OPERATION OF TYING THE CAROTID ARTERY.

By WALTER YATES, Esq., Surgeon, Nottingham.

ONE of the most interesting cases on record, in a surgical point of view, has been reported in your journal of the 7th of February. It is that of an aneurism of the right common carotid artery, in which a ligature was placed around that vessel by G. M. White, Esq., one of the surgeons to the Nottingham General Hospital.

In spite of numerous and very evident obstacles, he (Mr. White) succeeded in tying the artery in a first-rate style, after an operation which was prolonged for some little time, in consequence of the deep situation of the vessel, and of the small space intervening between the aneurismal sac above, and the sternal end of the clavicle below, and, of course, by a bleeding wound, which of necessity must somewhat impede the various steps necessary in all operations of this kind.

There are two points in connexion with this case of a very interesting and important nature—one, a matter of opinion and experience; another, a point of doubt. The former relates to the justice of the operation, and the second, to the source of the hæmorrhage, following almost immediately upon the separation of the ligature from the arterial tube.

Viewing the first question as a matter of experience, I believe there is no well-authenticated case of recovery taking place after the performance of a like operation (ligature of the common carotid artery) under similar circumstances, although the operation has been performed more than once or twice. This, then, is, as far as I am aware, the only instance in which the operation has succeeded. The very circumstance, however, that proved the immediate cause of death in the former cases occurred also in this—viz., hæmorrhage, and that on the separation of the ligature from the vessel; and although the individual recovered after no inconsiderable loss of blood, it is not at all unreasonable to suppose that it (bleeding) will occur in every case in which the same operation may be performed, the same disease and conditions being present.

When this most unfortunate occurrence (hæmorrhage) took place, no one could, not even his most willingly sanguine surgeon, dream that he had the most remote chance of anything save death; the sequel, however, proved the contrary. Be that as it may, hæmorrhage followed almost as a matter of course, or, at the very least, as a matter of the greatest probability. And why? Because the artery in most instances requires a texture, different in a great degree from the healthy, and in nearly all, if not in every instance of spontaneous aneurism, the vessel is diseased to some extent, both above and below the tumour; hence the danger of placing a ligature around or upon a diseased part. Therefore where there is no greater space than an inch or so intervening between the aneurismal sac above, and the clavicle and upper margin of the sternum below, bleeding is almost sure to follow an operation of this kind, from the peculiar condition of the vessel itself alone. There are other causes, also tending to frustrate the desired object. They consist in the prevention of the formation of a clot within the vessel, or in its removal when forming, or formed, and in the weight and force which the tube and the ligature must sustain from an immense mass of moving fluid. Supposing the artery to be perfectly healthy, it is questionable whether the force of the circulation would not wash away any clot that might be forming within an inch, or thereabouts, of its fellow trunk—the subclavian artery.

The second question embraces an inquiry into the source of the hæmorrhage. Mr. White asks, "Was it not from the portion of the artery connected with the tumour that the bleeding took place?" Whether the bleeding proceeded from the proximal end of the artery, or issued out of the tumour by a retrograde movement of the vital fluid, is a matter of the greatest moment; of one thing there can be no question—viz., that one end of the artery was not sealed up at the time of the

hæmorrhage, and reason would lead us to suppose that the end nearest the heart was the one, since it had to bear the greatest impulse of the heart's action, and the force of a heavy column of blood, which must almost necessarily prevent the formation of a coagulum sufficiently large and firm to close up the vessel. Moreover, if it be allowed for one moment that the tumour became in any degree harder after the ligature of the artery, it must at the same time be admitted, that the hardening was the result of a coagulating process going on within the sac. Now it is not very reasonable to look upon this hardening as the consequence of coagulation, and to believe, at the same time, that hæmorrhage took place from the end of the artery attached to the tumour, and that the other portion, where, in my opinion, no coagulation can take place, under such circumstances as in this case, and which is not placed under conditions favourable to the closure of this end (proximal) of the tube, whilst the other and distal end, where everything favours the process of coagulation, should remain open. Pulsation (intrinsic, of course) evidently could be felt previous to the operation; it seems to have ceased, however, with the commencement and progress of the hardening.

So long as the ligature remained on, it kept the coats of the artery in close contact, but as soon as it came away, one end of the vessel at least remained patent, and allowed a great escape of blood to follow. Possibly, both ends of the tube were open at or immediately after the separation of the ligature from the vessel—that is, if we view the artery as diseased. In this case, the chief if not the whole amount of blood would be expelled directly from the heart itself. There is every reason to believe that coagulation would go on in that part of the vessel situated between the tumour and the ligature, in consequence of its depending position, and also in consequence of its not being exposed to any causes likely to disturb the act of coagulation.

In taking up the question of the proximal extremity of the vessel being left patent, it may be asked of us, how we are to account for recovery under so fearful conditions, where the column of blood is forced on by the action of the heart, and this organ itself placed at no great distance from the seat of danger? Now and then some most mysterious things do occur, and this certainly partakes somewhat of that character. We must not, however, overlook the calm and collected state of the patient, the reduction of the heart's action, and of the whole circulating system, by suitable remedies and by rest, and the gradual filling up of the wound. For my own part, I imagine the principal cause of his recovery to have been due to the formation of a firm clot, not within the vessel, but within the wound, which would have the effect of compressing the remaining portion of the vessel, so as to close it permanently as far down as the giving off of its fellow trunk—the subclavian artery, a circumstance which a ligature could never effect. The lint also, which was placed in the wound, would tend to effect the same object.

These are questions which, in my humble opinion, must set at rest any differences of opinion in regard to the source of this bleeding. If this view of the case be right, no hæmorrhage could take place from the distal end of the tubes; however,

"All's well that ends well."

Nottingham, Feb. 1846.

ON THE NOMENCLATURE OF ANATOMY.

(ADDRESSED TO PROFESSORS OWEN AND GRANT.)

By JOSEPH MACLISE, Esq., Surgeon, London.

THE present state of anatomical science, as cultivated in the schools by all thinking minds, is comparative; for the comparative research is the science, and when once the spirit of generalization has invaded this or any other department of human knowledge, it proves that the accumulation of facts is large enough to show them, in mass, as a relationary subject. The eye which reads them in the aggregate, engages in the task of giving them an order, and this order or classification is a means whereby the memory can carry the burden of facts naturally comparable.

Whilst it is on all hands confessed that this science of anatomy is based upon the rule of comparison, and that from this mode of research has originated every illuminating truth which the science possesses, the question suggests itself as to the real value and merits of that department of anatomy named "human."—When made the object of study, isolated from all the homologous scale of the vertebrated series of animals, and the subject of morphology. Can the human anatomist furnish any new fact regarding the form and dimensions of

parts as constituting the human body, and whilst he continues to labour apart from the domain of forms, comparable through their metamorphoses, can he hope to arrive at any reasonable interpretation of the human figure as a unit of the vertebrated scale of manifold design?

When we know that anatomical science has sprung from an investigation of a special and isolated figure, and while we confess that by comparison alone we can hope to interpret design aright, and found a nomenclature upon the principle of generalization, who will expect that the nomenclature in present use, as it had been first applied in description of the human form, should answer all the expansive interpretation demanded by comparative reasoning?

The human anatomist, from the days of Vesalius to Albinus, and down to the present time, has, in the narrow sphere of his observation, laboured to tediousness in only re-wording the primer of this science, at the same time that a line of illustrious names in descent from that of Aristotle to Geoffroy have marked certain epochs in comparative research and the revelation of Nature's works, which seem as though they were recreations of Nature, or of the mind that studied her.

Human anatomy discourses of the human figure as of an isolated design of parts so connected as to fashion an entirety special and distinct in itself; and the nomenclature applied to it is absolutely descriptive of it alone, at a certain stage of its development. It would be no difficulty to prove that this nomenclature is not only incomprehensive of all phases of the course of growth through which the human form passes, but it is moreover unsuited for a generalized account of all conditions of developed character in which this form presents itself, even at the adult period.

This nomenclature, such as it is, being originated in contemplation of the special human figure, and already consented to as the implement of anatomical demonstration, before that the comparative research could have been brought to test its intrinsic value, has been carried by the comparative anatomist as his guide through that vast field for scientific investigation, where, at every step, he discovers that the name is not expressive of the form, for form is passing through metamorphoses, and by its partial change of physical character, not only from class to class, and species to species, of the animal scale, but even from phasis to phasis of the course of development, through which the individual form is conducted, it thus transcends all the trammels of words.

However suitable the existing nomenclature may prove for the mere description of organs and surgical regions proper to the special animal form; however sufficient it may seem, in the hands of either the human anatomist or the veterinarian, it is no longer a subject of doubt that, for the rigorous questioning of the comparative science, whose conclusions are drawn from the abstract view of nature, the use of such a nomenclature must continue to shackle the spirit of generalization, and confound the better judgment in the falsity of those ideas which it conjures up.

Comparative research has established the subject of morphology as a department of anatomical science, and raised the question of "unity of organization," which commences by proving that forms, homologous of each other, may or may not instance identical functional characters, and hence proves that a nomenclature which takes account of functional differences, does actually apply to organs of analogous structure, names of varying signification; of this the scapular organs are well-known examples, being, throughout all their marvelous metamorphoses, still retentive of the uniformity of structural type, and yet operating in functional variety. The cetacean oary member, the solipede forelimb, the human arm, the chiropterous anterior member, the wing extremity of the bird, and the finned organ of the osseous fishes, are terminated at their distal extremes by digital organs, named palms, hoofs, hands, wings, and fins; they are evidently struck from some archetype original; they contain elemental parts identical in each; the difference of name does not change the enduring homologous cast of all. Nomenclature is based upon the recognition of functional difference, and the ear is trained by the sound of words to discredit those impressions which the eye receives in illustration of the sameness of Nature's forms in all their bodily reality. But, to examine in detail the philosophic soundness of nomenclature, as applied by the comparative anatomist in his definition of animal character, would be a task far too vast for present limits.

Morphology is the science of form passing through metamorphosis; to debate upon this subject in all its bearings will yield the proof resultant, that the arbitrary classification of animals, founded upon the passing nature of things, must be as a rule inconstant in its application, vague, undefined, un-

fixed, unlimited, changing with the law of metamorphosis as with the borrowed traits of colour, characterizing bodies animate as absolute distinctnesses by the various shades of colour, and boasting of its more certain proofs of reasonable distinction as being drawn from the anatomical facts, when the same facts, if carried to the comparative observation of the individual animal fabric at various stages of its development, will make species of itself from the state of primordial organism onwards to the period of decline. "I call that," says Cuvier, "a specific distinctness between animals which I have separately classed, which, though bearing the same name of hyoid apparatus, is furnished with elemental parts less in number for one animal than it is for another." And to this Geoffroy answers in effect, "Then must it follow, by parity of reasoning, that you rate as specific distinctnesses the beings of this one species, one of which shall have produced the hyoid apparatus connected by an osseous shaft to the temporal bone, the stylo-hyoid ligament having become ossified, and the other whose hyoid apparatus remains distinct from the temporal bone, the bond of connexion being ligamentous." The human body furnishes instances of this variety of development.

The questions of "absolute distinctnesses" and "absolute uniformity" have engaged the attention of comparative reasoners ever since the days of Aristotle; nor has the attractive interest which attaches to them been worn off with the sunset of the great mind of Geoffroy St. Hilaire. Comparative anatomists, who think not lightly in the wondrous track of Nature and her processes, still own to the seriousness of the subject. Aristotle, Linnaeus, Cuvier, Daubenton, Buffon, Camper, Vieq d'Azyr, Newton, Belon, Bonnet, Goëthe, Oken, Spix, Geoffroy, Meckel, Serres, and Carus, have reasoned upon it; and in this country, the names of Owen and Grant point as the indexes to a kindred philosophy. To both these professors we address the following remarks, suggested upon a comparative view of vertebrated skeletons:—

It has been the object of all comparative research to found a classification of the animal kingdom, according to animal differences and resemblances; but the limits of these opposite qualities are undefinable; where the one ceases it is supposed that the other commences; but it still remains a doubt whether analogous forms have any limit, consequently it must be doubted whether absolute differences of form have any real existence, except as forms under metamorphosis; and it is known that metamorphosis is never carried to such extent as to mask all the features of resemblances. A generalized survey of the endo-skeleton fabrics yields to the mind the abstract idea of uniformity; this quality is self-evident. A more detailed notice of those figures takes account of characters in dissimilarity. All progress in the science of comparison is marked by an explanation of points of covert analogy where previously they had impressed the mind with the idea of differences. The cultivation, therefore, of the science of comparison is progressive by analogy, and must be accounted incomplete in the same ratio as forms are devoid of rational interpretation—that is to say, of interpretation by reference to some standard of comparison. There must be some archetype figure existing in nature if we see reason to admit the law of metamorphosis.

For what is the original character of that form which suffers metamorphosis? This is the problem to be solved. Without first determining the archetype structure of this figure, all the comparative research must be veiled in mystery, and will continue to be so, forasmuch as the mind passes into an indiscriminate ruin of ideas, originated upon the view of facts of form which point to some original or standard figure, of which they are the products, and yet of which standard for comparison it possesses no defined and fixed idea.

It is possible to conclude with reason, from an abstract view of the endo-skeleton figures, that those figures are referrible to some standard or typical form, the substance of which, while subjected to the law of metamorphosis, furnishes homologous characters to all those forms produced under the operation of this law. Those forms, so produced, must necessarily be homologous of each other, being the products of the metamorphosed original; hence also it must appear in the light of an axiom that they are homologous to this original, whichever this latter figure may be, for it is the figure typical of them.

Proceeding in this belief, we examine the endo-skeleton figures comparatively, we take any of those figures as the standard of comparison; and if it be the human form, we discover that other vertebrated skeletons, when referred to it, manifest the plus and minus of elemental parts proper to it, the human form; hence we conclude that this form cannot be accounted as a design archetype of those other designs which are plus in elemental parts; but the human skeleton

may reasonably be taken as archetype of those skeleton designs which are minus in elemental parts proper to it; hence also it must be concluded that any skeleton figure which is produced of parts plus in number to those constituting the human figure, is rationally to be regarded as archetype of this latter, and hence we conclude, lastly, to reject the human form of an endo-skeleton as the standard of comparison, and upon this *a posteriori* reasoning, if it merits the name, we proceed to examine the root and origin of anatomical nomenclature.

This nomenclature was established at a time when the science of comparison was unknown. The anatomy of the human form was made the groundwork of education, and the mind, after having been schooled in the shallow doctrine, come of limited experience, had, when taught to look abroad upon the nature of forms comparable among themselves, and modified, according to some unaccountable law of operating design, to unsay all its earlier impressions, and feel the want of a generalization, which is the mind's repose.

A nomenclature which happens to be originated in contemplation of any special form, isolated from the comparative series of which this form makes an unit, cannot be said to be founded upon the nature of things—that is to say, upon the general character of things; but a nomenclature which has been based upon rational comparison of forms homologically characterized among themselves,—such as are the endo-skeleton figures,—must speak the sentences of nature, which are sentences of generalization.

A nomenclature which is made descriptive of the special figure only,—the mind which created such nomenclature having been as yet unaccustomed to the rule of comparison,—cannot be comprehensive, cannot speak in generalization, must be unfitting for the language of generalization, is meagre in signification, being only expressive of the isolated design, and causing the mind, which would fain untrammel itself from all ideas attaching to it, or the objects described by it, still to revert to those ideas, cramped and confined as they really are, and to carry them as its implements of generalization upon the nature of things. When the broad experience of the law of nature, of metamorphosis, and of design, should of itself reverse the rule, either by a rational interpretation of the form, whatever be its name, or by expunging the name altogether, if it be the inevitable consequence that it must furnish a false idea while allowed to remain. The nomenclature of the special anatomist is tolerated by the comparative reasoner, and the science of the latter is mystified by the use of it. What is the meaning of the name, “*os sacrum*,” for example? And what is the consequence when the comparative anatomist bears it with him in his interpretations of the natural work in design?

While it is confessedly the aim and object of comparative science to figure forth for itself, in abstract idea, the archetype form of metamorphosed bodies, to choose this archetype as its standard for comparison, and to interpret design in all comparable figures, in so far as they prove to be the modification of an original, the following must be the questions naturally suggested by the rule of comparison—viz., is the osseous figure named “*os sacrum*” by the special anatomist, a part invariably occurring in the endo-skeleton fabrics of mammals, birds, reptiles, and osseous fishes? Not being produced invariably in those skeletons, is it also true that the elemental parts proper to the design named “*os sacrum*” are now and then absent from those skeletons? What is the absolute meaning implied by the name “*sacrum*”? How has the human anatomist characterized this form which he agrees to name “*sacrum*”? Will this name and those ideas attaching to it bear the test of comparative research? What relation has the word “*sacer*,” or the ritual of sacrifice, with the reason of science?

How can it be expected that the nomenclature of the special anatomist should prove consistent in the hands of the comparative interpreter, when it is found to be insufficient for characterizing generally all those conditions of development which even the special form presents from time to time?

When the special anatomist describes the *os sacrum* as having a venter and a dorsum, a promontory, a base, and an apex, such description applies to it, properly speaking, only at the age of puberty, when the fusion of nuclear elements has taken course. When the forge-man demonstrates that his anvil has a base, a face, and an arm, does not this latter equal the former in the knowledge of morphology?

But when the special anatomist, still cleaving to his nomenclature, turns to discourse of facts in connexion with the sacral figure, and tells the listening student that it is a rule invariable, that the *os sacrum* succeeds the fifth lumbar vertebra, he speaks a falsity in the face of facts, for even the

human form may produce the lumbar spine as consisting of four vertebrae or of six, and these are the subjects which the transcendental doctrine is to interpret.

To one who has studied this inconsistency of nomenclature in all its bearings, whether as made use of by the special or by the comparative anatomist, it must occur how the body of error obstructs his passage to rational interpretation of the forms of nature; and also how, when he would generalize upon forms as they are produced in homologous cast, the ill-defined shadow of mystery (a secret and more dangerous foe to progressive truth than even the actual and cumbrous open front of error) turns into ridicule that system which the mind would fain establish as science; and this is the effect of continuing in the use of a special nomenclature.

A truth of generalization should create the name in general acceptance. The science of comparison, which is the march of reason, should found its nomenclature in reason, and rise emancipated from the nonsense of the special nomenclature, and the word “*innominate*,” which this applies to form. Error begets error as truth begets truth, and mystery is that hybrid offspring which springs from the combination of opposites. Comparative anatomy, in its present state, is a mystery, and its nomenclature is the source of this. Its facts of developed character are palpable realities, but its interpretations do not stand the searching test of reason. It is the name which distorts the abstract idea of the form.

What is species? Let us first know what is the law of form. If it be true that the laws of species are centered upon the laws of form, it is reasonable to expect that the revelation of the laws of form will best expose to the root the laws of species. Are the vertebrated skeletons uniform? Not being as absolutely uniform designs, what is the source of their deformities and their analogies? Are the vertebrated skeletons produced as figures of one species? Not being so, is the source of their structural deformities the cause of their varieties in species? What is the law of forms in variety? Is it the law of metamorphosis? What, then, is the archetype figure which suffers metamorphosis? It is to the recognition of this archetype that all the science of comparison must lead, and till it can be discovered, we can know nothing of the transcendent walk of nature and design, of her creations of forms in variety, and of her species, which are those varieties. That there must exist in nature an original or archetype structure, from which the endo-skeleton designs are struck, and to which they are comparable, we give the following in illustration.

A comparison of endo-skeleton forms impresses the mind with their character of analogy, but the plus and minus of elemental parts proper to them individually contemplated, raises the question as to the source of those differences, and carries us back to the recognition of that form which in its fulness of development shall include all other forms lesser than it, and still bearing analogy to certain parts of it. The segment of a circle bears analogy to the segment of a semi-circle, but no one will doubt that the semi-circle is archetype of the segment, and also that the circle complete in all its parts must be accounted the archetype of segments and of semi-circles; and hence follows this train of thought—viz., If to the segment standing alone we apply a name, at the same time that we do not interpret it as the segment of a circle, what then is the value of such name? what does it teach? Is it not by its comparison with the archetype circle that we are to arrive at the luminous interpretation of its design as a segment? And while we have reason to believe, from proof positive, that an archetype form does exist for all endo-skeleton figures, it follows, that until we know of this archetype, and make comparisons with it, the designs of those endo-skeletons, which are as varying parts of this archetype, cannot be understood.

Let us remember that the form of species is not constant, and that species does not differ from species much more than we find individuals of one species differing from each other. If it be at present the boast of comparative science, its method and its system, that it bases its rule of distinction upon the anatomical facts, let it also explain for us why we should account two individuals as being of one species while the like anatomical facts exist and make them as distinctnesses; let it interpret for us the creation of cervical ribs in the human body, and before it undertakes the vain task of subjecting the shadow or species to analysis, let us first know of the constitution of form, its body, and substantiality.

There are ideas in generalization, as yet to be developed by comparative reasoning, which, without passing from the domain of facts, will again shake the throne of Cuvier, and method, as they once did, when all that was learned in scientific Europe listened for the result which was to settle the questions of “*absolute distinctnesses*” and “*absolute unifor-*

mities" as instanced in vertebrated skeletons. From that period to the present, comparative anatomy has progressed by the discovery of analogies alone, and species have been fused with species according as the law of form came to be more philosophically understood.

The "anomalies of organization" still baffle the efforts of the comparative anatomist at interpretation, and they yet remain as blots upon this fairly-written page of science, interrupting what should be given in current meaning, and by their presence causing an unconnectedness in its sentences. There is no anomaly to the law of gravity! and there will be no anomaly to the law of form when this shall have been searched at its foundation within the nature of things. In the works of Newton may be found a presentiment of what the science of comparative anatomy must one day reveal to us: he writes, "In corporibus animalium, in omnibus fere, similiter omnia posita."

Russell-place, Fitzroy-sq. Feb. 1846.

REVIEWS.

The Transactions of the Provincial Medical and Surgical Association. Vol. xiv. pp. 285. London: Churchill; Sherwood, Gilbert, and Piper. 1846.

In this country, we believe, the idea of presenting yearly reports or retrospective addresses on the progress of medicine and surgery, originated with the Provincial Association. The idea was a good one, and during the first years of operation, when the crack hands of the provinces were to be selected, the reports were of the highest interest. That interest has even been kept up to a very considerable degree by a succession of talent most creditable to our provincial brethren. But, unfortunately, the idea was so good that it has been appropriated in various directions. Other retrospective reports have appeared, some of them of "high literary" character, some painstaking, and microscopic enumerations of the scientific progress of the year, and others, digests of the ideas that have been entertained by the medical community during the time. Subdivisions have been introduced, and we have half-yearly and annual reports of the different branches of medical and surgical knowledge. All this is unfortunate for the parent which gave birth to the plan. A large association, with its necessarily cumbrous machinery, cannot compete on equal terms with half-yearly or quarterly publications. In time the association will probably have to strike out some fresh path, and to place the retrospective addresses on a new footing.

The addresses in the present volume, very excellent in their way, are the productions of Dr. Charlton, of Newcastle, and Mr. Teale, of Sheffield. They are the careful collection of the facts of the year, without much attempt at generalization or induction beyond the materials under their hands. Both of them are compiled with extreme precision and care.

Besides the retrospective addresses, there are papers on "Grinders' Asthma," by Dr. Favell, of Sheffield; on Inversion of the Bladder, by Mr. J. G. Crosse; a Statistical Report of the Reading Dispensary, by Dr. Cowan; and a Statistical Report of the Surgical Department of the Royal Berkshire Hospital, by Mr. George May.

The paper of Dr. Favell is perhaps the most important of the volume. It enters fully into the different descriptions of grinding carried on in Sheffield, the symptoms of the disease, the causes from which they arise, and the organic changes with which they are connected. The author's words are, "The object which I have peculiarly in view in the present communication, is to determine the pathology of grinders' asthma, or rather, perhaps I should say, to exhibit the lesions of the respiratory organs which morbid anatomy most frequently reveals in the persons of those who have fallen victims to the disease." The minute appearances found on post-mortem examinations are given in seven cases. The general results were, "tubercles, small bodies resembling currants, disseminated extensively on the surface, and throughout the substance of the lungs; large masses found in the different portions of the pulmonary tissue;

emphysema; dilatation of the bronchial tubes; inflammation of the lining membrane of the bronchi, trachea, and larynx; adhesion of the pleuræ; enlargement of the bronchial glands; enlargement of the heart; and a granular condition of the kidneys." But the essential organic changes are, tubercles, the currant-like bodies, and the peculiar masses referred to. In four only of the seven cases were tubercles found; so that the disease is not necessarily tuberculous. Dr. Favell remarks of the currant-like bodies—"A frequent examination has convinced me that they consist of nothing more than the dilated extremities of veins, containing some of the solid constituents of the blood. I have often met with precisely the same appearances in other cases, where there was much congestion of the pulmonary vessels, and have traced their connexion with the scalpel." Of the masses found distributed through the different portions of the lungs, the author remarks, "Sometimes they are of a greyish colour, at other times they are black; sometimes they are extremely dense, at others they are cut with ease. In some instances, I believe they are occasioned by the effusion of blood into the parenchymatous substance of the lungs, constituting what is properly termed pulmonary apoplexy; but in the majority of cases they are doubtless the consequence of pneumonia, either in the acute or chronic form, and to which the grinders are particularly liable."

Similar alterations of structure have been observed as the result of pneumonia, by Drs. Hodgkin, Addison, and Williams. Finally, Dr. Favell draws "the general conclusion, that the disease essentially depends upon congestion or inflammation of the parenchymatous structure of the lungs, in some cases giving rise to the formation of tubercle, and in others, occasioning pulmonary degeneration without tubercular deposit." The subject of treatment is merely glanced at, the first indication being, according to Dr. Favell, "to subdue existing inflammation, and the second, to support the strength of the patient."

Mr. Crosse's paper is short, and is accompanied by an engraving. It is a description of a rare and almost unique case of inversion of the bladder through the urethra in a young girl, one of the ureters opening on the exposed surface, and producing stillicidium urinae from the tumour. The surgeon who first saw the case, entertained the idea of removing it as a common tumour by ligature, but on the nature of the case being ascertained, the prolapsed organ was reduced, and replaced, by the taxis. The child was at this time between two and three years old, and at fifteen, Mr. Crosse ascertained that she was still troubled with incontinence of urine, though no return of the vesical displacement existed.

Dr. Cowan's numerical report is drawn up with his accustomed accuracy and carefulness; it must form a very interesting and useful tabulated view of the diseases which occur in the district to which it refers. There is one portion, bearing on statistical philosophy, which we extract for remark:—

"From the extensive comparative investigations of Mr. Watt, it seems that the deaths, by various diseases, are nearly identical at the same age, and that whatever the total amount of deaths by each disease may be, the proportion which the deaths, falling at certain periods of life, bear to the whole deaths of these respective diseases, remains the same.

"This interesting law proves the existence of general influences regulating the life and health of the community, however variously expressed by the greater or less prevalence of particular complaints, and also indicates how difficult must be the correct solution of a therapeutic problem, where agents other than those we are employing are so materially influencing the result. In fact, the whole philosophy of medicine can be very imperfectly apprehended by a being so limited in capacity and duration as man; and a juster estimate of the vast extent and difficulty of the inquiry would tend both to repress much hasty and presumptuous generalization, and establish a juster estimate of the true limits of human instrumentality.

"If so much is to be attributed to the action of external agencies, and if by these are chiefly regulated the nature and amount of illness and death, it is manifest that our expecta-

tions of future benefit must be founded far more upon improved hygienic regulations than upon additions to our pathological or medicinal resources.

"As science in its widest sense really advances, will the specific power of drugs be less and less admitted, while the physician's claims to respect and confidence will be found to rest far more upon his practical acquaintance with, and power of adjusting, those general conditions, which are adverse or favourable to health, than upon his supposed familiarity with agents directly adapted to the cure of disease."

We trust all this is the expression of a transient thought rather than of an established conviction. Otherwise, let Dr. Cowan examine himself. He is harbouring a medical fatalism, or, what is worse, a scepticism of the powers of medicine. Doubtless the pregnant-meaning words, "Time is short! Art is long!" are as true now as when they came fresh from the pen of Hippocrates. In a generation or in a life, no diminution of the law of mortality is seen when large and extended observations are made. But statistics is as yet too young to aver with confidence that the triumphs of our art do not produce an ameliorative impression on disease, and the duration of human life, an impression destined to go on increasing with every succeeding age. The position of a conscientious physician must indeed be gloomy, who toils on in the profession, oppressed with the idea, that an inexorable hand, in the shape of a numerical law, is extended over him, rendering a given number of deaths in a given number of cases an imperative necessity. If we look to immense numbers and become confused, let us individualize our observations,—let us look near as well as far off, and consider, whether does a greater number of deaths occur in the practice of a skilled or an unskilled physician, or in cases left to natural chance? We believe the honest determination of this question is calculated to brighten Dr. Cowan's sombre reflections. Human life, we doubt not, apart from moral causes, will tend to become more and more valuable from the influence of public medicine or hygiene, which will eventually moderate or destroy all contagious diseases: and of private medicine, the domain of the practising physician, by the gradual but sure improvement of the methods of treating individual diseases.

The surgical report of Mr. May extends over six years, it is very carefully compiled from the hospital books and annual reports, but it presents no salient points for criticism.

We regret to see so large a space devoted to the mere lists of officers and members of the Association. No less than sixty-four pages, or nearly one-fourth of the whole volume, is occupied in this manner. Room should be economized in this and other respects, so as to afford a greater number and variety to the papers. As regards the contributions published, the Association should endeavour to rival the transactions of the Medico-Chirurgical Society. The publication committee should refer to the expressed objects of publication by the Association. These were, original essays or reports of provincial hospitals, dispensaries, or private practice; the increase of knowledge of the medical topography of England through statistical, meteorological, geological, and botanical inquiries; investigations of the modifications of endemic and epidemic diseases; the advancement of medico-legal science through reports of cases occurring in the provincial courts of justice. This is a bold, comprehensive, and highly valuable scheme; but if we look to the present volume as a part of its fulfilment, there are signs of meagreness and inefficiency, not so much as respects the quality of the papers, but as respects their limited number. Surely the topics afford scope enough for variety, if the men were inclined to work them. A hint may be valuable both to the members and the governing body of the Association.

There is one other point to which we will refer. In the lists of the many hundreds of members we observe only two titles are used,—M.D. to indicate the physician, and the word "Surgeon" is applied to all others, whether hospital surgeons or not. If this is to be taken as any indication of the senti-

ments of provincial medical men, it is clear that they prefer the old term, "surgeon," to the new phrase of "general practitioner," or the obsolete title of "apothecary."

The Dublin Quarterly Journal of Medical Science. 8vo, pp. 275. February, 1846.

THE Dublin Medical Journal, which has long ranked as one of the most able representatives of medical science in Ireland, has recently been transformed into a quarterly periodical, under the editorship, we understand, of Mr. Wilde, the well-known and generally respected Dublin surgeon. Under his able management, we have no doubt that the Dublin Quarterly will prosper, and increase the high character which it bears in periodical medical literature.

The first number, which we have now before us, promises well for the future. In addition to a very interesting and elaborate preface by the editor, narrating the history of periodic medical literature in Ireland, including notices of the medical and philosophical societies of Dublin, it contains several valuable original articles, and other interesting matter. One of these articles, that by Sir Philip Crampton on lithotomy, we partly re-produced in a recent number, (see *THE LANCET*, Feb. 14th.) That by Dr. Graves, on the relapse periods of ague, will likewise amply repay perusal. We have, also, particularly noticed a very able review of homœopathy and homœopathic writings.

In conclusion, we wish our contemporary every possible success. We have the highest opinion of the Irish medical school—a school remarkable for its sound clinical character, and its freedom from speculative fancies, and wish well to its representatives in the medical press.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

FEB. 24.—DR. WATSON, VICE-PRESIDENT, IN THE CHAIR.

ON THE POISONOUS EFFECTS OF ANIMAL FOOD WHEN EATEN IN A STATE OF DECOMPOSITION, WITH THREE CASES OF POISONING BY BACON, ATTENDED BY TEMPORARY DERANGEMENT OF THE MENTAL FACULTIES. By JOSEPH TOYNBEE, Esq., F.R.S., Senior Surgeon to the St. George's and St. James's General Dispensary.

THE author commences his paper by stating, that although numerous and valuable observations had been made on the effects of mineral and vegetable poisons, the medical profession possessed but very scanty information respecting the agency of animal poisons. Animal poisons act in three ways,—1st, by the gases evolved during putrefaction being respired; 2nd, by the introduction of decomposing matter into the system by means of wounds; 3rd, by its introduction into the stomach and intestinal canal. The paper referred to the latter class. It appeared that the putrefaction of animal matter was of two kinds—the ordinary one, in which meat is considered to be "high," the other which Dr. Christison describes as "peculiar," and which gives rise to the formation of a poison. The three articles of food which, under certain circumstances, undergo this peculiar change, are "a particular kind of sausage, a particular kind of cheese, and bacon." Between the years 1793 and 1827, or in the course of thirty-four years, two hundred and thirty-four persons residing in Württemberg partook of the sausage poison, of whom nearly one half died. Several well-authenticated cases of poisoning by bacon have been traced in Germany and France, but previously to the present time no cases of the kind have been recorded as having occurred in Britain; but, as Dr. Christison most justly remarks, "the defective system of medical police in this country would allow cases to pass sometimes without notice, and almost always without scientific observation; but it must not therefore be supposed that they are wholly unknown." The author proceeded to show that a poison of a similar character was developed in each of the three kinds of food alluded to; and he then detailed the three cases of poisoning by bacon which had been attended by him.

CASE 1.—A barrister, aged thirty-five, partook of tainted bacon three times, but was not affected by it until the third day, in the morning of which day he became anxious, but transacted his ordinary business, and also had interviews with several strangers, and took careful notes of what occurred. Towards the afternoon he became dreamy; his imagination was disordered, and he found that his memory had almost

deserted him; indeed, to so great an extent, that he could not recall to his mind the act of getting up, or, with one or two exceptions, the particulars of a walk he had taken with a friend before breakfast. The persons whom he had seen in the morning were as characters in a drama, and he could only assure himself that he was not then dreaming by turning to his notes, and by summoning his servant. He suffered from a slight diarrhoea; the pulse was slow and weak; the hands were cold, and covered by a clammy perspiration. In all he said and did he was perfectly rational, and in the evening he presided at a lecture. These symptoms, in a modified form, lasted for three or four days.

The second case was that of an architect, who partook of the bacon only once, on which day he had sickness, depression, and chilliness. The following day he complained of a burning sensation in the throat, acute abdominal pains, confusion of ideas, and dimness of vision. Diarrhoea ensued, and a cold, clammy perspiration.

The third case was that of a gentleman, aged thirty-seven, who partook of the bacon three times; felt nothing until the evening of the third day, (having taken the bacon at breakfast in the morning,) when he was seized with nausea, faintness, and spasmodic pains, in great intensity. The bowels acted violently; there was a great disturbance of the mental faculties, so that he found himself unable to make coffee, which he was in the habit of doing daily: other symptoms indicative of mental derangement followed, and convalescence was protracted for three or four days.

The mode of treatment pursued was the removal of the poisonous matter from the intestinal canal as soon as possible, and the production of reaction by the aid of stimulants.

The author then proceeded to observe that he believed a large amount of disease was directly traceable to unwholesome food. He referred to the extremely impure state of the water supplied to London, upon which subject he had given evidence before the Health of Towns Commission. He showed that bread, meat, beer, &c., were often very injurious to the health, and he gave an extract from a "Statistical Report on the Physical Condition of the Working Classes of St. James's," showing that the milk supplied to that parish was obtained from diseased cows, confined in filthy sheds, and fed principally upon an empyreumatic "mash" from the distillers, and the grain from the brewers.

The author concluded by calling upon the medical profession to come forward and occupy its proper place in the van of those who are now endeavouring to carry out measures for the improvement of the public health, to enforce upon the government the necessity of adopting enlarged sanitary measures, and above all, to appoint properly qualified officers of health, whose duty it should be to investigate into all circumstances which tend to injure the public health, in order that they may be effectually and speedily removed, and their recurrence prevented.

Dr. GREGORY said, that the confusion of thought and loss of memory described in the paper were by no means uncommon symptoms: they were frequently present in indigestion; not generally so severe as in the cases detailed; although he (Dr. Gregory) had seen some instances in which they were quite as intense, without any probability of their depending on a specific poison in the system from what had been taken into the stomach. He inquired if other persons had partaken of the bacon; and also, if other members had seen similar loss of memory and confusion of thought dependent on dyspepsia, with faulty secretion of the liver.

Mr. TOYNBEE replied, that the three cases detailed were those of the only persons who had partaken of the bacon in London. The opposite shoulder had been eaten by some persons in the country; it was less decomposed, and fried instead of broiled; the broiling, according to Christison, dissipating the poisonous principle: at all events, none of these persons suffered from the symptoms he had described. The patients of whom he had spoken were of robust habits, had never suffered from indigestion previous to partaking of the bacon, and were now again quite well.

Dr. JOHN WEBSTER believed, with the author of the paper, that the symptoms described were the result of the poisonous qualities of the bacon. In the south of Europe bacon was prohibited in warm weather, and was known in this country to be at certain seasons unhealthy. He remarked, that when cholera was prevalent in this country, he had frequently traced its origin to improper food, particularly bacon. He inquired of Mr. Toynbee, whether, in his case, the animal were healthy, and upon what it had been fed.

Dr. GOLDING BIRD said that, in his opinion, the source of the poisonous influence of the bacon would not have been detected

by chemical analysis. Indeed, he questioned whether any such toxic agent did exist, either in the Wirtemberg sausages or in the bacon. The very persons who examined these substances, generally, were contradictory, and their statements after all were scarcely better than conjectures. Thus though they had suspected the presence of hydrocyanic acid, sebatic acid, and acrolein, they had failed to detect them. Even Brichner proved no more than that he removed the less injurious portions from the more active ones of the sausages which he placed under examination. The speaker believed that the explanation of these poisonous phenomena was to be found in Liebig's extension of the well-known law of a molecule in motion having the power to communicate similar motion to other molecules with which it may come in contact. Animal matter, when putrescent, was in a state of irritation, and if taken into the stomach was either changed into albuminous or fatty matter, and underwent the process of digestion, as did more healthy food; or if the digestive powers of the stomach were weak, the matter visited the power of the assimilative functions, the putrescent molecules entered the blood, acted there as a septic poison, and produced symptoms characteristic of a highly deranged state of the nervous system. High temperature, as frying, and cooking generally, did not prevent the injurious effects of the putrescent food by its volatilizing a peculiar poison, but simply by the production of a new series of chemical changes which altered the molecular arrangement of the unwholesome food, and rendered it quite harmless. Whatever the putrescent food, whether had bacon, Wirtemberg sausage, or decayed Stilton, the conditions for the development of the injurious effects from their ingesta were the same, and consisted in a too feeble state of the primary assimilative functions to put an end to the molecular motion of which putrescency was constituted.

Mr. TOYNBEE had, during the progress of the cases detailed, been convinced, by careful watching of the symptoms, that the effects developed were the result of the poisonous influence of a morbid poison. Researches since instituted confirmed this opinion, and therefore he differed entirely with the views expressed by Dr. Bird. In his work on poisons, Dr. Christison devoted a chapter to the consideration of the peculiar poison which was engendered by the decomposition of animal matter. Whatever the meat in which this poisonous influence was engendered, whether bacon, veal, or sausages, the symptoms produced in the person eating it were identical, and much more severe than if they originated simply in indigestion. The train of symptoms described minutely and fully in his (Mr. Toynbee's) paper; the length of time which elapsed before they developed themselves; the slowness with which they disappeared, and the fact of the loss of memory being a symptom in the recorded cases of poisoning by sausages, all tended to confirm the opinion which he had given. He quoted Dr. Christison and others, to show that a poison had been obtained by them from putrescent sausages, bacon, &c., of such power that a very minute portion of it administered to an animal had produced death, the symptoms preceding the fatal result being similar to those described in the paper before the Society.

ON SOME POINTS IN THE STRUCTURE OF THE SPLEEN AND SUPRARENAL CAPSULES. By C. HANDFIELD JONES, M.B., Cantab., Assistant Demonstrator in St. George's Medical School.

(Communicated by Mr. PRESCOTT HEWETT.)

The author remarks that the work of Professor Müller contains all that is certainly known respecting the structure of the spleen, and the account given in this paper confirms entirely that of the German physiologist. He asserts that there are frequently found in this organ a number of peculiar cells, or rather vesicles, of distinct yellow colour, varying much in size and generally aggregated in groups. These are traced throughout the animal series, and are found most developed in the lowest class, that of fishes, but in none of them are of constant occurrence. With regard to the nature of these cells, it is suggested that they may consist of biliary matter; but the point chiefly insisted on is, that they present an instance of secretion taking place in an organ which normally does not appear to exercise this function. The reason of the spleen thus differing from the true glands is shown to depend on the circumstance that its component cells are nuclei, and not true cells, though under certain conditions they do assume that form. The structure of the supra-renal capsules is next detailed, the medullary portion consisting of nuclei and a blastema; the cortical, either of nuclei which have each become surrounded with a quantity of granular matter, so as to resemble closely an epithelial cell of the kidney, or of amorphous granular matter, sometimes forming small globular

masses, which are probably produced by the action of the nuclei. The supra-renal capsule is thus shown to approach more nearly in its character to that of the true glands, the cortical substance being regarded as an elaborated product of the medullary: this was confirmed by a subsequent remark to the effect that in the foetus the medullary substance very much exceeds the cortical, while in later life the proportion is quite reversed. Finally, a question is raised whether the nuclei of the spleen, being supposed to possess (as other nuclei) an attractive power, may not exert this specially on the blood corpuscle, and thus regulate the quantity of blood which the organ contains, and which, according to Dobson's theory, varies at different periods.

Dr. HANDFIELD JONES had lately had an opportunity of examining the supra-renal capsule of a foetus at the sixth month. He had found that the medullary matter formed the main portion of the organ, being surrounded by a thin slip of cortical substance. He thought that these facts tended to corroborate his view that the cortical matter was elaborated by the medullary, and was stored up around it in consequence of having no excretory duct for its removal.

Mr. TOYNBEE remarked, that although the bodies described by the author of the paper might be similar in colour, and appear to be constituted under the microscope like biliary matter, the only complete test of their exact nature was a chemical analysis.

Dr. HANDFIELD JONES did not mean to assert positively that the matter found in the spleen was really biliary, but he merely intended to draw attention to the fact of its being in that situation, and the similarity it bore to the bile found in the liver of the frog.

MEDICAL SOCIETY OF LONDON.

FEB 23, 1846.—DR. THEOPHILUS THOMPSON, PRESIDENT.

Mr. BISHOP introduced to the notice of the society a boy who laboured under a most aggravated state of stammering. In attempting to speak, the tongue projected from the mouth, the face contorted, and an interval of several seconds elapsed before he had the power of uttering a syllable, the same difficulty occurring at almost every succeeding attempt to articulate. Mr. Bishop stated that his reason for presenting this case to the Society was, to put to the test the theory he had promulgated in his papers, read to the Society, on stammering. He proposed showing the patient again in a short time, when the principles he had advanced would be either verified or abandoned; but he had himself no doubt of a favourable result.

PLACENTA PRÆVIA.

Mr. HOWELL detailed a case of placenta prævia, in which there was considerable hæmorrhage, slight pains only, and a tolerably rigid and slightly dilated os uteri, situated high up. The placenta was over the os uteri, and partly detached. Following the plan of Dr. Simpson, the placenta was removed entirely, and from that moment the loss of blood did not exceed two ounces. At the end of nine hours the head being still high up, and no labour-pains having come on, the perforator was employed, and delivery safely effected. The mother did well. During examination per vaginam, the blood flowed down the backs of the fingers, proving that the hæmorrhage was from the detached portion of placenta and not from the uterus. Looking at the usually fatal result, both to mother and child, of the old practice in placenta prævia, he thought in some cases that Dr. Simpson's plan should be adopted.

Mr. HEADLAND inquired why the child was not delivered when the hand was in the womb for the removal of the placenta? Mr. Howell's statistics respecting the fatality of placental presentation when the old practice was followed, was not correct; for when the cases were early seen by competent persons, the result was not usually fatal. In all his (Mr. Headland's) own cases, the termination had been satisfactory. The question of practice in these cases was one of deep importance, and a recommendation of a new and questionable mode of proceeding should not go forth under the authority of a practical man like Mr. Howell. Facts, which discussions of this kind elucidated, however, should impress the public with the necessity of delivery being accomplished by competent persons. Dr. Simpson's plan might perhaps be advantageously resorted to in cases where the placenta was partially detached, and a portion of it in the vagina.

Mr. HOWELL explained that he did not turn the child when he detached the placenta, because he had seen version under these circumstances frequently fatal, and that too in the most skilful hands. He should not rashly follow Dr. Simpson's

plan, in every instance of placental presentation; every case of this kind had its peculiar features, by which the practice must be determined.

Dr. WALLER observed, that the question of practice in these cases must be determined by facts only. The first consideration was this: 1st, Did detachment of the placenta immediately stop hæmorrhage? 2nd, If hæmorrhage were thus stopped for a time, was it safe to trust to the powers of Nature afterwards? He related four cases, which were somewhat in favour of Dr. Simpson's plan. In the first case the placenta came away five hours before the child, (an arm presentation;) there was no hæmorrhage. In the second case the placenta came away before the child; the mother in both these cases did well. In the third case, he was called to a woman in whom the placenta was presenting; she had lost much blood, but was able to sit up in bed. The placenta was attached nearly over the entire os uteri, but not entirely, as the funis had descended into the vagina. The placenta was entirely detached by the hand, the hæmorrhage ceased, the child was delivered, and, with its mother, did well. In the fourth case, he was called after hæmorrhage had gone on for many days. There was still dangerous loss of blood. The os uteri was loose, but the cervix was so contracted that two fingers only could be introduced; with these he detached the placenta, but did not remove it. Hæmorrhage ceased. The arm presented. There was no return of hæmorrhage; and after waiting some hours, delivery was effected by version. The mother did well. The old plan of proceeding was in his hands, when called sufficiently early, almost invariably successful; when called late, and other plans of proceeding had been tried, it was often fatal.

Dr. CLUTTERBUCK, in allusion to the discussion at the last meeting, remarked, that he considered the occurrence of arthritis in cases of paralysis, was merely an accidental circumstance, and could not be regarded in the light of cause and effect. He had never seen the two diseases together, and therefore thought the occurrence must be uncommon.

WESTMINSTER MEDICAL SOCIETY.

FEB. 21, 1846.—DR. SAYER, PRESIDENT.

REMARKABLE DISEASE OF THE ANKLE-JOINT.

Mr. HARDING related the following case:—Six years ago a young lady met with an accident, and severely injured her foot and ankle. Considerable pain, swelling, and inflammation followed. This was treated by the frequent application of leeches, foot-baths, and warm-water fomentations. At the expiration of a month the swelling and inflammation had subsided, but the pain remained about the joint. To relieve this she was advised by a friend to remain in bed a certain time, and with this perfect rest the pain also disappeared. Fancying herself now quite well, and nothing doubting her ability to walk, she got up, and attempted to cross the room. To her great surprise, however, the foot doubled outwards, and she fell upon the ground. Very many subsequent efforts were made, but always with the same result; the foot doubled outwards, and, like a broken bone, refused to support the weight of the body. To find relief, she sought from time to time the advice of many eminent surgeons, but no benefit resulted, and she was obliged to use a crutch, which she walked with for three years, when the following plan was devised, and proved successful. A certain quantity of prepared chalk and acacia powder was mixed together, and made into a thin paste with water. A common calico bandage, eight yards long, was saturated with this mixture, and applied wet round the foot, ankle-joint, and about three inches up the leg. The foot was kept perfectly at rest until this bandage was quite dry, when it formed a firm hard case of cement round the part. With this support she could walk without assistance tolerably well, and, when accustomed to it, could take very active exercise, and even dance the fashionable dances of the day with ease and agility. She does not, however, rest upon the heel, but supports the weight of the body upon the fore part of the foot. The bandage requires to be removed about once in three months, which is done by soaking the part for a considerable time in warm water. When the bandage is off, the foot is just as powerless now as it was a few months after the accident.

In the discussion which ensued, it was remarked by several members, that cases of hysterical affections of the joints often presented anomalous and remarkable symptoms. In this case, however, there was no evidence whatever of the presence of hysteria, and the joint appeared to have really received a severe injury.

THE LANCET.

LONDON: SATURDAY, MARCH 14, 1846.

ON Monday evening last there was held another meeting of the Council of the Royal College of Surgeons. The attendance was more numerous than on the previous occasion. When it was moved that the resolution embodying the vote of censure on the conduct of Mr. LAWRENCE should be confirmed, the reprimanded individual addressed the Council, and endeavoured, by urging various pleas, to interpose an effectual barrier between himself and the execution of the sentence which had been passed upon him. He whined, manœuvred, and pleaded in vain. The majority of his colleagues resolved to be both just and inexorable,—in a word, to be inexorably just. The sentence of condemnation, after a warm discussion and a division, *was confirmed*.

The position which WILLIAM LAWRENCE now occupies in the presence of the many thousands of surgeons of England, whom he has insulted, is of his own creation,—a sufficient attestation of its being at once both degrading and dishonourable. Gratifying is it for us to be enabled to announce to our professional brethren, that in the opinions expressed by all the leading members of the Council, during the discussion of the “resolution of censure,” the merits, respectability, and general scientific standing of the members of the College were fully, distinctly, and repeatedly acknowledged. In the speeches of some of the minority, a less amiable and just spirit prevailed. But it was evident to all, that the calumniator of the members of the College had not a single friend at hand who was sufficiently bold or indiscreet to attempt to justify his highly offensive conduct. The resolution for confirming the minutes having been carried by a majority, we ought to be enabled to publish the *names* of the members of the Council who have thus succeeded in passing the vote of censure, and also the names of those gentlemen who have thought it to be consistent with their duty to record their votes against it. But the proceedings of the Council of the College of Surgeons, like those of a certain disreputable committee, are conducted with closed doors—are transacted *in secret*.

WITH painful feelings we approach one of the most flagrant of the professional scandals and infamies of the day—namely, the unnatural connexion so long permitted between the names of Dr. RICHARD BRIGHT and “Professor” HOLLOWAY. During four years of incessant advertizing in almost every daily, weekly, or monthly publication in the kingdom, and by an incredible expenditure, it has been vauntingly proclaimed that Dr. BRIGHT has given his unsolicited sanction and support to this notorious quack, and the nostrums he offers to the gullible public. We are not aware that the advertized connexion between them has ever been publicly disavowed by Dr. BRIGHT, anxiously as we have often looked for it; so that we

are bound to consider the distinguished physician as the willing or indifferent victim of this empirical Juggernaut.

Not that we mean for a moment to give credence to the extraordinary tale promulgated respecting Dr. BRIGHT, under the sanction of a real or pretended oath taken before a magistrate. If it could obtain belief among the profession, Dr. BRIGHT would at once, and for ever, fall from his present position. Still, the public must believe it. The long continuance of the same story, and its passing uncontradicted, are sufficient proofs for the mass, who never really think about such matters, or look at all below the surface of things. The poor and the sick are peculiarly open to such kinds of imposture. The following is copied from a small handbill, in which the Earl of ALDBOROUGH is emblazoned on one side, and Dr. BRIGHT on the other, as the two great supporters of HOLLOWAY’S PILLS and Ointment. The bill belongs to that disgusting genus so perseveringly thrust into the hands of foot-passengers in the leading thoroughfares of the metropolis.

“A CURE FOR ALL!!”

“HOLLOWAY’S OINTMENT.—Extraordinary cure of a case abandoned by Guy’s, the Metropolitan, King’s College, and Charing-Cross Hospitals, London.—This Affidavit was sworn to this 8th day of March, 1842, before the LORD MAYOR, at the Mansion House.

“*Summary of Affidavit.*—WM. BROOKE, messenger, of 2, Union-street, Southwark, London, maketh oath and saith, that he (this deponent) was afflicted with FIFTEEN RUNNING ULCERS on his left arm, and ulcerated sores and wounds on both legs, for which deponent was admitted an out-door patient at the Metropolitan Hospital, in April, 1841, where he continued for nearly four weeks. Unable to receive a cure there, the deponent sought relief at the three following hospitals:—King’s College Hospital, in May, for five weeks; at Guy’s Hospital, in July, for six weeks; and at Charing-Cross Hospital, at the end of August, for some weeks more; which deponent left, being in a far worse condition than when he had quitted Guy’s, where Sir BRANSBY COOPER and other medical officers of the establishment had told deponent that the only chance of saving his life was to LOSE HIS ARM. The deponent thereupon called upon Dr. BRIGHT, chief physician at Guy’s, who, on viewing deponent’s condition, kindly and liberally said, ‘I am utterly at a loss what to do for you; but here is half a sovereign. Go to Mr. HOLLOWAY, and try what effect his pills and ointment will have, as I have frequently witnessed the wonderful effects they have in desperate cases. You can let me see you again.’ This unprejudiced advice was followed by the deponent, and a perfect cure effected in three weeks, by the use alone of HOLLOWAY’S PILLS and OINTMENT, after four hospitals had failed!!! When Dr. BRIGHT was shown by the deponent the result of his advice and charity, he said, ‘I am both astounded and delighted; for I thought if I ever saw you again alive, it would be without your arm. I can only compare this cure to a charm!!!’

“Sworn at the Mansion-house of the City of } WM. BROOKE.
London, this 8th day of March, 1842. }

“Before me, JOHN FIRIE, Mayor.”

The handbill from which we have taken the above affidavit, is headed by a tawdry woodcut, the design of which is actually taken from WEST’S picture in the National Gallery, of “Christ healing the sick in the Temple.” A crowd of persons are represented as bringing the sick and maimed to HOLLOWAY, who, of course, personates the SAVIOUR in the act of performing his miracles. The same design is impiously printed on the pill-boxes and the pots of ointment. We have even seen it heading advertisements in country newspapers—advertisements which have actually contained real or pretended certificates from dissenting ministers. Until a recent period, a dirty cartoon, equally blasphemous in its design, stood as a screen in the pill and ointment mart in the Strand. We state the naked and repulsive facts; they need no rhetoric, no indignation of ours; we wish we could place

them before every religious abettor of this or any other form of quackery in the kingdom; for all belong to one family, and the same loathsome spirit is rife in all.

The setting forth of the Charter of the College of Physicians is as suitable to the present, as it was to the time when LINACRE obtained it more than three centuries ago. Now, as then, "A great multitude of ignorant persons, boldly and accustomably take upon themselves great cures, to the high displeasure of God, great infamy of the faculty, and the grievous hurt, damage, and destruction of the king's liege people." But there is a vast difference in the aspect of the profession towards quackery at the present time. An unaccountable torpidity exists. We stand almost alone in our denunciation of it, in all its phases, as a gigantic evil in and to the profession, a great blot upon public morals, and an enemy to the public safety.

For a long time, the written affidavit, of which this handbill purports to be a copy, was exhibited in the shop-window at Temple Bar, with the actual signatures of WILLIAM BROOKE, the so-called messenger, and Sir JOHN PIRIE, the Lord Mayor, by way of giving determinate and irrefragable proof of the truth of the handbills and advertisements. At present, it is, however, withdrawn, but corroborative proof of another kind is resorted to. A testimonial of the virtues of the pills and ointment in curing ulcers is advertised from a Dr. RICHARD BRIGHT, of Ely-place, instead of Saville-row. The trick passes muster, and does its work, for no one takes the trouble to inquire if there be any "celebrated physician," named Dr. RICHARD BRIGHT, at Ely-place, (which we need hardly say there is not;) no one thinks, indeed, of any other Dr. RICHARD BRIGHT than the "chief physician at Guy's." The following is a copy of the testimonial in question, taken from the daily *Times*:—

"Dr. Bright, of Ely-place, Holborn, and Holloway's pills and ointment.—Copy of a letter from this celebrated physician to Professor Holloway:—'Sir,—I think it but an act of justice to inform you that I have tried your ointment and pills in several cases of ulcerated sore legs, which for a considerable time had resisted every kind of treatment, but which were afterwards effectually cured by the use of your medicines. In cases of bad breasts, I have also found them of great service; indeed, from my practical knowledge, I think them invaluable in most cases.

"Signed, RICHARD BRIGHT, M.D."

It is singular, that on this occasion any compunction should make him use the evasion of Ely-place, while in the other advertisement, "Dr. BRIGHT, chief physician at Guy's," is boldly paraded.

If we blame the quack who thus preys upon society, must we not also blame the physician for the sufferance which allows it to continue? Dr. BRIGHT has risen to great, and far be it from us to say undeserved, professional eminence. His professional reputation has given him extensive practice, and he has also acquired no inconsiderable fame; it has given him high social position and connexion; he has risen to the head of the medical staff of one of the most famous metropolitan hospitals, and he is "physician extraordinary to his Sovereign." He must, or ought to, feel satisfied with his professional career. Others there are who have done far more than Dr. BRIGHT for the advancement of medicine, but who have not been so fortunate as to meet with an equal reward. There has always been in the profession a disposition to receive everything he had done in a kindly and gracious spirit. Can it be said that the faculty has no claim in return for all this? Undoubtedly it cannot.

There is a reciprocal claim! From him, if from any man living had the profession of medicine a right to expect honour, respect, and defence.

The profession of the law, in the person of JUSTICE GASCOIGNE, is said to have stopped not at rebuking and punishing the heir to the throne, in vindication of its right and dignity. The church also has never been wanting in defenders. Time was when a Physician* appeared before a Lord Mayor of London to defend the privileges of his order, even when they were encroached on by the professors of surgery. Dr. BRIGHT's passages before a Lord Mayor of our own time are of a very different order. Many of the old physicians, heroes of the cane and the lancet, were as chary of the honour of the faculty, as the knights of the lance could be of the fair fame of their ladies. There was a black-letter chivalry as well as the chivalry of the casque and the sword. Dr. BRIGHT is, we grieve to say it, a sad specimen of modern degeneracy in this respect. He has allowed the medical faculty to receive a dishonourable hurt through his name, and has, to all outward appearance, remained silent and unresenting.

But it may be asked, what could Dr. BRIGHT have done? This question we proceed to answer. We would argue the question not so much against the quack as against Sir JOHN PIRIE. If no oath at all of the kind was ever taken, then HOLLOWAY would have had to be dealt with. It would be easy to obtain an injunction in this case, for there can be no mistake about "Dr. BRIGHT" the "Chief Physician of Guy's," and the hero of the hand-bill, being *the Dr. Bright*. Either this or an indictment for conspiracy might have been the mode of procedure. But if the oath were really administered, then was the Lord Mayor most open to censure for throwing a scandal upon the profession, and an insult on Dr. BRIGHT. He was, too, legally responsible for the offence, and might have been signally punished. By a singular coincidence, it happened, that at the Devon Spring Assizes, in 1842, in the very same year, and at about the same time as the swearing of this affidavit, a case was tried bearing most directly on the legality of the act of Sir JOHN PIRIE, always supposing the oath to have been really taken.

By an Act of Parliament, in which declarations were substituted for oaths, and which came into operation in 1835, magistrates are made guilty of a misdemeanor if they administer oaths touching matters over which they have no jurisdiction by statute. The act runs thus:—

"And whereas a practice has prevailed of administering and receiving oaths and affidavits voluntarily taken and made in matters not the subject of any judicial inquiry, nor in any-wise pending or at issue before the justice of the peace or other person by whom such oaths or affidavits have been administered or received; and whereas doubts have arisen whether or not such proceeding is illegal; for the more effectual suppression of such practice, and removing such doubts, be it enacted, That from and after the commencement of this Act, it shall not be lawful for any justice of the peace or other person to administer, or cause, or allow to be administered, or to receive, or cause, or allow to be received, any oath, affidavit, or solemn affirmation, touching any matter or thing whereof such justice or other person hath not jurisdiction or cognizance by some statute in force at the time being."

Under this Act a trial arose, as we have stated. The facts were as follow.

A justice of the peace for the county of Devon, JOHN NOTT, Esq., administered oaths to JOHN HUXTABLE and two other persons

* Caius.

respecting some statements affecting the professional character of a clergyman, the Rev. J. RUSSELL. These oaths he transmitted to the Bishop of EXETER, urging the bishop to make inquiries into the conduct of his subordinate. Mr. RUSSELL, however, immediately preferred an indictment against the magistrate for this proceeding, under the above Act, and the case was tried by a special jury. Ignorance of the law was pleaded by Mr. NOTT, but Mr. Justice COLERIDGE directed the jury that "the mis-
"chief contemplated by the Act was of a public nature, and
"therefore contravention of it an indictable offence. That
"mere ignorance of the law was no legal excuse for the com-
"mission of the offence." A verdict of guilty was returned, and the magistrate was sentenced to *one month's imprisonment!* Subsequently this judgment was amended in the Court of Exchequer, on the ground of some informality in the indictment; but the interpretations of the law given by the judges went directly to support the verdict of the jury. And there can be no doubt of the necessity of such a law. But for this Act, oaths might be administered which might be false, and yet not the subject of indictment for perjury; for a statement sworn to in this illegal manner has no greater effect than a written statement without an oath. It does not constitute perjury; and Lord DENMAN observed, that if such oaths were allowed with impunity, "a mock tribunal might be erected,
"without any real jurisdiction, before which the character of
"an individual might be ruined without redress."

Thus, then, there is a case in point, and almost entirely parallel with that of Dr. BRIGHT and Sir JOHN PRIE, if Dr. BRIGHT had chosen to avail himself of the aid of the law. Apart from the assertion of his personal honour, he might have made this illegal affidavit an occasion of service to the whole medical faculty. If Sir JOHN PRIE had been indicted, the profession would have reaped the benefit in public respect, and the thousands who encroach on its rights and privileges would have received a useful check. But there are other legal means, other forms of action, also, to which we need not again refer, but which we would recommend Dr. BRIGHT to inquire into, by which the pestilent quack himself might be reached and punished. Surely there are inducements enough to rouse Dr. BRIGHT. He ought, indeed, to have acted without receiving such a rough monition as the present. Are there not hundreds of men who have grown grey in the profession, and who are still dependent on their labour, so great is the competition, and so low the scale of medical remuneration? Are there not hundreds of industrious young men rushing as candidates for every petty appointment that offers, let the salary be ever so menial in amount? Should not these facts, for they are so, incite Dr. BRIGHT to some steps that might have hindered the flagitious progress of a quack, who, by the help of Dr. BRIGHT's name,—a name made by the suffrages of his brethren,—draws thousands of pounds per annum from the public, all which money should legitimately and of right flow into the coffers of a plundered profession. Dr. BRIGHT has incurred a very heavy debt towards the profession, to the discharge of which we trust he will apply himself in right earnest. Nothing would please us more than to see him setting himself right in a matter which is, in truth, as it at present stands, a very grave one.

In our strictures, however severe they may seem, we have not had in view any *attack* on Dr. BRIGHT, but rather the *defence* of the profession. We have said all in honour and

nothing in hate; without personal feeling of any kind whatever. May our pen forget its cunning, when we indite, knowingly, one word in derogation of a faculty to which we rejoice to belong, or of any upright and orthodox member; still, we would not stay our hand, in our attack upon quackery, if the shade of ESCULAPIUS stood in our path. But we have no cause for hesitation; it is by such conduct as we have been condemning that the manes of the illustrious dead are daily outraged.

In another page we print a letter from Dr. Locock respecting the dishonest use of *his* name by the unprincipled quacks. The letter is courteous, and in many respects gratifying, but it is certainly not all we could have wished, or which the profession might have expected. Of course, the use of his name (as we believed) was dishonest, and unsanctioned by him in any way. But we regret, that after having consulted two or three medical friends, who advised him to do nothing, and consulting a lawyer, who gave the opinion that he had no remedy at law or equity, Dr. Locock should have been willing for his good name to continue the undisputed property of the knavish pretenders who have filched it for their vile and unseemly purposes. His lame and impotent conclusion is the fear that he is "likely to have no other redress than has fallen to the lot of others who have been similarly circumstanced." Dr. Locock has not gone beyond the merest initiation of an attempt to avenge the injury committed against himself and the faculty, when he at once falls back prone and paralyzed. Had he made any *public* legal attempt to put down the insult, we should not have been able to say that he had been made "the supporter of quackery, without, as far as the profession is aware, lifting a finger to defend himself *or the faculty* to which he belongs."

We have heard legal opinions of an opposite cast to the one quoted by Dr. Locock. Would the eminent lawyer be of opinion that the continued daily advertisement of the names of her Majesty's attorney and solicitor general, in connexion with notorious falsehood and fraud, and in a matter directly relating to the profession of the law, would be no "loss nor damage" to these gentlemen? The reputation of her Majesty's physician should be as valuable as that of her Majesty's lawyer, and certainly the quackish use of the name of the former is likely to bring both him and his profession into public contempt. He could only have given such an opinion on the supposition that a low tone of professional feeling was universal amongst medical men; that his client's name might be used for any disreputable purpose, and yet the name and the man retain the unabated suffrages of the profession. We are by no means sure that Dr. Locock has suffered "neither loss nor damage" from the unmolested prostitution of his name and fame by the set of Jews who have fastened upon it. The time will, we trust, soon arrive, when no man will be able to suffer his name to be allied in any way to open and glaring quackery without losing the confidence of the profession.

We conceive that the profession have a right to expect that Dr. Locock should make the actual attempt to arrest the evil, and failing in this, that he should do his utmost towards procuring an alteration in the present anomalous state of the law in reference to quackery. His public position would give him great power and influence in this respect.

Another feature in Dr. Locock's letter of which we must

venture to complain, is, that he appears to consider the matter an entirely personal one. There is no reference whatever to the profession,—to the faculty,—of which he is an unit, and which is suffered to receive a wound through his name. The very lowest view of the subject is, we cannot help thinking, taken throughout. He is most anxious to remove the supposition that “*I* would not be desirous of getting rid of such a serious personal annoyance,” and that “*I* was otherwise than seriously annoyed by such a breach of honesty,” or that “*I* was indifferent to your well-meant lecture on my apparent inertness.” And, again, he says, “*I* am afraid that *I* am likely to obtain no redress.” We most cordially wish Dr. Locock had entertained the nobler, the truly liberal and professional view, of the subject, and had given a thought to his order as well as to himself. It is, unfortunately, too much the fashion, in the present day, for every single member of the profession to think of himself, and not to think at all of the faculty, which gives him his rank and station. Almost all our medical institutions, from the want of the representative principle, and from other causes, tend to foster and perpetuate this deplorable state of things. Every man in the profession ought to entertain two duties, one towards himself, the other towards the medical faculty—the general medical body. It is the prevalent forgetfulness of this latter duty which has contributed so greatly to our present degradation. In the church, we hear of “the dignity of the cloth,” in the law, of “the honour of the bar;” but in medicine we have hardly a phrase of similar meaning, so totally is the thing signified forgotten. We may have many eminent men amongst us, we may confer signal benefits upon the state, but unless we are animated by an unselfish and respectful sentiment towards our profession, and a determination to uphold its honour and dignity at all hazards, we shall, as a body, shine to but little advantage. To such men as Dr. Locock and Dr. Bright the profession ought to be able to look as examples in this respect.

THE BRISTOL MEMORIAL.

DEPUTATION TO SIR JAMES GRAHAM.

ON Tuesday last the Hon. H. F. BERKELEY, member for Bristol, and Mr. WAKLEY, M.P., attended at the Home Office, and presented to Sir JAMES GRAHAM a memorial which had been signed by no less than 827 FELLOWS and MEMBERS of the Royal College of Surgeons. A copy of the document will be found below.

Sir JAMES GRAHAM entered fully into the objects and views of the memorialists, and stated to the deputation that he was extremely anxious to see a good understanding and harmony restored between the Council of the Royal College of Surgeons and the great body of the profession. The right hon. gentleman also stated to the deputation that if a MEDICAL BILL were to be presented to him which had received the sanction of the profession generally, he would willingly bestow upon it his most deliberate attention, as it was his earnest desire to see all the sources of discontent in the profession completely and for ever removed.

“MEMORIAL OF THE BRISTOL ASSOCIATION OF SURGEONS.

Addressed to Sir James Graham.

At a general meeting of the members of the Royal College of Surgeons, of England, resident in Bristol and its neighbourhood, held on Thursday, the 24th July, at the Medical Library, Orchard-street, the following memorial was unanimously adopted:—

To the Right Hon. Sir James Graham, Bart., M.P., one of her Majesty's Principal Secretaries of State.

The memorial of the undersigned members of the Royal College of Surgeons of England,

SHOWETH,—That your memorialists respectfully express their gratitude for the interest you have evinced towards the medical profession, by the introduction into the Commons House of Parliament, of measures to settle the present conflicting laws for the regulation of medical education and practice throughout the United Kingdom, and earnestly hope that you may be enabled to carry your intentions into effect, by the enactment of a measure alike satisfactory to yourself and the medical profession.

But we would beg to call your serious attention to the provisions of the charter recently granted to the Royal College of Surgeons, and to the injustice which your memorialists, in common with the great majority of the members of that college, have suffered by the partial and invidious manner in which the council have exercised the powers vested in them by the charter of 1843.

We submit that, as members legally admitted by examination to an equality of privileges with all, but the council of the College of Surgeons, no distinction or pre-eminence should have been given to any member of our body unless upon clearly defined principles, which would have justified so great an alteration in the constitution of the college.

At the same time that we hail with pleasure and satisfaction that a well-merited and honourable distinction has been conferred upon many scientific gentlemen, who adorn our mutual profession, we are nevertheless aware that many who, in their restricted spheres of usefulness, have laboured with equal ardour in the prosecution of surgical knowledge,—many distinguished naval and military surgeons who, having had peculiar opportunities for acquiring information, have materially assisted the progress of medical and the collateral sciences, and thus elevated the general character of the profession—have been passed over, while others, whose diplomas bear comparatively recent dates, have received those honours denied their seniors.

We therefore express a hope that you may deem it fit to advise her Majesty to grant a Supplemental Charter, by which all those who were admitted members of the Royal College of Surgeons of England, previous to September, 1843, (under such restrictions as her Majesty's government may consider necessary,) shall, upon just and equitable principles, be placed upon an equality with the recently elected fellows.”

HOSPITAL REPORTS.

UNIVERSITY COLLEGE HOSPITAL.

ON PERICARDITIS.—By JOHN TAYLOR, M.D., Professor of Clinical Medicine in University College, and Physician to University College Hospital, London.

CASE 27.—*Headach, giddiness, &c., followed, after six months, by partial hemiplegia, blunted intellect, dilated pupils, and slow pulse; increased impulse of heart, then tumultuous action and double friction-sound; erysipelatous inflammation of face without redness, wheezing laryngeal respiration, and signs of bronchitis; urine albuminous; death.*—*Post-mortem, with remarks: hæmorrhage into right corpus striatum, with softening around it; changes in the coagulum; relation of the hæmorrhage and softening to each other; distinction between the symptoms of simple cerebral softening and of hæmorrhage, with its rationale; premonitory symptoms; absence of rigidity of limbs, or convulsions: site of the headach; characters of paralysis; connexion between particular sets of muscles and particular parts of brain; pericarditis probably curable without leaving any anatomical traces; characters of the friction sound; other symptoms; inflammation of the pleura without redness; physical signs; pneumonia and its signs; pain occasioned by it in the abdomen; inflammation of larynx and pharynx; Bright's disease in advanced stage; its latency; little albumen in urine; no anasarca, and the reason.* *Causes*—1. of the renal disease and hypertrophy of the heart; 2. of the co-existing acute inflammations; connexion between apoplexy and morbus cordis; treatment and its effects.

JAMES C—, aged 38, admitted Monday, February 21st, 1842, a short stout-built man, of sanguine temperament, a stableman, married; always had sufficient employment; has not kept habitually late hours; formerly was accustomed to dram-drinking, but has been little addicted to this during the last two years. Father died from a fit, after three days illness, at

the age of 82, and was also subject to rheumatism. During the last three years has had several attacks of acute articular rheumatism; the joints were swollen and red. For several winters has had a cough, dyspnoea, and palpitations of the heart. Eighteen months since, he fell from a height of ten feet upon the pavement, but without striking or hurting his head. About six months ago he began to have headach, chiefly affecting the right side, and since then has been troubled with giddiness. During the last three weeks, besides the giddiness, has had a mist before his eyes, and words or letters appeared to be double; has also had numbness of the fingers and thumb of the left hand, and these symptoms have continued up to the present time. February 18th, on rising in the morning, he felt great giddiness, and on attempting to pull on his trousers, fell backwards upon the floor. His mind felt much confused, but he never lost his consciousness. He was assisted up by his wife, and recovered sufficiently to go to his work the same morning. The following morning, on going down stairs after dressing, he again felt so giddy that he would have fallen if he had not laid hold of the balusters; he was able, however, to go to work. In the evening he applied four leeches to his right temple, and took some opening medicine.

On admission, the countenance had a heavy stupid expression; face not flushed; much drowsiness; giddiness on sitting up in bed; pain over the occiput and nape of the neck; says his memory is not impaired, but it seems to be so, and the intellect is dull and confused; pupils rather large, but also dull; has a mistiness before his eyes when he looks at distant objects; no noise in the ears, and never has had; articulation thick and indistinct; no difficulty of deglutition; the mouth deviates to the right side, and a little upwards; the upper lid of the right eye covers the ball more than that of the left; (this appears to be owing to some puffiness of the lid which followed the application of leeches to the temple;) partial loss of sensation in the fingers and thumb of the left hand; motor power diminished in the same hand, for he cannot grasp any object firmly; he can close the fingers with more force than the thumb. When he holds anything in this hand, he says he is very apt to let it drop; the hands are of a rather livid colour, and, as well as the feet, feel cold. Pulse 60, full, and very firm; skin quite cool; a murmur with the first sound of the heart, slight, and indistinctly defined; impulse not mentioned; chest well formed; slight cough, but without any pain; some sonorous and sibilant rhonchi; tongue whitish; does not deviate towards either side when protruded; bowels have been freely opened by medicine. Ordered venesection to twenty ounces, if the strength permit. To have ten grains each of calomel and compound extract of colocynth immediately, and a dose of house physic after three hours. Five grains of blue pill three times a day. Low diet.

22nd.—Twenty ounces of blood were taken, and it was bled and cupped. Feels better. Repeat the venesection to fourteen ounces.

23rd.—No headach or giddiness; articulation improved; sensation and motor power in the fingers increased; pupils smaller; pulse 84, full, but less firm; blood neither bled nor cupped.

24th.—Says he feels better; head seems confused; intellect blunted; on pinching any one finger of the left hand, and asking him to point out which it is, he always says the forefinger; no diminution of sensation in the feet or legs; pulse 96, firm and jerking; rather a loud bellows murmur with the first sound of the heart, most distinctly heard about the fourth costal cartilage at the left border of the sternum; a slight murmur with the second sound, also at the base; impulse too strong. Ordered, ten ounces of blood to be taken by cupping from the nape of the neck. To take half a drop of croton oil immediately.

25th.—A little pain across the forehead; no giddiness; pupils natural; no difference in the eyelids of the two eyes; speaks better; pulse slightly jerking; bowels moved several times; gums tender. Omit the blue pill, and repeat the croton oil to-morrow morning.

28th.—On pinching the hand, he can distinguish the parts touched. To take three grains of iodide of potassium three times a day in peppermint-water.

March 4th.—Sleeps badly. To have four grains of iodide of potassium.

7th.—No headach or giddiness; the memory is improved; and the intellect is less confused; can still distinguish the parts of the left hand which are touched; pulse 116, hard, rather jerking, occasionally intermittent; there is a murmur with the first sound of the heart, loudest at the left side of the bottom of the sternum, audible, also, at the apex and the top of the sternum, but not in the neck; no murmur with the second sound.

9th.—Has had severe pain over the occiput; no giddiness; pulse 120. Ordered to be cupped on the nape of the neck to eight ounces.

11th.—No headach; feels much better; sensation equal in both hands; mouth deviates a little.

14th.—Cardiac murmur less distinct; the action of the heart is tumultuous; a metallic clicking is heard over the apex; no pain or uneasiness in the region of the heart; pulse 104. To be cupped over the heart to eight ounces. The blood drawn was buffy.

15th.—A double sound—apparently a friction sound—heard pretty equally over all the region of the heart. To take five grains of blue pill three times a day.

16th.—Heart's action less tumultuous; the morbid sound continues, and appears to consist of a bellows murmur and a friction sound combined. Repeat the cupping over the heart to eight ounces. To take the blue pill twice a day only.

18th.—Heart's action less tumultuous; morbid sounds less extensively audible; loudest at the left side of the sternum, over the lower two-thirds; less loud at the upper third; pulse 120, and considerably smaller; on percussion, a dull sound over the heart to the extent of four inches perpendicularly, and the same transversely; gums very sore. To take the blue pill every night only.

19th.—Omit the iodide of potassium. To take a quarter of a grain of tartarized antimony, with a drachm of sulphate of magnesia, in peppermint-water, every six hours.

21st.—The integuments of the chest are puffy at the upper part, especially on the right side, so as to conceal the clavicle; face much swollen, most on the right side; right eye closed; no redness, but smarting pain in the face; a large vesicle formed yesterday on the right cheek. The swelling commenced yesterday, and was then limited to the upper part of the face; attributes it to a draught of cold air; dyspnoea extremely urgent; loud wheezing respiration over the larynx, chiefly with expiration; no swelling about the epiglottis or glottis can be felt with the finger; no ulceration inside of the cheeks; mucous rhonchus in the posterior and inferior part of the left lung; puerile respiration in the upper part; sonorous and sibilant rhonchi at the back part of the right lung; feeble respiratory murmur in the front. *Heart:* action very rapid; healthy sounds much diminished; little or no murmur audible; pulse 140, small and hard. The urine is rendered turbid by heat and nitric acid; and after standing, it deposits a white flocculent precipitate, equal in bulk to one-sixth of the urine employed; specific gravity 1012. Bowels opened four times to-day. Had a swelling of the face three or four years ago—said to be erysipelas. Omit the blue pill; increase the tartarized antimony to half a grain; the parts affected to be fomented with hot water.

22nd.—Face much less swelled on the right side; swelling and redness of the left ear; the scalp covering the left temple is swelled and tender, but not red; some oedema at the upper part of the right side of the chest; respirations thirty-six a minute, laborious, noisy; cough trifling; very little expectoration, none could be seen; over the larynx is a loud wheezing noise, with imperfect mucous rhonchus, especially during expiration; loud, sonorous, and some mucous rhonchi in the anterior, and especially in the superior, part of the right lung; the same behind to a less amount; some sonorous and sibilant rhonchi in the left lung, chiefly behind; heart's sounds inaudible; pulse 120, small, soft, not intermitting; passes very little urine; retched much in the night, but vomited nothing; bowels open several times; no increased heat of the skin; face pale, lips slightly livid. Increase the dose of tartarized antimony to three quarters of a grain, to be taken every four hours. Apply eight leeches to the throat, and a blister to the sternum.

23rd.—Less swelling and redness of face and scalp; the throat was relieved before the leeches fell off; heart's sounds more distinct; no murmur; action less tumultuous; pulse 120, small, not firm; less rhonchi over the larynx and both lungs; no expectoration; has vomited twice, and been purged four or five times.

24th.—Pain in the abdomen since the morning; it is constant but is increased in paroxysms; moderate tenderness, especially over the right hypochondrium; not much swelling or tension; pain during inspiration below the right hypochondrium; loud sonorous rhonchus over the anterior part of the right lung; less on the left side; sonorous and mucous rhonchi over the back part of the left lung; much less over the right; on percussion, a clear sound over the left lung, but a dull one over the back part of the right lung; heart's sounds masked by the noisy respiration; pulse 129, small, weak; intellect quite clear. Omit the tartarized antimony. To take four

grains of carbonate of ammonia, with an ounce of decoction of senega, every three hours. Hot fomentations to the abdomen.

25th.—Died at four A.M.

Inspection of the body fifty-seven hours after death.—Exterior:

A great part of the trunk and limbs marked, in the course of the larger veins, with stains of a claret-colour; face and head a little swollen, but not red, and the affected part of the scalp is infiltrated with serum; left ear swollen and red; no oedema of the legs or any other part.—*Head:* The arachnoid membrane, over the anterior part of the brain, is less shining than usual, drier, and rather opalescent, and is studded with a number of small, opaque, white spots. The two laminæ are connected by old adhesions along the margin of the great longitudinal fissure; no effusion of coagulable lymph or pus; slight sub-arachnoid serous effusion; the pia mater everywhere was paler than ordinary, and was readily removed without tearing the surface of the brain; one or two drachms of serum at the base of the brain; substance of the brain unusually pale and of a dull white colour; consistence natural; numerous red points of a considerable size in its interior, but of a very pale-red colour; no serum in the ventricles. The surface of the right corpus striatum appeared a little softened, and on scraping it off, a softer part, of a yellower colour, was soon reached; a little deeper was found a coagulum of blood of the size of a walnut; its exterior was of a deep fawn colour, the central part consisted of rather fluid black blood; it was surrounded by a capsule or cyst, of a still deeper yellow colour, and which tore with a very slight force; from a quarter to half an inch, or more in some parts, the substance of the brain around the clot was reduced to about half its natural consistence, and had a uniform deep fawn tint, dotted over with spots of a deeper yellow colour. No other morbid appearance in any part of the brain or cerebellum. The arteries were quite healthy, presenting no atheromatous spots. Weight of the brain, cerebellum, and medulla oblongata, fifty-one ounces and a half.—*Neck:* The mucous membrane covering the epiglottis and the adjacent part of the root of the tongue; that stretching from the epiglottis to the back part of the larynx, and over the arytenoid and cricoid cartilages; and the commencement of the pharynx was of a deep dusky-red colour; the redness was occasioned by the injection of numerous very fine bloodvessels, (particularly well seen through a lens), and was not a mere uniform red stain; a little mucus lying in the pharynx was colourless; there were two small spots of redness on the mucous membrane covering the true vocal cords; viewed through a lens they were found to consist of very fine bloodvessels; there was a little puffiness of the mucous membrane in the same situation. Before cutting open the larynx, the rima glottidis was observed to be open; the mucous membrane lining the anterior part of the trachea was rather too vascular; a small quantity of thin frothy mucus in the trachea.—*Chest:* The right pleura contained about twenty ounces of turbid slightly red serum; a large quantity of colourless soft lymph was lying over the lower lobe of the lung, especially over the base; the pleura was thickened and opaque, but not uniformly, and evidently from disease of an anterior date; no redness of either the pleura costalis or pulmonalis. The lower lobe of the lung was dense, non-crepitant, and of a dirty-grey colour, externally and internally; a dirty sero-purulent fluid could be scraped off its cut surface; portions of it were found to sink in water; its substance lacerates easily; upper lobe of a dirty pale grey colour, pervious, crepitant, scarcely denser, and not at all more brittle than usual; very little blood or serum exudes from the cut surface; the bronchial tubes, as far as examined, (through two or three divisions,) much thickened; twice as thick as in the left lung, and their calibre diminished; the thickening seemed to be in the cartilaginous portion, and was more marked in those leading to the lower than to the upper lobe; the mucous membrane was pale and not thickened; no adhesions or other morbid appearance in the left pleura; lung, pale anteriorly, and not so dark as usual behind; texture soft; crepitant and paler than usual. Bronchial tubes contained some bloody mucus; lining membrane, especially of the large divisions, intensely red; the redness terminated abruptly, and appeared in part, at least, to have arisen from imbibition. Weight of the right lung, thirty and a half ounces avoirdupois; left, seventeen ounces, avoirdupois.—*Heart:* Not more than three or four drachms of serum in the pericardium, and that not turbid; great redness of the serous or sub-serous tissue of the visceral pericardium, a little over the anterior, but chiefly over the posterior surface of the heart; the redness was composed of fine bloodvessels, and was not uniform, as in mere staining by imbibition; no loss of smoothness or transparency; a few spots of rather firm false membrane in the course of the anterior coronary artery, easily

scraped off with a scalpel; heart considerably enlarged; walls of the left ventricle much too thick; firm and paler than usual; cavity considerably dilated; endocardium transparent. Aortic valves but little thickened; but a lamina of old false membrane can easily be removed from the ventricular surface; they were thinner than usual near the margins; almost perforated; water poured into the aorta escaped into the ventricle but very slowly; numerous atheromatous spots in the commencement of the aorta, not elevating the lining membrane; the lining membrane of the aorta and the valves was stained uniformly of a deep-red colour; mitral valve rather thick, but otherwise healthy; its orifice admits two fingers with rather less freedom than usual; the fingers are constricted as if by an annular band at the base of the valves; left auricle neither dilated nor hypertrophied; foramen ovale closed; walls of the right ventricle too thick; cavity increased, but smaller than the left; endocardium and valves of the natural thickness; sigmoid valves a little stained; tricuspid orifice admits three fingers too freely; right auricle rather large, not thickened.—*Blood:* Right ventricle contains a large colourless coagulum; right auricle the same, with a black coagulum in addition, and situated posteriorly to the former; a coagulum chiefly of fibrine in the left auricle, and a small one in the left ventricle; the aorta and pulmonary artery each contain a coagulum of fibrine, with some black blood at and near to the sigmoid valves. Weight of heart, seventeen and a quarter ounces, avoirdupois; dimensions externally, length from the origin of the aorta to the apex, four and a half inches; greatest breadth, four and a half inches; greatest thickness of the left ventricle, excluding col. carnea, nine lines; right ventricle, three and a half lines; circumference of the aorta, two and a half inches, pulmonary artery, three inches, opposite to the free border of the sigmoid valves.—*Abdomen:* A few ounces of colourless serum in the peritonæum; œsophagus not examined.—*Stomach:* Full-sized; mucous coat pale, and extensively mammillated, especially in the pyloric half; weight, six and three-quarter ounces.—*Liver:* Full-sized; pale; some small calculi in the gall-bladder; weight, fifty-four ounces.—*Spleen:* Full-sized; healthy; weight, five and a quarter ounces.—*Kidneys:* Both very small; external surface marked with fine vascular arborizations; mottled, and rather uneven; substances a little dense; cortical portion, both between and external to the tubuli, very much diminished in bulk, and filled with yellowish-white deposit; tubular part not altered; weight of both together, six and three-quarter ounces avoirdupois.—*Intestines:* Appeared healthy, but were not laid open.

[The valuable remarks of Dr. TAYLOR, in a summary review of this case, we are compelled to postpone until next week.]

MEMORIAL OF THE SURGEONS OF BATH.

To the President, Vice-Presidents, and Council of the Royal College of Surgeons of England.

WE, the undersigned, Fellows and Members of the Royal College of Surgeons of England, practising in the city of Bath, considering it our duty to avoid the responsibility of being chargeable with indifference to the professional interests of our body at large, beg leave to submit to your consideration our views on the important questions which now occupy the minds of our professional brethren throughout the United Kingdom.

1. We are anxiously desirous that the curricula of general and professional education should be enlarged to the utmost extent required to protect the public from the manifold evils arising from the exercise of our profession, by unlearned and under-educated persons; and we will, therefore, gladly co-operate with the ruling powers of the College, in effecting so desirable an end.

2. We do not, however, conceive that the end proposed above is to be secured, by making either the present Apothecaries' Company, or any other new incorporation, created in its stead, an appendage to the Royal College of Surgeons of England; we are advocates for the College becoming the home of what is called the general practitioner, desiring that the examination should embrace all the subjects connected with surgery, medicine, and midwifery.

3. We are at a loss to conceive any adequate reason for the College refusing to become such an examining body as now suggested; for why should those who, in their daily practice, attend indifferently both surgical and medical cases, as it were virtually proclaim their own medical incompetency, by declining to examine on that subject; and their entire repudiation of midwifery seems rather the offspring of some re-

mote superstition, than the reasonable determination of men interested in the welfare of the human species; we would, therefore, propose that the Council appoint a conjoint Medical and Surgical Board, not more than one half to consist of members of the Council; the office of such Board being to examine candidates for the membership in all those sciences, whose knowledge may be considered essential to the formation of a competent medical and surgical practitioner.

4. Consolidation, not extension of our existing Institutions, seems on all accounts most desirable, provided, at the same time, a rule of equity and justice be meted out to all existing members of the College; and this brings us naturally to a clear and decided expression of our opinion that the selection to the fellowship, under the Charter of 1813, has been a palpable infringement of the rights of those existing members of the College, for whom we claim, as a right, under a Supplementary Charter, admission to the fellowship; with this proviso, that they be of ten years' standing, that they produce testimonials of good character, and that they engage neither to retail drugs, nor to make the remuneration of their services dependent on the quantity of medicine supplied to their patients; and that, on the same conditions, all those who were members previous to the grant of the last Charter, be made fellows in rotation, as soon as they shall have been members ten years.

5. Future members, as well as those who have passed since the Charter of 1843, to be elected fellows by examination only, or as the reward of merit, at the discretion of the Council.

6. The age of admission to members we would fix at twenty-two, a period of five years having been devoted to professional studies, not less than three of which should be connected with hospital practice.

7. The examination for the membership and fellowship to be open to the fellows and members of the College.

8. We deem it necessary that the number of the Council be increased by an infusion of provincial surgeons, whether practising surgery alone, or surgery, medicine, and midwifery conjointly; but no fellow to be eligible to the Council who dispenses his own medicines.

9. The Meetings of the Council to be open to the fellows.

January, 1846.

DR. LOCOCK'S LETTER ON THE MAL-APPROPRIATION OF HIS NAME BY THE QUACKS.

To the Editor of THE LANCET.

SIR,—I willingly acknowledge that I have reason to be gratified both with the manner and the spirit with which you have been pleased, in your last number, to call the attention of your readers to the shameful way in which notorious quacks had made use of my name.

You are wrong, however, in supposing that I have taken no steps to put down such conduct, and that I would not be desirous of getting rid of such a serious personal annoyance, were it possible.

By the advice of several of my medical friends, in whose judgment and knowledge of the world I had full confidence, I refrained from inserting any disclaiming letters in the newspapers; agreeing with them that it would lead to endless trouble, from the constant repetition of the quack advertisements, and from the very numerous country papers, magazines, journals, &c., in which they are daily inserted. Unless my repudiation appeared nearly as often as the advertisements, no effectual counteraction could be obtained.

I took the advice also of an eminent lawyer as to the propriety of applying to the Court of Chancery for an injunction, but the opinion returned to me was decisive. I quote the following passage:—"I fear you must continue to bear the annoyance of which you complain, because it is clear to me, that as you can prove neither loss nor damage by the sale of Dr. Locock's wafers, you have no remedy either at law or equity."

Three years ago, the death of my father, Dr. Henry Locock, appeared in the papers. He had retired from practice for more than twenty years, and I have ascertained was totally unacquainted with "Lady Dick." Not till after his death did the Corn-cutter at Charing-cross ever venture to publish a pretended certificate, without either date or address, signed "Henry Locock, M.D." But it is evident that as my name is not Henry, and my father's death has prevented any contradiction from him, it is not in my power to prevent or to stop such a dishonest proceeding.

It was also not till after my father's death that these pretended Pulmonic wafers were advertised; and in the printed

hand-bills which accompany the box, I found that the composition of the drug was attributed to Dr. H. Locock.

It was in this way that the fraud on the public was concocted; and I am afraid that I am likely to have no other redress than has fallen to the lot of others who have been similarly circumstanced. Every one will remember, a few years ago, the constant paragraphs in the newspapers puffing off Ashley Cooper's pills.

I do not wish to occupy your space with so unworthy a subject; but I was anxious that my professional brethren should not suppose that I was otherwise than seriously annoyed by such a breach of honesty; or that I was indifferent to your well-meant lecture on my apparent inattention.

The only other remark I take the liberty of making is, that you are mistaken in supposing I have any present intention of retiring from practice. If your paragraph to the contrary remained uncontradicted, I might perhaps be able to "prove both loss and damage."

I remain, Sir, your obedient servant,

CHARLES LOCOCK, M.D.

Hertford-street, May-fair, March, 1846.

ON THE CASE OF RUPTURED UTERUS REPORTED BY MR. TYTE, SURGEON, HARROW.

LETTER FROM MR. TYTE IN REPLY TO MR. D. JONES.

To the Editor of THE LANCET.

SIR,—In No. 8 of THE LANCET for 1846, page 229, there is a summary of my case of rupture of the uterus, and some remarks thereon by Mr. David G. Jones: the former is not quite correct, as it states, amongst other things, that the head was so far advanced as to press upon and dilate the perinæum,—my statement being, that the head had descended low in the pelvis, slightly dilating the perinæum,—and omits to mention that I had attended the patient three years before through a tedious labour. Mr. Jones characterizes the treatment as unusual, and says that it ought not to pass unnoticed, from the extraordinary manner in which it was conducted, repeating the statement I have corrected above, that the head was pressing upon, and dilating, the perinæum. If I have erred in my mode of conducting the case, I have the satisfaction of having done so in excellent company, as the following quotation from Dr. R. Lee's lectures on midwifery, page 435, will show.

"When the head of the child presents, and rupture of the uterus takes place, the best plan is without delay to deliver with the perforator and crotchet; and to prevent the child, during the operation, from passing through the rent into the peritoneal sac, pressure should be made over the fundus uteri, and the opening made in the head in the most gentle manner. I have seen no case of ruptured uterus in which it was possible to deliver with the forceps; and I am not aware that any case of ruptured uterus has been recorded in which a living child was delivered with the forceps. 'Efforts have frequently been made to deliver with the forceps in such cases,' says Dr. Collins, 'but this instrument is seldom applicable, as the introduction of the blades generally forces the head out of our reach; besides, but little would be gained, for the child dies shortly after rupture takes place; the dimensions, too, of the pelvis are in such cases for the most part defective; all which circumstances would seem strongly opposed to this mode of delivery. In three of the thirty-four cases above alluded to, attempts were carefully made to deliver with the forceps, but without success.' Dr. Burns is of a different opinion. He says, the child may live for hours, after rupture of the uterus, if the placenta be not detached, or the hæmorrhage great. If the head have entered the pelvis, and be within reach of the forceps, we must cautiously introduce the blades, taking great care not to press up the head or make it recede. From this hazard, and from observing that in such cases the child is generally dead, it has been advised by good authorities to perforate the head; but if we have no other inducement to use the perforator, I should consider that, unless the head be high, the forceps would be as safe in this respect."

This quotation, which may perhaps not quite accord with Mr. Jones's modern views on midwifery, will, I think, bear me out in my treatment.

It will be observed, that when we proceeded to deliver, the head had receded somewhat, but was in the cavity of the pelvis; there had been no labour pains of any utility for upwards of fifteen hours; her pulse flagged, and she had vomited. Every practitioner ought to be aware, as Mr. Jones says, that vomiting is a frequent occurrence during labour, and I think also, of some other information quoted above; but taken in connexion with the rest of the symptoms, who could

question that delivery ought to be at once effected? The difficulty with the vectis and forceps arose from the frequent recession of the head, for, as Mr. Jones remarks, there was no impaction; and he wishes to impress upon your readers, that he could have performed an operation in little more than half an hour, which the highest authorities in the art never knew to have been done, and believe to be an impossibility. The same cause (the recession) produced great difficulty in the perforation of the head, and the extraction of the child appeared to be impeded by spasmodic contraction of the fundus and body of the uterus around it. I contend, then, that, from the general circumstances of the case, we were imperatively called upon to deliver, and that the post mortem satisfactorily accounts for the difficulty in the use of the instruments, by revealing the ruptured state of the uterus, and that the practice pursued is sanctioned by high and multiplied authority, and I do not believe that any competent judge would question it.

I am, Sir, yours respectfully,

Harrow, February, 1846.

EDWARD C. TYTE.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

(THE BUST OF THE SURGICAL JANUS.)

WE have received the following note from Dr. Cursham, and readily place it in our columns. It certainly was a lucky and well-timed accident which led to the removal of an offensive resemblance to a bad original.

To the Editor of THE LANCET.

SIR,—Will you do me the favour to state in the next number of THE LANCET,—that the removal of Mr. Lawrence's bust (along with that of Dr. Bright) was merely a temporary arrangement, until additional brackets were put up in the library, and that the Council had no knowledge whatever of this proceeding, which originated entirely with myself.

I am, Sir, your obedient servant,

GEORGE CURSHAM,

Hon. Sec. to the Royal Medical and Chirurgical Society.

Saville-row, March, 1846.

ON REFLEX MUSCULAR ACTIONS.

NOTE FROM MR. W. ANDERSON, RUTLAND.

To the Editor of THE LANCET.

SIR,—I have not the slightest desire to occupy your pages with prolonged controversy upon the reflex muscular actions; nor is it at all in accordance with my taste and habits to retort the spirit and language of the letter signed "Vindex," in your last number. I could, however, serve him in his own strain, if I did not deem the subject of too important a nature to be treated with levities such as are found in Peter Pindar. In matters of science, the employment of the poignant shafts of wit, railery, or satire, by men pretending to a scientific character, is, to say the least, inapt and unbecoming: such weapons better become the unphilosophic. Regarding medicine as a boon from the Creator to suffering humanity, I consider that it is the duty of the members of the profession to cultivate it in a calm and dispassionate spirit of philanthropy; and how much soever it may be regretted, that doctrines now established upon the firm basis of truth (and which have immortalized the names of the founders) were opposed by ignorance, prejudice, and passion, we are not warranted in receiving any new doctrine without a full and searching investigation of its merits. If it withstand such investigation—if its truth appear ultimately in native lustre to the entire conviction of the world, it will be the more durable, and its author's name will be deservedly handed down to posterity, associated with an imperishable fame. I revere the memory of Harvey, Hunter, Sydenham—of Galileo and Kepler—and of others less illustrious who have advanced the cause of science—of medical science and humanity. I respect the name of Dr. Marshall Hall, but I can see no reason why his new doctrines should be encircled with the halo of sanctity with which "Vindex" would shield them from the scrutiny of the profession. Whether they be proved to be true or erroneous, Dr. Marshall Hall has merited his wreath, by turning the attention of the profession to the inquiry of a subject most important in human physiology and pathology; but I cannot help thinking, that such intemperate zeal as is manifested in the letter of "Vindex" will domore to unsettle the new doctrine of the independent function of the spinal marrow, than all the arguments brought against it by its opponents. He brings

into the field the same intolerant spirit of dogmatical denunciation in defence of his conviction, which he would no doubt loudly deprecate, if exercised against it.

It is, indeed, a grave and serious matter to appear before an entire profession charged with ignorance of so small a portion of the human structure as the olfactory nerve, and it was no little relief to me to find, at the conclusion, that that entire profession is included, "at one fell swoop," in a charge of ignorance also. For my own part, so obtuse are my faculties, that my ignorance cannot perceive its egregious error. I cannot, in my conscience, plead guilty to the charge, nor can I see that my accuser has substantiated it against me. I have not interfered with the anatomy of the olfactory, but I am disposed to repeat, that, in viewing the function of that nerve,—when I see impressions made upon its sentient extremity, followed immediately by certain muscular phenomena,—I regard them in the relation of cause and effect, notwithstanding the intervention of a sensation.

I shall now, Sir, for the present, withdraw from this subject; but if I live, I shall return to it another day, when more fortified by facts deduced from observation, &c.

W. ANDERSON.

Oakham, Rutland, Feb. 1846.

* * We regret that, from the crowded state of our columns, we could not conveniently publish the whole of the letter of Mr. Anderson. Confident are we that the discovery made by Dr. MARSHALL HALL is one of the most brilliant to be found in the records of physiology. Mr. Anderson will find the subject to be in every respect worthy of his most attentive consideration.—ED. L.

A NATIONAL FACULTY OF MEDICINE.

To the Editor of THE LANCET.

SIR,—I was very much gratified on reading your editorial remarks contained in THE LANCET for February 28th, concerning the formation of a NATIONAL FACULTY OF MEDICINE, together with the resolutions of the Council of the British Medical Association on the same subject. Both of these, if I mistake not, contain the elements of much good to the profession. Certain it is, the time has now arrived when nothing short of a National Faculty will satisfy the requirements of our body; and the sooner the British Medical Association buckles on its armour, and commences the honourable fight for it, the better.

No institution, as it appears to me, has stood its ground more faithfully in professional opinion than this, and no institution is more capable of originating a scheme of voluntary organization for this purpose. These views have not been hastily forced on my belief; for as yet I have not attached myself to any reform association whatever. I have been content to be a quiet, unobtrusive observer of all such matters. The time, however, has now arrived when I cannot help believing, that if the profession would but rouse from its extraordinary apathy, and be more united, each part making some concessions for the general good,—no portion of it asking for too much,—a Faculty of Medicine might be formed, (say for England, as a starting point), which, by its system of representative government, its mode of conducting the education of candidates for the profession, its rewards for scientific medical improvements and discoveries, its registration of all classes of the profession, &c. &c., must ultimately, if not speedily, force itself on the notice of the government. The profession cannot possibly remain much longer in its present anomalous condition; something must be done, and that soon, to ameliorate it, or it will not long exist as a profession. * * * The existing institutions might remain as they are. Let the College of Physicians grant the diploma of physician, the College of Surgeons that of surgeon,—let the surgeon who wishes to practise pharmacy in addition, apply to the Apothecaries' Company,—let all these elements be for the present incorporated in a Faculty of Medicine,—let the faculty register these diplomas, and publish the list, annually, of physicians and surgeons thus entitled to practise,—let the moneys thus acquired, and by the registration of all students entering the profession, be appropriated to the cause of medical science, in granting premiums for valuable discoveries and improvements in all the departments of medical science, with the publication of an annual registration list, a national Pharmacopœia, &c. &c. * * * To the British Medical Association I would say, "You are the only body who ought to undertake the management of this matter;" and to the profession, and more especially to the surgeons in general practice, (really the bulk of

it,) I would say—"Be united, give up all frivolous and vexatious quibbles about trifles, (in which the public do not sympathize;) never mind whether you are called fellows of your colleges or members, (the public judge of men by their merit and abilities, and not by the name their college gives them, especially when titles are to be conceded to a given age, without the test of examination)—in short, give up the shadow, and grasp the substance." Peace and unity among members of an honourable calling like that of medicine must necessarily command respect; the means of living honourably, better secured to us, must tend to the same end; and these, together with a grand Faculty of Medicine at our head to guide and stimulate the progress of medical science in this country, must eventually raise our status as a profession.—I have the honour to be, Sir, your faithful servant,

WM. RODEN, M.D., M.R.C.S.,

Fellow of the Medical and Chirurgical Society, &c.

Kidderminster, Feb. 1846.

A NEW MEDICAL BILL.

To the Editor of THE LANCET.

SIR,—Now that it appears that Sir Jas. Graham will abandon his Bill for Medical Reform, from his inability to frame a measure acceptable to the profession, which he well knows is full of jarring interests and opinions upon the matter, I hope Mr. Wakley, supported by the general practitioners, will be induced to bring forward the measure he gave notice of last Session, and the heads of which are printed in THE LANCET of January 31. Those resolutions contain, in principle, every essential of medical reform in every view, and nothing of an unreasonable character; but there are a few inquiries I wish to make, and a few observations I would also beg to place before you. The Apothecaries Company, in shaping the education and examination of, and in licensing the practice of medicine for, the general practitioner, is included in the settled institutions of the medical body, as much as the Colleges of Physicians or Surgeons. Will they abandon this right, or would it be just to require them to do so, without providing for it in some new incorporation? I confess, as one of the licentiates, that I owe them as much allegiance as I do the College of Surgeons for my membership,—and more so, because the College of Surgeons, by its retrospective charter, has inflicted on me a degradation. Again, what would have been the qualification of the general practitioners, as a body, for the practice of physic, without the curriculum of the Apothecaries? The College of Surgeons, whilst it remains an institution for anatomy, physiology, and surgery, alone, and unmixed with the pursuits required by the physicians and apothecaries, has some apparently very logical arguments for conducting the official government of the College by pure surgeons; and if the general practitioner, as such, wishes to interfere in their affairs, the College, I submit, must be remodelled. If he may interfere, then, of course, it ought to be practicable for a person who might take the three licences of the physicians, surgeons, and apothecaries, to have a franchise for all or either, and to be eligible to the corporate honours of all. It has struck me, that the member of the College of Surgeons, practising as an apothecary, if not made eligible for corporate appointments, might be most consistently entrusted with the power of voting for such pure surgeons as might aspire to the dignities of the College; but on these points I rather desire than suggest information, and remain, Sir, very respectfully,

Your obliged reader,

THOMAS STOKES.

Nailsworth, Feb. 1846.

SEPARATION OF DRUG-DEALING FROM MEDICAL PRACTICE.

To the Editor of THE LANCET.

SIR,—The thirteen propositions specified in THE LANCET of Jan. 31st ult., and offered for the consideration of the profession as the basis of a bill to be presented to Parliament, ought, in my opinion, to prove satisfactory to every respectable member of the profession,—more especially the thirteenth—"The Separation of the Practice of Physic and Surgery from the Sale of Drugs and Medicines." Till this separation is effected, the members of the medical profession will never attain that position in society they ought to possess. We want no third estate; all practitioners should be either physicians or surgeons; but "Quot homines tot sententiae" has been the destruction of every plan for medical reform hitherto offered to the legislature; indeed, so numerous are the interests likely to be interfered with, that a perfect unanimity in all grades is

not likely to be obtained, nor do I think it necessary. Pray, what have we, the legally constituted physicians and surgeons, to do with the heterogeneous mass of chemists, druggists, and drug-selling apothecaries, licensed or unlicensed, with their glaring lamps, and red and blue bottles, and all such trumpery, further than to keep them in their proper places? But this can only be done by positively refusing to admit them, one and all, into any associations of physicians and surgeons that may hereafter be formed for the purpose of obtaining an efficient medical reform; at the same time, all regular physicians or surgeons must firmly refuse to join or otherwise countenance any association of chemists, druggists, or drug-selling apothecaries, licensed or unlicensed. These latter gentry will doubtless attempt to interfere, but all their attempts must be utterly disregarded; to notice them will be to excite controversy, create confusion, and cause their notoriety.—Allow me now, Sir, to ask what has become of our promised champion, Mr. Guthrie—and what has become of the Association of Surgeons at Bristol? Have they all deserted the good cause, in despair? I hope not: let me recal to their recollection the injunction of the Sybil to the old friend of our school-boy days, the pious Æneas—

"In ne cede malis; sed contra audientior ito,
Quam tua te Fortuna sinet."

I am, Sir, your obedient servant,

Castle Hedingham, Feb. 1846.

GEO. HARVEY.

NEWS OF THE WEEK.

VERDICT OF MANSLAUGHTER AGAINST A SURGEON.—Within the last few days, an inquiry commenced before T. M. Phillips, Esq., coroner, and a respectable jury, at the Red Lion, New Friezeland, near Bilston, into the circumstances attending the death of Hannah Hickman, aged twenty-five years, the wife of Mansfield Hickman, a forgerman residing at that place. In consequence of the serious nature of the inquiry, the inquest was twice adjourned, and terminated, on Thursday week, in a verdict of manslaughter against Mr. John Dickenson, surgeon, of Bilston. Mr. Best, surgeon, said, on arriving at Hickman's house, about four in the morning, and making inquiries, he ascertained sufficient to convince him that Mr. Dickenson had not acted right; he considered Mr. Dickenson's conduct as in many respects betraying extreme unskillfulness, in consequence of which he believed the deceased had died. Mr. E. H. Coleman, surgeon, of Wolverhampton, expressed a similar opinion, upon which the jury at once returned a verdict of "Manslaughter" against Mr. Dickenson, who was committed on the Coroner's warrant for trial at the ensuing Assizes.

MEDICAL SOCIETY OF LONDON.—The seventy-third anniversary meeting of this Society was held, on Monday last, at the Crown and Anchor Tavern, in the Strand. The President in the chair. Mr. Bishop, F.R.S., delivered the Oration, which was an elaborate and philosophical inquiry into our present knowledge of the vital principle and its influences. The Fothergillian gold medal was presented to Robert Mortimer Glover, M.D., of Newcastle-upon-Tyne, for his Essay on the Pathology and Treatment of Scrofula; and the silver medal to George Pilcher, Esq. The president accompanied each presentation with an appropriate speech.

This Society, the oldest in the metropolis, with the exception of the Physical Society of Guy's, is about again to publish "Transactions," a volume at present being in the press. This is a proof of the increasing prosperity and usefulness of the Medical Society of London—a Society connected with the names of Fothergill, Sims, and Lettsom. The following is the list of office-bearers:—President, Mr. Dendy.—Vice-Presidents, Dr. Golding Bird; Mr. Headland; Dr. Theophilus Thomson; Mr. Bishop.—Treasurer, Mr. Clifton.—Librarian, Mr. Dendy.—Secretaries in Ordinary, Mr. W. A. Harrison; Mr. J. F. Clarke.—Secretary for Foreign Correspondence, Dr. Davidson.—Committee, Dr. Bennett; Mr. Diamond; Mr. Hutchinson; Mr. Linnecar; Mr. Middleton; Dr. Rees; Mr. Roberts; Dr. Roberts; Mr. Steadman; Dr. Waller; Mr. Crisp; Dr. Scott Alison; Dr. M. Hall; Mr. Pilcher; Mr. Hilton; Mr. Taunton; Dr. L. Stewart; Dr. Clutterbuck; Mr. Eales; Mr. Saunders.—To deliver Oration, 1847, Dr. Golding Bird.

WESTMINSTER MEDICAL SOCIETY.—The anniversary meeting was held on Saturday last, when the following gentlemen were elected office-bearers:—President, Mr. Hancock.—Vice-President, Dr. Frederic Bird.—Council, Dr. W. Merriman; Dr. Roche; Dr. Snow; Mr. Hird; Mr. W. Harding; Mr. J. F. Clarke; Mr. C. Brooke; Mr. Curtis; Mr. B. Norman; Mr. P. Marshall.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted members on Friday, March 6th, 1846:—H. F. Wilde, H. Hailey, D. Hooper, J. Snelling, W. E. G. Pearce, E. J. Burman, J. D. Rendle, J. G. Jones, and C. J. Sylvester.

CORRESPONDENTS.

There will be added to *THE LANCET* of next week a Supplement of Sixteen Columns, extending the Number to Forty Pages; thus making the third of that size since the 1st of January. It will contain a great variety of interesting original articles.

In consequence of communications which we have received on the subject, it is fit that the following statement should be made:—

At a meeting of the governors and subscribers of the Royal Free Hospital, Gray's-inn-road,—Lord Robert Grosvenor in the chair,—Mr. Wakley was elected one of the committee of management for the present year. On receiving a note from the secretary, announcing his election, Mr. Wakley wrote, in reply, to inquire, whether it was true, as reported, that the managers of the hospital were indebted in the sum of 7,000*l*. The secretary, in reply, admitted that the report was correct, but that he considered there was property to that amount belonging to the hospital. On stating the case to his legal advisers, and acting on a strong recommendation from them, Mr. Wakley declined to take his seat as a member of the committee. He therefore respectfully, but decidedly, refused the appointment.

Curioso.—The Bill of Sir James Graham is abandoned. In the other, an attempt will be made to provide for the suppression of such an odious piece of quackery. It is a pity that the fools cannot be "suppressed," who sustain such an abomination.

C. H. A.—If it be the disease he has named, it is not infectious. If he will consult any respectable surgeon, it is most likely he will be cured without difficulty. He should carefully shun the advertising quacks.

Dr. M. Sinclair, (Manchester).—Several of the suggestions of Dr. Sinclair are valuable, and we hope that he will allow his paper to remain in our custody. On making selections from the suggestions of our correspondents, on a future occasion, it is likely that we shall transfer two or three of the propositions of Dr. Sinclair to our columns. Had we space, the whole of his paper should be published; but it is utterly impossible to embody in our pages the whole of the communications which are sent to us on the question of medical reform. At the same time, we are led to hope that that circumstance will not prevent the members of the profession from communicating any opinions on the subject which they may deem valuable.

A Welchman.—Such strictures as are contained in the letter thus signed produce little effect when they are published anonymously. We quite agree with the writer in his observations.

Mr. Copeland, (Cheltenham). The petition to the Queen from the Gloucestershire Medical and Surgical Association has been received, and shall be printed.

The report of the Lying-in Hospital, Birmingham, by Dr. Waddy, has been received, and will be published wholly or in part.

M.R.C.S.E.—An immense number of correspondents, adopting a great variety of signatures, recommend that the insulting orator should no longer be met by members of the profession in consultation.

The letter of Mr. T. D. Hunter (Notting Hill) has been forwarded to the constable of the parish. Clark has evidently rendered himself liable to the penalties imposed by the Apothecaries' Act.

We have received certain communications respecting the surgical evidence which was given at the trial of Lieutenant Pym. Is Mr. Jenkins (one of the witnesses) a member of any *College of Surgeons*? The reports appear to us to contain internal evidence of inaccuracy on the part of the reporters. If any gentleman who was present at the trial would send to us a newspaper which he can allege contains an accurate report of the evidence, we should feel obliged to him.

Mr. Cuttill, (Braunston).—His paper on the Non-duality of the Mind has been received, and shall be published.

"Gamma".—There is a great increase in the premiums at all the offices under the circumstances stated. It is better that the life should be risked than that it should be assured at such an enormous annual premium. The Asylum Life-office is a safe, respectable establishment. There are no statistical tables which enable us to answer the last question. Abdominal "ruptures" undoubtedly tend to shorten the duration of life.

The tone of the clever remarks of A. B. is extremely gratifying. His monition is not without foundation: we hope that some time will elapse before it will be necessary to repeat the "exclamations."

Madame will probably be the subject of an operation in due time; meanwhile, her dupes ought to be cut for the simples. The foreigners who speculate on the credulity of the English public appear to believe there can be found in this country the greatest fools in existence.

Mr. Bryant, (Lambeth).—His paper on Chorea shall be speedily published.

Mr. George Wilson.—His letter, in answer to Mr. Robins, on the Division of Midwifery Fees, will receive early insertion.

We should feel obliged if the author of the communication from Portsmouth, respecting the co-partnership between "medical men and chemists," in that town, would authenticate his next communication by sending to us, in confidence, his name and address. The abuse which is attracting his attention is well deserving of notice and reprehension; and the statement he has already furnished shall be published.

Enquirer.—Thanks to Enquirer for sending to us the bill of "Horatio Goodday." Our correspondent asks, whether by recommending that dissections should now cease, we would advise the profession to put their trust "in that contemptible body, the 'Committee' of the National Association." To which question we reply—Certainly not. There is to be a PUBLIC MEETING of the Association on the 17th of April, at 7 o'clock at night, when the members will have the power of placing themselves in a new and a just position, with reference, not only to the fallen Committee, but to their future interests. The Associated Surgeons are in daily expectation of receiving a communication from the Council of the College. The hour of 7 p.m. appears to have been fixed upon for the purpose of preventing the attendance of country surgeons. It must be altered.

T. S. C., (Old Kent-road).—Any respectable practitioner would be enabled to cure his malady without difficulty. T. S. C. will find many such gentlemen in his own neighbourhood. The advertising quacks are impostors. Dr. Conolly resides at Lawn House, Hanwell, near London.

The note was received, but the "pamphlet" on the "Practice of Midwifery" to which it refers, if received, has been for the present mislaid. It shall receive due attention, when found.

C.—It is the same "Dr. Dewhurst." Full information with regard to him can be obtained from the Secretary of the Mendicity Society.

Chirurgus, (Lincoln).—The subject is worthy of attention. The practice condemned is an abuse of a great public charity, and is attended with absolute danger to the lives of the patients.

Mr. J. B. Bryant.—The paper will be published.

Mr. John Gray.—The "Last Will and Testament" of the calumniator has been received, and has provoked not a little laughter.

A Subscriber.—Turner, Lindley, and Carpenter.

Dr. Herbert Barker, (Bedford). If juries at inquests are not satisfied with the testimony, whether medical or otherwise, which is first produced for their consideration, they have it in their power to compel the coroner to summon a medical witness. The attendance of Dr. Barker at the inquest could not have been of any utility, unless there had been a post-mortem examination; whether such a proceeding as that was required or not we have here no means of determining. It is, we believe, the invariable rule of coroners never to dispense with medical evidence when the slightest suspicious circumstance is connected with the death of a person on whose body an inquest is held.

Mr. J. Beattie.—In any medical bill which can pass the legislature, the members of the three Colleges of Surgeons will be certainly placed on an equal footing with regard to their right to practise in all parts of the kingdom.

J. L. M.—The apprenticeship must be for five years: this is the provision of the Act. The society sanctions an attendance at lectures, or in places where the best information can be obtained during a considerable portion of the term. The conduct of the court in this respect is just and liberal. J. L. M. will find that his present acquirements must greatly facilitate his future advancement and success; they would be fully appreciated by the Court of Examiners.

Printed circulars, begging for advertisements, similar to the one which has been furnished to us by Verax, are sent to our office every week. Such a raffish publication is not worth a paragraph of censure. The representations published by its unprincipled quackish proprietor are false and fraudulent, and persons deceived by them have their remedy at law. We are obliged to Verax for his kind attention.

A Member of the Association.—If the "Provincials" think it right to keep such a simpleton in their employ, we, certainly, have no reason to complain, but it is unfair that a large body of the Country Surgeons of England should have the discredit of publishing, with one exception, the most stupid medical journal in existence—and that one is published by a quack, as he is not a member of the medical profession.

We advise A Medical Student, whose letter is dated March 11, to state his case to the Secretaries of the College and Hall. We believe that he would be admitted for examination at one or both of those Institutions.

Communications have been received from—Mr. W. B. Page, (Carlisle); Dr. Duncombe, (Nassau Bahamas); Mr. W. Acton, (Islington); Dr. James Turnbull, (Liverpool); Mr. Robinson, (Hammersmith); Mr. Jenner, (Golden-square); Mr. Wordsworth, (London Hospital); Mr. W. F. Barlow; Mr. Frederick Smith Garlick, (Hallifax); Mr. Ackland; Dr. Ferman; Q. Q. Q.; Critic; Electron; Mr. Inskipp; Dr. G. Curscham; Mr. J. B. Bryant; C.; and Chirurgus, (Lincoln).

Erratum.—In Dr. Turnbull's Lecture, page 262, column 2, line 40, for "nervous" read "venous;" and in the same page, line 11, column 1, for "pin-like" read "pea-like."

LECTURES

ON

PLETHORA AND ANÆMIA,

AND ON

SOME FUNCTIONAL DISORDERS DEPENDENT
UPON THE STATE OF THE BLOOD.

DELIVERED AT THE LIVERPOOL NORTHERN HOSPITAL, SESSION 1845-46.

BY JAMES TURNBULL, M.D.

PHYSICIAN TO THE HOSPITAL.

LECTURE III.

Symptoms of anæmia; general appearance; debility; symptoms from disorder of the brain and nervous system; from disorder of the digestive organs; relaxation of the digestive and other mucous membranes; state of the tongue; anæmic dyspepsia; atonic, irritative; gastrodynia. Do anæmic disorders of the stomach tend to induce structural changes? Severe case of anæmic gastrodynia.

WE come now to treat of the symptoms of anæmia. The surface of the body in anæmic individuals is pale; and in extreme cases, it has a waxen or blanched appearance; and we may observe on the back of the hands only one or two small veins, which have more of a pinkish than of the natural blue colour. The complexion is in general more or less pallid and exsanguine; and the lips, gums, and whole interior of the mouth, have lost a portion, and in some cases nearly the whole, of the natural red colour. In persons, however, naturally florid, when the anæmic state has not advanced very far, and consists of diminution of the globules more than of the total quantity of blood, there may be considerable redness of the cheeks and mucous membrane of the lips. In these cases, however, the redness of the cheeks is more circumscribed than natural; and the remainder of the face has a pale, faded colour, with often a dark or discoloured appearance round the eyelids and at the corners of the mouth. Andral draws attention to this redness of the complexion in anæmic individuals, and observes, that "it is not very uncommon to meet with persons who have still a pretty good colour, whose cheeks are even habitually injected in a remarkable manner, and whose outward appearance would willingly cause one to regard them as plethoric individuals. The blood of such persons contains, however, an insufficient quantity of globules, and there is only a false appearance of plethora."* The countenance is often dull and heavy, indicating torpor of the functions generally; and in some cases it has a remarkably swelled, puffy appearance. The conjunctiva becomes paler than usual, and has often a peculiar bluish pearly-white colour, from the conjunctival and sclerotic vessels containing little red blood.

There is seldom much emaciation in spontaneous anæmia at an early period, and in chlorosis we often find the patient fleshy, and of a stout habit of body, having that false appearance of plethora just noticed. There is, however, more abundance of adipose and cellular, than of muscular tissue, and the flesh feels soft and flabby. Besides the peculiar fullness of the face, there is sometimes puffiness of the cellular tissue generally, and even slight œdema of the ankles and of the eyelids. There is always more or less weakness, languor, and inability to do anything requiring much bodily exertion, and we not unfrequently hear patients say that they feel ready to drop down from fatigue after walking a short distance, or going up a stair. There is often weakness and pain in the back, with soreness of the muscles when exerted, and there are aching pains in the calves of the legs in ascending a stair, and after walking, from muscular debility.

The other general symptoms result chiefly from derangement of the functions of the brain and nervous system, of the digestive organs, of the heart and vascular system, and, in women, of the uterus. In this order we will examine separately each of these disorders of function.

Disorder of the functions of the brain, &c.—Anæmic patients are often exceedingly nervous, and easily startled and put into a state of agitation. This excitable state of the nervous system occurs not only in spontaneous anæmia, but also where there has been considerable loss of blood. Vertigo or giddiness is the most common functional disorder of the brain, and we do not often find it altogether absent, whether the case be

one of simple diminution of the blood globules, or this state combined with diminution of the quantity of blood in the system, for this is a very common symptom in chlorosis, and is not unfrequently present in the form of anæmia which is the effect of long-continued illness, and which is present during the convalescence from fever and other diseases. It is also one of the first effects of direct loss of blood, as well as a symptom of plethora. Becquerel and Rodier, in describing anæmia with preservation, increase, and diminution of the normal mass of blood, have regarded this symptom, as well as pain and weight of the head, and noises of the ears, as peculiar to the form of anæmia with increase of the mass of blood. I feel satisfied, however, that these symptoms may be present in all the different varieties of anæmia and plethora.

In anæmia it may be very slight, causing only a little confusion in the head, and occurring for a second or two at long intervals. In other cases it occurs much more frequently, and is very severe; it may cause the patient to stagger like a drunken person, and he may even fall if he does not take hold of something to prevent this. An attack is frequently induced by changing the position of the head, as in stooping, or rising from the stooping posture, or by turning quickly round, or by throwing the head back. There is often a very severe fit of giddiness on getting out of bed in the morning, in consequence of raising the head from the recumbent position, and along with it there is sometimes sickness, faintness, and perspiration. At other times, the patient is liable to fainting fits, which are induced by slight causes, and during these attacks there may be either partial or complete loss of consciousness. In women they often occur before and after the catamenial periods. There are very frequently singing or rushing noises in the ears; sometimes a chirping or ticking sound is heard when the head is pressed upon the pillow in bed, which seems to be caused by pressure on some of the small arteries developing the intermittent arterial murmur. The eyesight is sometimes affected, and objects may be seen of a greenish or of some other colour, or there may be dimness and cloudiness of vision. There may be sleepiness or dull heavy pain, which is either general over the head, or confined to one or both temples, or some other part. These symptoms are generally combined with loss of energy of the mental faculties; but in some cases there is increased sensibility of the nervous system, and intolerance of light and sound. It is difficult to account satisfactorily for many of these symptoms of such opposite characters, some of which arise from a torpid and others from an excited state of the functions of the brain, while several may occur, not only in anæmia, but also in the state of plethora. Dr. Williams has attempted to account for the excitement of the nervous centres, and the generally nervous character of persons in a state of great weakness, by attributing it to the peculiar circulation of the blood through the brain and spinal cord; and he observes, "When the mass of the blood is reduced in quantity, the bloodvessels generally contract in proportion, their tonicity adapting them to the amount of their contents. But the vessels within the brain and spinal canal cannot contract with the same facility, for not being exposed to atmospheric pressure, and some of them being fixed in bony canals, they do not shrink as the blood becomes reduced, and therefore they retain more than their proper share of the circulating fluid. This disproportionate amount of blood in the nervous centres produces different effects, according to the degree in which the heart's propulsive power reaches it. Under the influence of palpitation, fever, or other kind of excitement, the brain and spinal cord receive through their uncontracted vessels an unusual share of the force from the heart, and erethism of the functions of these nervous centres is the consequence, and pain, spasm, sensorial disturbance, or sympathetic irritations of some kind or other, occur."

Whilst he accounts for increased sensibility in this manner, he attributes the giddiness, drowsiness, and impaired mental faculties, arising from diminished sensibility, to congestion produced by the feeble action of the heart; and he has shown that in some extreme cases this stagnation causes delirium, coma, and fatal congestion, by occasioning coagulation of blood in the sinuses, and permanent obstruction to the passage of the blood through the brain. These variations in the rapidity of the circulation, and the quantity of blood received by the brain, will undoubtedly account for many of the symptoms met with in the different forms of anæmia; we must not, however, lose sight of the effects which may be produced by diminution of the proportion of globules, as well as by the changes induced in their form by exosmosis and endosmosis. The red globules being the carriers of the oxygen from the

* Essai d'Hématologie Pathologique, p. 56.

lungs to the various tissues of the body, it is possible that the heaviness, giddiness, and disposition to faint, observed in anæmia, may be owing to a deficient supply of this vivifying and indispensable agent to so important an organ as the brain. It is possible, too, that the highly-excited state of the nervous system, and the reaction which follows great loss of blood, may be in some degree caused by the globules circulating less freely through the brain, from being enlarged by endosmose.

In addition to these more common disorders of the function of the brain, we have others of different parts of the nervous system, some of which are of less frequent occurrence. There are often nervous pains of some part of the chest; they are generally on one side, most frequently on the left, about the situation of the cartilages of the false ribs, or a little above or below this. It is important to distinguish these nervous pains from that caused by acute inflammation, for they have sometimes been mistaken for and treated as pleurisy, peritonitis, or inflammation of the liver. Pain is sometimes felt immediately over the region of the heart, and the integuments and muscles are very tender on slight pressure. At other times there is pain in the centre of the sternum, or in a circumscribed spot just above the lower angle of the scapula. In these cases we generally find tenderness on pressure in one or more portions of the spinal column, most frequently about the centre of the dorsal region; and on pressing this spot, we often cause a pain to shoot from this the origin of the spinal nerve, to the other tender part supplied by its branches. It would appear that in some of these cases the anæmic state may act indirectly, as well as directly, in causing these pains; for we have, as a direct effect of anæmia, increased excitability of the nervous system, and frequently, also, atonic or irritative dyspepsia, or uterine irritation, which may react through the reflex nerves of sensation. Anæmic patients are liable to various other neuralgic affections, and thus we sometimes meet with intermittent neuralgia or tic douloureux. In other cases the excito-motory nerves are affected, and we may have convulsions of hysterical or epileptic character, or chorea, or spasmodic asthma. In these cases, too, the anæmia may indirectly, through the reflex excito-motory nerves, produce these effects by deranging the functions of the abdominal organs, as well as directly, by affecting the part of the nervous system which is disordered. Last summer I was called to see a chlorotic young woman, in whom the nervous system was very much excited. She had hysterical difficulty of breathing, and very frequent respiration, caused by severe spinal irritation. The whole spinal column was very tender on pressure, and at a spot about the centre of the dorsal region, the slightest pressure caused a convulsive tremor of the whole body, which at times came on of itself. A blister was applied to the spine, which removed the difficulty of breathing as soon as it began to rise. Purgatives to remove intestinal irritation were at the same time administered, and afterwards chalybeates, to remove anæmia. There was, in this case, anæmia, causing augmented sensibility of the nervous system, and uterine and gastric irritation, reflected through the excito-motory nerves, and causing spasmodic difficulty of breathing, and occasional convulsive tremor.

In some cases we have a feeling of numbness in a part, and in others there is weakness, resembling, or even amounting to, paralysis. In two cases of paralysis which have come under my care, the muscular weakness seemed to be the direct effect of anæmia. In both there was a very loud venous murmur, and the preparations of iron were useful. In one, however, diarrhœa was accidentally brought on; paralysis of the lower extremities became complete, and seemed to be the effect of anæmic softening of the brain, and the patient died comatose. We have at present in the hospital a sailor boy, aged fifteen, now nearly well, who was admitted with complete loss of power in the lower extremities, and well-marked symptoms of anæmia, which have rapidly disappeared under the use of chalybeates, preceded by the application of a single blister to the nape of the neck, in order to remove anæmic congestion.

Symptoms from disorder of the digestive organs.—The power of the digestive organs is weakened by anæmia, in whatever way induced. Andral observes, that "for the natural performance of the process of digestion, it is necessary that the stomach should become the seat of a certain degree of sanguineous congestion, which in anæmic individuals cannot take place." The first and most simple effect of anæmia upon the stomach is a diminution of its ordinary power, so that digestion becomes laborious, and is performed slowly; and thus the individual becomes sensible, often painfully so, that the process is going forward. It will be evident, that derangement will not

rest here,—that if the process be slow, it will be imperfect also, and that the resulting disorders will react upon the general state of the system, and in many instances so complicate the case, that it will be difficult to ascertain whether the disorders have had their origin in the state of the digestive organs, or in the altered condition of the blood.

Anæmic disorders of the stomach may be observed in their simplest forms in cases of hæmorrhage, as after miscarriage, or great loss of blood after parturition. In these cases there is weight and painful uneasiness after taking food. There is also flatulence, and there may even be tenderness on pressure; symptoms which, though caused by deficiency of blood, are very similar to those produced by an opposite condition of the vessels of the stomach. It is important, therefore, that you should know that such symptoms occur in consequence of loss of blood, so that you may carefully distinguish them from those of inflammatory irritation of the mucous membrane. We meet with few cases of spontaneous anæmia in which there is not some disorder of the stomach or of the other digestive organs. The most common symptom is a feeling of weight and uneasiness after a meal, with flatulent distention, and this continues until the process of digestion is finished, when there is, for a time, relief from the uneasy feeling. Where the sensibility of the nerves of the stomach is much increased, there is eructation of the food from half an hour to an hour or more after a meal, and it is brought up into the mouth, in a half-digested state, by the contraction of the muscular fibres of the stomach. This kind of ruminating process we find very common in chlorosis; and we not unfrequently find patients say that they are unable to keep food upon the stomach, though they have no sickness. In fact, the uneasiness which they suffer causes them to seek relief by endeavouring to bring the food off the stomach. In some cases, too, the pain experienced during digestion is so severe, that the patient would almost rather be without food; and in chlorotic females we find an especial dislike to animal food, which seems to cause the pain more than any other sort. Digestion is, in many cases, not only slow and painful, but it is also imperfectly performed; there is acidity or heartburn, and increased secretion from the relaxed and weakened mucous membrane, causing pyrosis or waterbrash. The functions of other organs concerned in the process of digestion are deranged, not only directly, from the state of the blood, but also secondarily, from the disorder of the stomach. The liver is frequently torpid, and Dr. Copland regards its derangement as very influential in producing anæmia. Except in very advanced cases, the bowels are almost always constipated; and this seems to arise, not only from the secretions being diminished, but also, more especially, from the muscular power and peristaltic motions being weakened. Continued constipation leads to deranged secretion, and we sometimes find the motions dark and unhealthy, or deficient in colour, when the liver is torpid. In extreme cases, the intestinal mucous membrane becomes relaxed, and diarrhœa occurs, and rapidly increases all the other symptoms. The diarrhœa does not generally arise from the irritation of intestinal accumulations, but as a direct effect of anæmia; for I have observed it come on suddenly in those who had previously been taking aperient medicine regularly. Anæmia seems, in fact, to weaken the mucous membranes generally, and we occasionally see several of them attacked at the same time, or in succession, with chronic inflammation and increased secretion. A patient came under my care on account of chronic bronchitis, and suffering also from the effects of a miscarriage which she had had five months previously. She had also waterbrash, and frequently brought up a pint of "pure water," not generally, but sometimes, sour. A fortnight before, she had been attacked with diarrhœa, and had been also subject to leucorrhœa. She had the venous murmur, and the pallor, giddiness, fluttering, and other characteristic symptoms of anæmia, from loss of blood consequent upon miscarriage. In these cases the discharges from the mucous surfaces rapidly increase the anæmic state, and Dr. Rees has regarded the loss of the albuminous part of the blood, from leucorrhœa, as an important cause of anæmia. If, however, the mucous membranes generally are liable to be affected in anæmia, it would render it probable that this disordered state of the blood is oftener the cause than the effect of leucorrhœa.

The appetite is generally more or less impaired; and in some cases of chlorosis there is a desire for pickles and other indigestible articles. The most important point, however, for us to observe, is the dislike which anæmic patients very frequently have to animal food; and this is sometimes so great, that it is difficult to induce them to overcome the dislike which arises from distaste for animal food, as well as from the pain which

it often occasions. I once had a lady under my care, who remained very anæmic after being confined, though she was not suckling; and the smallest portion of animal food invariably caused severe pain in the stomach, and intense acidity. In this case, the stomach could only gradually, and after the use of chalybeates for some time, be brought to bear animal food.

We meet with almost every variety in regard to the state of the tongue. There are some appearances, however, which seem closely connected with the anæmic state, and which must therefore be noticed. The tongue may be either slightly coated with a white or yellowish-white fur, or it may be quite clean, and in some cases is perfectly natural. It is frequently tremulous, generally paler than natural, and very often swelled and cedematous-looking, with indentations from the pressure of the teeth against its sides. This is the most common state of the tongue; but there are also some cases where, instead of being swelled and flabby, it appears small and contracted. The papillæ towards the point are often unnaturally prominent, and where there is some fur, they may be seen shining through it. In most cases, however, and in the simple forms of anæmia, they are only more prominent, and are pale, like the rest of the tongue and the mucous membrane of the mouth. In some cases, the tongue has a pale, flabby appearance, as if it had been macerated for some time in water; and in a few old-standing cases of anæmia, I have observed striae, or lines like cracks, running transversely or longitudinally.

Many of the symptoms of deranged digestion which have been described, are the same with those that have been regarded as most characteristic of the form of indigestion, which has been called the atonic or asthenic. This is the primary and most common form of dyspepsia; and it arises from the stomach, along with the rest of the system, being debilitated by causes which, in some instances, act indirectly upon it, by lessening the quantity and quality of the circulating fluid, as occurs in cases of hæmorrhage, &c.; and in some cases, by causes which act directly upon the stomach; such as depressing mental emotions, over-exertion of the mental faculties, and errors of diet. There are other causes, such as impure air, deficient exercise, and innutritious food, the influence of which may be direct, though, perhaps, at the same time, more powerfully indirect, through the impoverishing effect which these debilitating causes produce upon the blood.

This state of weakness of the stomach does not always exist in a simple form. The torpid condition of the digestive functions, by deranging the secretions and producing their accumulation, sometimes occasions irritation of the stomach or of some part of the intestinal canal, and we have then, in addition to the weakness of the digestive organs, the form of dyspepsia which has been called the irritative or inflammatory. We should recollect, however, that in anæmia it does not occur simple, but is superadded to the previous atonic dyspepsia, and it is required, therefore, in treating it, that we should combine or follow up sedative and antiphlogistic treatment with the use of tonics. I have observed the complication of irritative dyspepsia with anæmia, chiefly in females, and often in connexion with profuse and frequent menstruation. The tongue in these cases is red, and sometimes rather dry at the tip, and it has occasionally a rough strawberry appearance at the point, from enlargement of the papillæ. There is pain at the epigastrium after food, and on pressure, and there are often acidity, sickness, and vomiting; there is thirst, with some heat of skin and sharpness of the pulse; the feet are generally cold, and there are alternate heat and chills. These symptoms of inflammatory irritation are sufficiently marked to enable us always to discover it when present, without much difficulty. I believe, however, that inflammatory irritation of the stomach does not frequently occur to any considerable extent; and that in many cases it will subside with little treatment beyond the removal of the causes, and the use of light, unstimulating food. I think, therefore, with Dr. Johnston, that indigestion arises generally from debility, and is atonic, and I believe that in anæmia it will not be often necessary to apply leeches to the stomach.

Anæmic gastrodynia.—In the disordered states of the digestive organs which have now been pointed out, we have generally more or less increased sensibility of the nerves of the stomach, to which we may attribute, in a great measure, the sense of weight and uneasiness felt during digestion. This increased sensibility sometimes becomes a very prominent symptom, and the pain seems, in some cases, of neuralgic character. It is increased by the contact of food with the stomach, and is sometimes so violent that patients are afraid to take a meal. It is often very obstinate to treat, and is apt to

return after being removed. The application of leeches, except where there is complication with irritative dyspepsia, aggravates rather than relieves this affection, and it is therefore a matter of importance that the pain of gastrodynia should be carefully distinguished from that of chronic gastritis. Dr. Carriere, of Strasburg, a few years ago, pointed out the value of the venous murmur in making this distinction, and also in enabling us to discover the nature of some cases of anæmic neuralgia and hemicrania.*

It is a matter of some consequence to determine whether these anæmic functional disorders of the stomach ever lead directly to structural changes. It would seem to be the common opinion, that if they do cause structural disease, it is only very rarely. Dr. Ashwell observes, in reference to chlorosis, that "it is rare for structural change to occur in the stomach, liver, or intestinal organs, in the most protracted form of the disease, although it is common to see the largest amount of functional derangement." I may observe, however, that hæmatemesis is not a very unfrequent complication of the indigestion and severe gastrodynia of chlorosis, and it is fair to suppose, that in some of these cases, though they do not prove fatal, it may proceed from ulceration. In addition, there are some facts, in regard to the class of cases in which perforation of the stomach takes place, which would lead us to think that some relation may be traced between them and the existence of an anæmic state of the system. Mr. Crisp, in *THE LANCET* of August, 1843, has shown from a table of fifty-one cases in which perforation of the stomach occurred, that thirty-nine were females, and only twelve males; that the majority were between fifteen and thirty years of age; and that, in most, there was chlorosis, or some uterine irregularity. Now it has been already pointed out, that anæmia occurs much more commonly among women than men; that the great proportion of cases is between the ages of fifteen and thirty; and it will also be shown that uterine irregularity, either as a cause or effect of anæmia, is an almost invariable accompaniment. Though perforation is generally preceded by severe dyspepsia, we should not omit to observe, that occasionally it also occurs in females apparently healthy. The facts, then, of anæmia causing severe functional disorders of the stomach, of hæmatemesis being sometimes present with it, and of anæmia and perforation both occurring most frequently in females, and at the same periods of life, and both being generally complicated with uterine derangement, would cause us to regard it as not improbable that there may be some connexion between them, and that the functional disorders of anæmia may sometimes lead to structural changes, and induce ulceration of the mucous membrane of the stomach.

The following is a case of severe anæmic gastrodynia, where it is not improbable that ulceration might have existed:—Mary D—, aged 20, was admitted into the Liverpool Northern Hospital on the 15th of July, 1845, on account of severe pain at the stomach, of long standing. About four months before, she had been under treatment for this complaint, which had been at that time accompanied with vomiting of blood. She got much better, though not perfectly well; the pain had returned with its former severity about a month before her admission. She was of light complexion, and had a pale chlorotic appearance. The tongue was clean, not very pale, but looked as if it had been soaked in water, and there were many transverse and longitudinal lines upon it. The papillæ towards the point were unusually developed, but unaltered in colour. There was no thirst; the pain at the stomach was very severe, and increased by taking food, especially animal food, but it was somewhat relieved by warm drinks. It came on most severely from half an hour to an hour after dinner, and was often attended by sickness and vomiting. There was pain over the cardiac extremity of the stomach on pressure; the bowels were regular, and the motions natural; the catamenia were formerly present every fortnight, and profuse; of late they had been present every three weeks, and were scanty; at these times the pain at the stomach was increased. There were noises in the ears, much giddiness, and pain in the temples and forehead. There was shortness of breath; palpitation on exertion, but no murmur at the heart; pulse 70, weak. There was loud and perfectly continuous venous murmur in the right internal jugular vein, accompanied by a slight thrilling sensation, felt when the finger was applied in the same situation. An aperient powder was prescribed, containing rhubarb and magnesia, of each ten grains; mercury with chalk, five grains; and powdered ginger, two grains. Five grains of citrate of iron, in

* *Medico-Chirurgical Review*, Oct. 1841.

an ounce of infusion of calumba, with a drachm of compound tincture of cardamoms, were prescribed, to be taken three times a day; bread and milk for breakfast, and bread and meat for dinner, were ordered as her diet.

22nd.—The appetite had improved, and the pain at the stomach had diminished, though it had been better and worse from day to day.

30th.—She was improving, though slowly; she had still the venous murmur, and lightness, though no pain in the head. The pain of the stomach was still occasionally present, and on the preceding evening it had been very severe, and accompanied by sickness and vomiting. The catamenia were present. A grain of the iodide of iron, in an ounce of infusion of quassia, was prescribed instead of the citrate. Her health steadily improved under the use of this, and the dose was gradually increased.

Aug. 25th.—She was taking three times a day a drachm of the syrup of iodide of iron, containing four grains; she was then almost well, except that she had a pain below the left shoulder, extending forward towards the lower ribs, for which a belladonna plaster was applied.

29th.—She felt quite well; she had more colour; her tongue had become redder, and almost quite natural; she had no giddiness, and no pain at the stomach. The venous murmur was almost inaudible, except during inspiration. She was then dismissed, cured.

FOREIGN DEPARTMENT.

M. TROUSSEAU ON THE ABUSE OF ALKALINE PREPARATIONS.

AMONG alterative medicinal agents, alkalies certainly occupy as important a place as mercury, iodine, and arsenic; alkalies exercise on the economy an immense influence, as do acids; and this must necessarily be the case. The blood is naturally alkaline, but it is only so in certain proportions, which enable it to endow with special chemical properties the various secretions. Of these secretions, some are slightly alkaline, such as the saliva and the pancreatic fluid; some are alkaline in a high degree, as the bile; while others are very acid, as the urine, perspiration, and gastric juice. If by the use of alkalies you increase the alkaline state of the blood, at last you bring about a special state of that fluid, and a new state of the secretions. The secretions which are naturally alkaline will become more so; those that are neuter will become alkaline; and those that are acid will either become less acid or more or less alkaline. These chemical effects necessarily take place. The presence of acids being one of the conditions for the digestion of food in the stomach, it cannot be a matter of indifference to neutralize the acids which the economy wants—for the transformation of fecula into glucose, for instance. The digestion of amylaceous substances becomes, therefore, incomplete, or extra-natural, if we may use the expression. The presence, also, of alkalies in the blood in due proportion, gives to this liquid the means of burning, to a certain extent, the carbonaceous elements absorbed in the process of digestion. An imperfect combustion gives rise, without doubt, to morbid symptoms; but a too great or too rapid combustion, on the other hand, is not the less attended with inconvenience, as it gives rise to important mutations in the composition of the blood, and consecutively in the texture of the organs.

It is therefore, under no circumstance, of unimportance to administer alkalies. Taken without any real indication for a few days, they only give rise to momentary disturbance; but taken in large quantity, they occasion a cachectic condition, followed by a deplorable state of emaciation. The ancients before us had admirably indicated the influence of alkalies on the composition of the blood: they had remarked, that it became more fluid, being paler than in the normal state; and that at last a cachexia became established, characterized by paleness, general puffiness of the tissues, and passive hæmorrhage; moreover, they had also perceived that these symptoms were followed by emaciation. Within the last few years, the abuse which has been made of the mineral waters of Vichy and Carlsbad, in the treatment of gout, has proved the above fact. The abuse of alkalies has certainly done more harm than that of iodine.

When, in an acute disease, we wish to produce promptly a modification in the state of the blood, similar to that produced by bleeding, we employ mercurials, and more especially calomel; but when the disease is a chronic disease of the liver, or an affection depending on a diathesis, with predominance of

acids in the secretions,—as in gout, for instance,—then it is by alkalies that we must act. But we must take care not to go beyond the end which we propose to ourselves. Certainly the attacks of gout may be moderated by taking, with perseverance, the waters of Ems, of Carlsbad, or of Vichy; oftener still, by these same remedies, the formation of uric-acid deposits in the kidneys may be prevented. But to extinguish the gouty manifestation is no more to cure gout, than we cure syphilis by causing the disappearance of cutaneous syphilitic eruptions through topical applications. The diathesis is of so obstinate a nature, that, without exposure to other hygienic influences than those encountered by the common run of mankind, the gouty person will have a relapse of his attacks. A great deal is gained, however, if the attacks are rendered more rare and less acute. If the diathesis itself has to be destroyed, as some not very intelligent physicians wish, it becomes necessary deeply to modify the constitution; and the abuse of alkalies is to be feared, for it is a much more serious disease, and much more irremediable, than either gout or gravel.

The liver swells and becomes large in animals that are fed with highly carbonaceous substances, and that are condemned to inaction. Exercise, it is well known, is one of the best means of favouring the combustion of carbonaceous principles, and especially of fatty matter. It is also well known, and in this instance chemical theories agree with therapeutical experience, that the ingestion of alkalies, and the alkalization of the blood which results, render this combustion more easy, and act as an adjuvant to an inactive respiration. Theory would, therefore, have led us to the administration of alkalies in the treatment of chronic diseases of the liver, even if practice had not decided the question for centuries.

Even under these circumstances we must take care not to abuse the administration of alkalies. It is not enough recollected in medicine, that the properties inherent in living tissues suffice to resolve engorgements as soon as the first retrograding impulsion has been given. When we bleed in pneumonia, we do not believe that the pneumonia is cured merely because we have withdrawn from the lungs the blood in excess. Such an idea could not even enter the mind of any one who has the slightest knowledge of pathology. The blood having been abstracted, an obstacle to the accomplishment of the nutritive functions of the pulmonary tissue is removed, and resolution takes place in virtue of properties inherent in the pulmonary tissue, and that often without its being necessary for medicine again to interfere.

The obstacle which we can thus remove at once in an acute disease we can only slowly destroy in a chronic disease; but as soon as it is destroyed, the properties of tissues resume their play, and the physician has only to remain the attentive and intelligent spectator of the operations of nature. Thus it is that the importance of the precept which we have just established becomes apparent—viz., that in the treatment of chronic diseases of the liver, we must stop in the administration of alkalies as soon as resolution of the engorgement has begun, without endeavouring to pursue a morbid state which will now get well without further assistance.

It is because they do not take into consideration the properties which nature has given to our tissues, that so many physicians insist too long on alkalies in diseases of the liver. A patient finds himself better on his return from Vichy, Ems, or Carlsbad. His health becomes re-established during the winter. He thinks, that in order to prevent a return of the disease, he must, the following summer, again take the waters, and continue to do so for several years consecutively. Instead, however, of returning relieved, his sufferings increase, owing to his blindly insisting on the use of a remedy which was no longer required.

How is it that physicians do not see that a remedy powerful to cure is also powerful to do evil. Alkaline remedies are daily administered with inconceivable indifference. A physician prescribes to a patient one or two months' use of the waters of Vichy, Carlsbad, or Ems, as he would barley-water to drink. Is it a matter of so little importance to change all the secretions of the economy? Other alterative medicines are wielded with more prudence. Mercury and iodine, for instance, are administered with care and precaution, because the danger which attends their use is known.

In concluding these remarks, we have no hesitation in stating that the danger of alkalies is greater than that of mercurials, because the danger is less suspected, and that their administration is often only arrested when the health of the patient has been irreparably destroyed. This is not so often the case with mercurials, because the experience of three centuries

has told us that mercury could not be taken long with impunity. It behoves us, therefore, to declare loudly, both the immense utility and the extreme danger of alkaline remedies.

ASSERTED INJURIOUS EFFECTS OF THE MANUFACTURE OF
LUCIFER MATCHES.

Several German practitioners, and, among others, M. Heyfelder, clinical professor of surgery at Erlangen, have published a number of cases of necrosis of the maxillary bones, which they attribute to the influence of the materials used in the manufacture of lucifer matches, the patients having been thus employed. M. Bricheteau, wishing to verify the accuracy of these statements, with reference to the asserted cause of the disease, has carefully visited all the manufactories in which chemical matches are made in Paris and the neighbourhood. The results of M. Bricheteau's investigations do not appear to confirm the statements made in Germany. Among the two thousand workpeople, men and women, who are thus employed in or near Paris, it does not appear that a single well-authenticated case of necrosis of the maxillary bones has occurred. Three or four cases of disease of the maxillary are mentioned by M. Bricheteau, but he states that the disease was either syphilitic, or existed before the patients had worked at the factory.

The manufacturers have remarked, that the vapours that result from the instantaneous combustion of the matches, which contain sulphurous acid, and phosphorous and phosphoric acid, make the workpeople cough, and that the coughs thus occasioned are more troublesome in winter than in summer, owing to the ventilation of the workshops not being then so good; but they have not observed any other symptoms.

—*Journal de Médecine.*

A SKETCH
OF THE
RELATION OF THE SPINAL MARROW
TO
PARTURITION & PRACTICAL MIDWIFERY.

By W. TYLER SMITH, M.B., Lond.

LECTURER ON MIDWIFERY AT THE CHARLOTTE-STREET SCHOOL
OF MEDICINE.

The physiology of the nervous system sheds the same light on practical midwifery as it does on the function of parturition.

Conception itself is an excito-motor function, and some of the causes of sterility are of the same kind. Many of the disorders of pregnancy are reflex in their nature. Vomiting is caused, partly by the vitiated gastric secretions, and partly by the irritation of the uterine excitor nerves, which necessarily occurs during the growth of the uterus and ovum. On the other hand, the sickness favours the development of the uterus. The nervous cough of pregnancy is often of a purely reflex kind. I have known a patient suffer from spasmodic asthma during pregnancy, and at no other time. The cramps of pregnancy are reflex and spinal, though usually referred to the effects of mechanical pressure on the nerves in their passage through the pelvis. Cramp often occurs in the arms or hands where pressure is out of the question, and it more frequently occurs in the lower extremities, when the patient is in bed, than when in the upright position. The tenesmus and strangury are also of reflex origin. Is not the bearing-down pain, so frequently complained of by pregnant women, sometimes owing to a spasmodic contraction of the os uteri,—a sort of tenesmus of this organ? Are not the hysterical globus and difficulty of swallowing in the pharynx, spasm of the larynx, tenesmus of the rectum, strangury of the neck of the bladder, and uterine bearing-down, all kindred phenomena?—a spasmodic closure of the various ingestive and egestive organs? I believe that many of the motions usually referred to the child are, in reality, irregular contractions of the uterus; and I have thought that mal-presentations are sometimes attributable to undue contractions of the uterus during the period of gestation.

The treatment of these affections must be antispasmodic, but not according to the old meaning of the term. It consists chiefly in soothing the excito-motory system; by removing, as much as possible, irritation from the exciters connected with the uterine system, particularly the gastric and rectal incident nerves; and by diminishing the centric causes of spinal action,

such as plethoric or anæmic states of the vascular system, by carrying off the irritability of the muscular system, and by moderate exercise. The spinal marrow and its incident and reflex motor nerves are rendered more excitable both by anæmia and hyperæmia, the irritability of the muscular system probably by plethora and an inactive life.

All the more important extra-uterine causes of abortion are spinal in their nature, and these causes may either act directly on the spinal marrow, *centric causes*, or on the extremities of excitor nerves, *eccentric causes*.

The chief causes of abortion from *direct* or *centric* causes of spinal action are, emotion, the ergot of rye, perhaps savin, and some other poisons, anæmia and hyperæmia, or fulness of the circulation, and the respiration of carbonic acid gas. In the caves of Dahra, where the mode of death was by asphyxia from this gas, many of the women who perished were found to have aborted in their dying moments. All these causes of abortion are intra-vascular, with the exception of *emotion*, in which the disturbance of the excito-motor power is of a psychical kind.

The principal *reflex* or *eccentric* causes of abortion are, irritation of the rectum, as, from purgatives, constipation, or ascariæ; of the bladder, from calculi and other causes; of the mammae, from suckling during pregnancy; and of the stomach, from improper ingesta. The induction of premature labour by plugging the upper part of the vagina, or by puncturing the membranes, and abortion from sexual excesses, are also reflex motor phenomena.

A knowledge of the principles on which these extra-uterine causes of abortion depend, suggests the means by which they should be met. We perceive the importance of diminishing, in cases of threatened abortion, the causes of *direct* spinal action, and of removing those which act *eccentrically* on excitor nerves. The relation of the irritability of the uterine muscular fibre to abortion is an interesting subject for inquiry.

By excessive centric motor action, or by excessive reflex action, either, in the one case, from such causes as emotion and vascular fulness; or, in the other, from uterine and vaginal irritation, or the irritation of extra-uterine incident nerves; an important class of *precipitate labours* are produced.

On the other hand, deficient centric or reflex uterine actions are the great causes of *uterine inertia* and *tardy labour*. The causes producing the one order of dystocia are the remedies for the other. In uterine inertia, the immediate indication is, to stimulate the incident nerves of the parturient canal, particularly of the os uteri and os externum, the associated spinal exciters, and the central organ of the spinal system. In precipitate labour we should exert ourselves to diminish spinal irritation of every kind. Frequent examinations, early rupture of the membranes, the upright position, abdominal pressure, and irritation of the gastric, rectal, and vesical nerves, emotional excitement, and stimulating ingesta, all hasten the progress of parturition, and should therefore be avoided.

Uterine hæmorrhage from the fundus or body of the uterus depends on the partial or entire separation of the placenta, with uterine inertia. Hæmorrhage from the os and cervix uteri is generally dependent on placental presentation.

Certain mechanical measures are useful as palliatives in uterine hæmorrhage, but the *efficient* remedies are those which excite the motor action of the uterus. The patient is never safe after severance of the placenta has commenced, until the uterus is firmly and equably contracted.

For the mechanical arrest of hæmorrhage, the compression of the abdominal aorta, so as to cut off the supply of arterial blood to the uterus, is recommended by M. Dubois as of priceless value, by giving time for the appliance of other and more permanent means. We are recommended to exert the pressure on the left side of the vertebral column, so as to engage the aorta and not the vena cava. This is an evident mistake. The blood lost in uterine hæmorrhage is, as Dr. Lee has shown, more derived from the venous than from the arterial system. In those who have died from loss of blood, injections driven into the cava from the right auricle readily escape by the uterine veins. The success of compression must have arisen from the difficulty of complying with the common rule for its application. It is not an easy matter to compress the aorta in the abdomen without compressing the inferior cava. Another mechanical procedure is that of grasping the uterus with both hands through the abdominal parietes, and squeezing the organ, so as to prevent the efflux of blood, but this also excites the irritability of the uterine muscular fibre, and the reflex function of the organ, so that its operation is not purely mechanical. The tampon is also a mechanical remedy in very early pregnancy, when the uterus is small, and

coagulation can be promoted by its use, or when the flooding is from the os and cervix uteri. The abdominal bandage can scarcely be considered as having any mechanical power over the hæmorrhagic condition of the uterus.

But in hæmorrhages from the fundus and body of the uterus, efficient uterine contraction is the remedy. This contraction may be excited according to three distinct principles.

I. *Direct or centric spinal action*, in which the incident excitator nerves are not all affected, the spinal marrow being primarily acted upon. This may be induced, by emotion, by the ergot, by the borate of soda, by the administration of opium, and, perhaps, by medicines having an emetic action. In vomiting, not only the stomach but all the other egestive organs are stimulated; and we know that ipecacuan has been used for the suppression of hæmorrhage, formerly by Denman, and more recently by Mr. Higginbottom. No doubt, a reflex action between the stomach and the uterus is called into play at the same time; but there is good reason for believing that a centric influence is likewise produced; even syncope, which favours the suppression of hæmorrhage in other organs by the arrest of the circulation, and consequent coagulation, at the mouth of the bleeding vessels, in the case of the uterus acts also by inducing active contraction. I have already touched on the fact, that excessive fullness or excessive emptiness of the bloodvessels acts as an excitant to the spinal marrow. With respect to opium, the theory of its acting by the equalization of the circulation is quite untenable. I have no doubt whatever of its action in hæmorrhage being on the spinal centre, which it reaches through the medium of the circulation. The influence of emotion in arresting hæmorrhage is remarkable. Let the attendant manifest any sign of apprehension before a flooding woman, the loss of blood will continue and increase; then let another professional man enter the room with confident air, and before he has spoken or used a single aid, the hæmorrhage will often have ceased. Again, when a woman is sensible, so as to know her child, the act of placing it to the breast is much more efficacious than when she is insensible, though insensibility does not diminish the reflex action excited in this manner. This important fact has been noticed by Dr. Rigby. Suckling the child also excites a more marked contraction than the irritation of the breast by the nipple pump. To the action of the ergot, the chief of the medicines having a special influence on the centre of the uterine reflex arcs, I need not further advert at the present time.

II. *Reflex spinal action*.—The application of the child to the breast is, independently of its emotional influence, a powerful excitator of the uterus. Reflex action of the uterus may be excited by manual irritation through the abdominal parietes; by the introduction of the hand into the uterus, in which the excitator surfaces of the os externum, the vagina, the os uteri, and the internal surface of the uterus, are powerfully roused. The uterus will not contract on a coagulum of blood, when it will contract firmly on the knuckles of the closed hand. Where the tampon is efficacious in hæmorrhage from the interior of the fully developed uterus, it is from its power of exciting reflex action, not from its simply mechanical action. The various modes in which cold may be applied to the different excitator surfaces are extremely interesting. Suddenly swallowing a gulp of cold liquid, excites the equally sudden contraction of the uterus. The cold douche played from a height on the abdomen or vulva, or plashing a cold wet towel on the surface of the abdomen, or placing the hand, previously cooled by immersion in water, upon the abdomen, —all produce powerful reflex uterine actions. The introduction of cold or iced water into the vagina or uterine cavity has the same effect. Sig. Mojon proposed to inject the placenta with the coldest water, or cold water and vinegar, by the umbilical vein, in cases of hæmorrhage caused by partial detachment of the placenta. This plan has also been spoken of by Professor Muller. In all these cases much depends on whether the application of cold is continuous or intermittent. Dr. Locock remarked, that when cold is applied by napkins, and suffered to remain, the heat of the parts soon converts it into a reeking fomentation, quite inadequate to the intended purpose. Of the error of this there can be no doubt. To obviate it, Dr. James Arnott has invented an ingenious apparatus, on the principle of the syphon, for causing a constant supply of cold water to a small tank, to be applied immediately over the abdomen—the abdomen being placed by it in much the same condition as the bed of a running stream, save that the water is not in immediate contact with the abdominal surface. This practice is equally wrong with the single application of the cold napkin.

Cold long continued, as Sir R. Blackmore remarked to Chapman, may prove dangerous, by depressing the vis vitæ; but, more than this, it is not effective to the highest degree in producing reflex uterine action. A surface long exposed to cold becomes at last in-excitator, but the excitator power is restored by the application of warmth. Both Mr. Simpson and Mr. Barlow have shown this. The intermittent application of cold and warmth is the proper and economical mode of inducing reflex uterine action, whatever the surface to which the cold may be applied.

Besides the application of mechanical irritation and cold, it would be of great interest to know whether there be any substance specially excitator to the uterine surface, without its introduction into the blood, affecting the uterus in the same way that sulphate of zinc affects the stomach, or that carbonic acid affects the larynx. There is an experiment by M. Velpeau, in which it is said that the application of the ergot to the margin of the cloaca in the common fowl, excited the premature expulsion of the egg.

III. *Muscular irritability*.—The introduction of the hand into the cavity of the uterus, and irritation of the internal surface, either with the knuckles or the tips of the fingers, excite contractions of the uterus, partly by virtue of its muscular irritability. I have already referred to the reflex action thus excited. Both powers are evoked in combination under such circumstances. But the most direct mode of exciting the irritability of the muscular fibre is by electricity. I have referred to the induction and performance of labour, by electricity, in cases of spinal paraplegia, where no reflex or centric spinal action could be excited. Dr. Radford has applied this power to the arrest of hæmorrhage. Placing one conductor within the os uteri, and the other over the fundus, it is found that at the completion of the electric circle, powerful uterine contraction occurs. This plan has been pursued in numerous cases with success where other means had failed. I am not aware that Dr. Radford has ever spoken of the form of muscular power excited in this operation. But it is of considerable practical importance to distinguish between nervous motor power and the motor power inherent in the muscular fibre.

Thus, then, besides mechanical means, there are three distinct forms of motor action, which may be excited in the uterus for the arrest of hæmorrhage, or indeed for any other purpose. 1. Direct spinal action; 2. reflex spinal action; 3. muscular irritability. The different forms have not previously been analyzed, and it is especially important that they should be understood, because, in arresting hæmorrhage, if we do three things simultaneously, the three operations should be calculated to excite three different forms of motor action. A practitioner not knowing the different forms of motor action, would be very likely to heap up one reflex motor action upon another, and to try no other mode. The thing is done every day. Another practitioner, using the three separate motor powers at our command, would have a greater power over the uterus, a superiority, in fact, nearly if not quite equal to the proportion of three to one. In hæmorrhage after delivery, for instance, one person may plug the vagina, dash cold water on the vulva and abdomen, give cold drinks, and apply the child to the breast. He seems to do a great deal, but in reality he only excites the reflex action of the uterus, unless when the sucking of the child excites the action of the uterus by emotion; and to effect this, the cold douche or the sucking of the child would have sufficed. Another applies the child to the breast, or douches the abdomen, (reflex spinal action,) gives a dose or repeated doses of ergot or opium, (direct spinal action,) and irritates the uterus with the fingers through the abdomen, (muscular irritability.) The superiority of the one plan over the other is obvious. The one is like fastening a single horse to a vehicle by many ropes, with an idea of thus increasing the power; the other is like applying several horses to the vehicle by one rope, that rope being strong enough to bear the whole motor power.

To these physiological actions of the uterus, therapeutically applied, the use of purely mechanical means offers no hindrance or objection. They may, indeed, be used almost simultaneously.

Rupture of the uterus bears very important relations to physiology. It is a very singular paradox in practice, that rupture of the uterus should only occur in post-primal labours, and laceration of the perinæum exclusively in primiparous women: I am here, of course, only speaking of the rule. There is at the first blush sufficient similarity between the two accidents to lead one to expect that the same kind of causes should operate in producing both. There is, however, an essential difference in the strongly-muscular character of

the uterus and its outlet, and the comparative absence of this character in the cavity and outlet of the vagina. Muscular action is consequently the distinguishing feature of uterine egestion; passive or mechanical dilatation, that of egestion from the vagina. It is not difficult to conceive, that with successive labours, every successive development of the uterine muscular fibre, and every succeeding use of the fully-developed muscle in parturition, should increase its strength, and thus increase the danger of rupture, supposing muscular contraction to be the cause of the accident. On the other hand, mechanical distention and dilatation being the chief properties of the perinæum, as the outlet of the vagina, it is obvious that every succeeding dilatation must render it more readily dilatable and less liable to laceration. I have given much thought and attention to the subject, and it appears to me, that such is really true of the uterus and the perinæum. I believe that the uterus is very rarely indeed ruptured from pressure between the head of the child and the pubis, or the sharp linea-ilio pectinea, and other forms of mechanical injury, as authors generally suppose, but that its own contractions are the really efficient cause, other causes being subsidiary—such, for instance, as inflammatory action or long-continued pressure, which may end in softening or even sloughing of the lower part of the uterus. It is certainly not a little singular that pressure exerted on the uterus by the brim and walls of the pelvis, on the one side, and the head of the fœtus on the other, should be held to cause laceration of the uterus; while pressure of the perinæum between the hand of the accoucheur and the head of the child should be thought necessary for the safety of the perinæum. The heart is the only other organ liable to rupture with which the uterus can fairly be compared. In rupture of this organ, we have very valid evidence that it is ruptured by the force of its own contractions upon its contents, and not through its distention by the contained blood from obstruction or any other cause. This evidence is furnished by the fact, that in this accident the rupture occurs, in a very great majority of cases, in the left ventricle, though this is considerably thicker and stronger than the right. This is meant to apply to cases of spontaneous rupture; but cases of mechanical rupture, as from external injuries, afford corroborative evidence; for here, in the majority of cases, it is actually the right, the weaker ventricle, which is ruptured. Another fact of the same kind is, that rupture of the auricles is comparatively a very rare accident.

There are two modes in which the muscular contractions of the uterus may occasion its rupture; the first, when the contractions of the body and fundus are so violent that they force the head through the os uteri before it has fully dilated; the second, when the fœtus is fully engaged in the os uteri and vagina, and the contractions of the os and cervix uteri are so powerful as to produce rupture. Both kinds of rupture are aggravated by irritation of the excitator nerves of the parturient canal, either from excessive manipulation or the use of instruments, and by the centric action of the ergot and other centric stimuli. The causes are, in fact, the same as the causes of precipitate labour. In some cases the augmentation of the excitomotor power is so excessive that the slightest addition to irritation beyond that which depends on the fœtus will produce the most violent uterine action. Dr. Ramsbotham relates two remarkable cases in which rupture of the uterus occurred in each instance, while an examination was being made at the acme of a pain. The true indication where rupture of the uterus is threatened by the too great activity of the organ, is to avoid all causes of reflex action, or, indeed, uterine action of any kind, and to moderate that which is excited in the natural order of labour. Conjoined with the regulation of the motor power there must be the treatment adapted to moderate inflammatory action in the uterus, whether from pressure or any other cause.

The great cause of laceration of the perinæum is the rapid advance of the head and shoulders of the child; of course, rigidity, temperament, and age, specially predispose some persons to this accident. All the causes which produce precipitate labour endanger the perinæum; such, for instance, as great vascular fulness, frequently taking pains, and otherwise interfering with the natural progress of labour. Some of the most practised accoucheurs who have written have stated that they have never known an instance of laceration in secret births, where the woman has been left entirely alone. Those capable of judging have also said that the accident rarely, if ever, occurs to animals, except when they receive extraordinary assistance from the veterinary or other at-

tendant. The common plan for the prevention of the accident is pressure on the perinæum, exerted so as to support this structure, to retard the advance of the head of the child when necessary, and to assist in its emergence in the proper direction under the pubic arch. In the school in which I was taught, this plan was condemned, though no adequate explanation was given. Very many practical men have forsaken it, and for this valid reasons may now, I think, be given. Pressure on the perinæum undoubtedly excites reflex actions in the uterus, and also increases the expiratory action. The perinæum is, indeed, the most excitator portion of the vagina. It may be fairly questioned, too, whether pressure on the perinæum, viewed in the light of mere mechanical pressure, does really tend to prevent laceration. I believe it does not; that pressure on the perinæum only acts serviceably by retarding the advance of the child; and this is more than counterbalanced by the reflex actions and consequent acceleration of labour which it excites. Except in cases of immense dilatation of the posterior part of the perinæum with rigidity of its anterior border, the too rapid advance of the head can be retarded equally well by pressure on the head itself. I have already mentioned the sudden dilatation of the sphincter ani as a natural provision for the safety of the perinæum. Primiparous women should be prepared for this occurrence, and should be prevented from using any voluntary restraint. If they attempt to contract the sphincter ani by a strong voluntary effort when the child is passing, they increase the danger of laceration. This they are more likely to do when the hand of the accoucheur is in close proximity. In the only case in which any considerable laceration happened to a patient of mine, the membranes did not rupture at the beginning of the stage of propulsion, but gave way just as the head came to rest full on the perinæum; this greatly increased the reflex action of the uterus at this juncture, and from some cause the sphincter ani did not dilate in the usual manner.

Puerperal convulsion is a disease of the true spinal marrow, and its causes may be either centric or reflex.

The principal *centric* causes of convulsion are, mental emotion, vascular repletion, loss of blood, and cerebral counter-pressure on the medulla oblongata. It very frequently happens that more than one of these causes are in operation at the same time.

Emotion, as a cause of puerperal convulsion, has often been noticed. Any sudden intelligence or mental shock of any kind will so instantly induce the fit as to leave no question about the cause. Sometimes slight causes operate in the puerperal state. Mauriceau relates a case, in which a woman, after delivery, fell into convulsions, from the surprise and nausea caused by the entrance of a female friend, whose clothes were extravagantly scented. Dr. Merriman has very graphically related a case, in which a patient in labour fell into a fatal convulsion on the abrupt entrance of her medical man, against whom she had conceived a powerful prejudice. When convulsions have already occurred, emotional disturbance of any kind is very prone to excite their recurrence.

Vascular repletion is a very frequent cause of this disease; cerebral counter-pressure on the medulla oblongata may also be placed under the same head, as the pressure of the brain on the spinal marrow generally depends on fulness of the vessels of the brain. Vascular repletion is also a direct stimulus to the spinal marrow. The therapeutic action of remedies is a proof of this. In convulsions in plethoric subjects, bleeding is the all-important sedative of the spinal marrow. Experimentally, pressure on the superior cava, so as to retard the return of blood from the head, and thus distend the cerebral circulation, will produce convulsion in animals. It must be borne in mind, that it is not irritation of the brain which irritates the medulla oblongata, but the mechanical pressure exerted upon it by the brain. The brain may be seared or lacerated without producing pain or exciting motion. It is both inexcitator and insensible. But pressure exerted on its surface, so as to compress the medulla oblongata, the cranial extremity of the spinal marrow, instantly excites convulsion.

Loss of blood.—This cause of puerperal convulsion it is important to recognise, because the treatment it requires is directly opposite to that to be pursued in every other variety of the disease. Anæmic puerperal convulsion is sometimes produced by uterine hæmorrhage; and in fatal cases, from loss of blood, death is often ushered in by convulsive action. In other instances, extreme weakness and debility occurring previous to labour, is the chief etiological feature in the convulsions. There is an analogy between the spinal and the vascular systems. Fulness of blood increases the action of

the heart, and so also does an empty state of the bloodvessels. In the same ratio, extreme vascular fulness may excite the spinal centre, so as to produce spasm, and spasm is equally produced by extreme deficiency of the blood.

The principal *reflex* causes of puerperal convulsion are, irritation of the uterus and vagina, of the rectum, bladder, stomach, breasts, the membranes of the brain, and other organs possessing spinal excitator nerves. Sometimes more than one of these *reflex* causes of convulsion are in operation at the same time, and sometimes they are conjoined with *centric* causes.

The present being a mere sketch, I need not give examples of each *reflex* or *excentric* variety of convulsion. Cases are abundant in which the irritation of turning, or of manually extracting the placenta, or of the application of instruments, have excited convulsion, besides the most common of all *reflex* causes—namely, the irritation of the parturient passage by the fetus. Cases might also be cited of convulsion from distention of the bladder with urine, or the irritation of a calculus acting on the vesical excitator nerves. Irritation of the rectal spinal nerves by retained egesta, or of the pneumogastric by improper ingesta, need only be referred to as causes of the disease. The membranes of the brain, the mammæ, and the other organs in relation with the spinal, come more rarely into view as causes. One interesting physiological fact I may mention. In an experiment of Dr. Marshall Hall's, the brain of a dog was laid bare, when irritation of the cerebrum itself produced no motor action whatever; pinching and irritating the dura mater excited spasmodic action. I suppose a spiculum of bone to act in the same manner by irritating the membranes, not the brain itself. With respect to the mammæ, the drain of lactation is concerned, as well as the excitation of the mammary nerves, so that, in all probability, *centric* anæmic causes operate together with incident irritation.

To prevent puerperal convulsions when threatened, we must avoid or remove the different sources of *centric* irritation, and refrain as much as possible from irritating the excitator surfaces, carefully removing all sources of irritation from excitator nerves, particularly those of the rectum, bladder, and stomach.

In the treatment of the actual disease, the same indications are to be fulfilled still more positively, the same causes being now in more powerful operation.

The great remedy, the most undoubted sedative to the spinal marrow, is bloodletting. This is called for in all cases of fulness of the vascular system, and sometimes, even, when the supply of blood is below the average. There are two great indications to be had in view in bleeding; the first is to relieve the spinal system, and to diminish the cerebral vascular pressure upon the medulla oblongata; the second, to relieve the brain itself from the effects of vascular pressure. During the convulsive attack, the muscular system is emptied of blood by its contractions, and the glottis is closed. This produces great general turgescence, and particularly of the head and neck. Owing to the cerebral vascular distention, there is always danger lest the convulsive attacks should become complicated with coma, or even apoplexy, in the intervals. Often it has happened that the convulsion has led to the effusion of blood in the brain, and on dissection after death, the coagulum found in the brain has been set down as the cause of the convulsions instead of the consequence. In saying this, I do not mean to maintain, that in some instances apoplexy does not occur first; and here the coagulum, by producing cerebral counter-pressure on the spinal marrow, is the efficient cause of convulsion; but the two classes of cases must be distinguished. We should bleed, then, in ordinary cases, to allay irritation of the spinal marrow, and to prevent cerebral apoplexy. Thus it happens, that in order to avoid the latter, the boundary between depletion as an antispasmodic remedy, and bleeding as a cause of convulsion, is sometimes overstepped, and a case in which superabundance of blood formed the chief cause of the first attacks, may become changed into a case of convulsion from loss of blood; but we must be careful not to go too far in the misdirection. There is hardly a nicer point in obstetric practice than this. Scylla and Charybdis lie close on either side. A wrong movement may prove fatal to the patient.

Of the other remedies to *centric* action in full states of the vascular system, the topical application of cold is, perhaps, the most important. Cold applied continuously to the head is, as experience proves, beneficial; its *modus operandi* may be by diminishing vascular fulness within the cranium, or the reduction of temperature may be sedative to the medulla oblongata. There are also good reasons for believing hyos-

cyamus, hydrocyanic acid, and the Indian hemp, to be sedatives to the spinal system.

The remedies of *centric* action in the anæmic form of convulsion, are appropriate stimuli. It is here that opium, camphor, and other stimulants, become of the greatest value. We know that in great hurry of the vascular system, caused by debility or loss of blood, the heart is quieted by stimulus. In excitement of the spinal system from the same cause, the same agents are remedial to a parallel extent; but the active and passive convulsion must be correctly diagnosed from the first. What is curative in one case is deadly in the other. I mentioned, that from excessive and repeated bleedings it sometimes happens that cases in the first instance caused by *repletion*, were changed into those depending on *depletion*. Thus it is that bleeding is found beneficial at first, and camphor and opium in the more advanced stages of the same case. It is not uncommon to see those who are blind to the vital pathology of the disease, regret that they did not use opium and stimuli earlier. Some have tried opium at the outset, on the faith of such observations, and have destroyed their patients.

The *reflex* treatment of the disease consists in washing out the bowels, and in emptying the stomach and the bladder. An enema, an emetic, the catheter, are oftentimes sovereign antispasmodics; the ingestive and egestive organs should always receive the greatest consideration. All unnecessary irritation should be avoided; it is matter of fact, that a fatal convulsion has been excited by simply introducing the hand into the uterus.

In cases of convulsion, either before or during labour, the contents of the uterus form a grand source of spinal excitement. Some authorities look to artificial delivery, in such cases, as the great means of cure: this is natural, and is in strict accordance with the physiology and pathology of the nervous system and this disease; but, unfortunately, there is a reservation. The other egestory organs may be all emptied without any great amount of spinal irritation. Not so with the uterus; the evacuation of this organ, by artificial means, may be a terrible excitement to the spinal system. The whole length of the parturient canal is intensely excitator, and the fetus furnishes abundant irritation. In every case, therefore, before artificial delivery is decided on, it ought to be considered whether the operation of delivery is likely to cause more spinal irritation than the continuance of the fetus in utero, and the delivery by natural means—This is the problem to be solved.

The term "irritation" so frequently used in the present sketch, has, in its application to spinal physiology and pathology, a peculiar meaning, very different from sensation, or irritation in the ordinary sense. Perhaps *excitation* would be the better word. It must be borne in mind that there is no relation whatever between pain and spinal action. When the spinal marrow and its excitator and motor nerves are in a state of great excitability, gentle manipulation of the vagina or os uteri may produce greater results than actual rupture of the organ at other times. The common practice of "taking a pain" without any reference to the condition of the excitomotor system, has caused almost as many accidents and fatal cases as the ruder forms of mal-praxis. The uterus has been ruptured by taking a pain, however carefully, and a fatal convulsion excited by even the cautious introduction of the hand into the uterus. Irritation has formerly been measured by pain; but the new idea of *excitation*, apart from sensibility, and the grave accidents which have ensued from its non-recognition, cannot fail hereafter to effect an important change in the practice of midwifery—to give it, in fact, a new and scientific basis.

It is very common to hear, at the present time, that little advance can now be expected in the obstetric department of the profession; so many eminent men have gone over the ground, that anything new in midwifery is almost deemed impossible! However, I venture to say that there is hardly a point in the present outline that may not be developed to a very great extent. The application of the physiology of the nervous system to practical midwifery is a new department, of a higher kind than the vascular and mechanical principles upon which obstetrics have hitherto been founded. The relation of the circulation, and of mechanical principles, to parturition and its diseases, constitute the *material* part of the art, while the relation of the nervous system constitutes the *dynamical*. When the two are combined and carried out in practice to the extent of which our present knowledge and means of investigation admit, the obstetrician will, as regards both science and practice, be in advance of every other practitioner.

ON THE
CAUSES, PATHOLOGY, AND TREATMENT
OF
DEFORMITIES IN THE HUMAN BODY.

(WITH CASES AND ENGRAVINGS.)

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NO. III.

Muscles; their tonicity or contractility; volume constant in different stages of their contraction; power of muscles; weights of the extensors and flexors compared; muscles have no intrinsic power of elongation; may be elongated mechanically; effects of standing during lengthened periods; effects of change of attitude; power of extensor and flexor muscles compared.—Quantity of nervous action expended dependent on the nervous system.—Myotomy and tenotomy.—Paralysis.—Spasm.—Sections of muscles and tendons an irrational practice.

THE MUSCLES.

THE muscles have long been regarded as one of the causes of distortions of the spine and limbs. It will be desirable, therefore, to investigate how far this hypothesis is consistent with what is known respecting the properties of muscles in repose and action, and the conditions to which they are subjected by elongation and contraction. It is well known to every physiologist, and to every practical surgeon who has paid attention to the subject, that all muscles, when in a state of repose, are also in a state of passive tension, and that, however relaxed they may be by the position of any portion of the body, they will, if cut across, become still more contracted. This property has by some authors been termed *tonicity*, by others, *retractility*. If a limb be kept constantly bent, and the ends of a set of muscles be kept nearer to each other than they would be when the limb is extended, it is observed that the passive force which is always inherent in living muscles will cause them to diminish in length, and to become permanently contracted. If the flexion of the limb is only temporary, and the repose of the muscles in their new position short, they lose, for that period of repose, only a portion of one of their dimensions, namely, their length, and gain a proportionate augmentation of their two other dimensions of breadth and depth; for, during the voluntary contractions of muscles, their total volume remains constant. But this applies only to the action of muscles in the healthy movement of the limbs; for, if from any unnatural position of the body and want of exercise a muscle is kept unduly shortened, it diminishes in depth and breadth, as well as in length, and loses also a portion of its power. The powers of muscles are in proportion to the areas of their corresponding transverse sections, and at the rate of about five hundred pounds for every square inch. According to MM. Prevost and Dumas, the muscles are capable of contracting about 0.23 of their length, or nearly one-fourth, a range which is sufficient to produce all the motions and positions observed in animals. The comparative power of muscles, according to Borelli, may be thus estimated.

1st. When two muscles are composed of an equal number of fibres, or are of equal thicknesses, but of unequal lengths, they will suspend equal weights; but their motor powers, and the heights to which they are capable of raising the weights, will be as the lengths of the muscles.

2nd. When the lengths of the muscles are equal, and their thicknesses unequal, their relative powers will depend on the latter, but they will raise weights, proportional to their powers, to equal heights.

3rd. When the lengths and thicknesses of muscles are unequal, the weights which they will raise will depend on their thicknesses, and the heights to which they will raise them will be as their lengths. When the fleshy fibres of a muscle lie parallel to the tendon, the space through which they will draw it is equal to the contraction of the fleshy fibres; but when they are inserted obliquely into the tendon, the space through which they will draw it will vary with their inclination. From the researches of the Professors Weber we learn that the weight of the extensor muscles of the trunk and lower extremities generally predominates over that of the flexors. Their proportions in the legs of two well-formed healthy subjects were found to be as

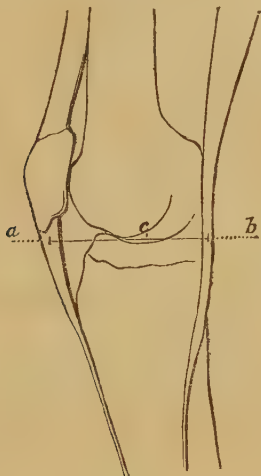
$$2403.2 + \frac{1021.1}{2} : 810.3 + \frac{1021.1}{2} = 2913.75 : 1320.85,$$

or as 11 to 5 in favour of the extensors. The weights of two of these members of the equation are halved, to allow for the double office which some muscles perform of both flexion and extension, according as either end becomes the fixed point; but, if the whole weight of each set be substituted, the proportion then becomes, 2403.2 : 810.3, or nearly as 3 to 1. The weight of the extensor muscles, when compared with that of the entire leg, is in the proportion of 5 to 9; when compared with that of the whole of the muscles of the leg, including both extensors and flexors, it is as 3 to 4. Borelli has given approximate values of the powers of a great number of the muscles of the human body, from which we select a few computations, that will convey an idea of the enormous amount of their absolute power, and the large proportion of it which is provided in order to gain velocity. Borelli states that the whole force expended by the muscles of the arm, when stretched horizontally, is 209 times greater than that of any weight suspended at its extremity, and that the force of the biceps, compared with that of the brachialis, is as 3 to 2.6, or as 15 to 13, and their absolute forces as 300 to 260. He estimates the force of the deltoid as 61600 pounds, the sum of the forces of the intercostal muscles at 32040 pounds, and of the glutæi at 375420 pounds. The extensor muscles of the hip, knee, and ankle-joints, have also a large proportion of their power designed to produce velocity.

Such being the law regulating the power of muscles, we need not be surprised that persons labouring under an atrophied state of a limb find it accompanied by extreme debility, arising, not only from vital, but from mechanical causes. It must be borne in mind, that a muscle has the power of contracting, to a greater or less extent, but no power of elongating itself. A muscle, however, may be elongated by means of a certain amount of stretching force, if continued a certain period of time, varying according to circumstances. From these principles we may deduce considerations which are extremely important when applied to the treatment of deformities in general, and especially of those in which the muscles are supposed to exercise any control. In the erect posture, the head, neck, and trunk with all its appendages, are kept poised on the heads of the femurs by the vigilance of the muscles; and it will be shown that there is no position in which all the muscles acting on the trunk take their proportionate share of action so nearly as when the body is in the perfectly erect attitude. Any movement produced by curving the spine either forwards, backwards, laterally, or obliquely, out of the erect position, tends to elongate one set of muscles, and increase their quantity of action, whilst their opponents are shortened, and deprived of their proper share of action as long as the new position is maintained. It will be shown in a subsequent paper that the erect position of the body is that in which there is the least expenditure of muscular action; it therefore follows that some of the muscles must act at a mechanical disadvantage whenever placed out of this attitude; but, as any constrained attitude is irksome if much prolonged, a transfer of action from one set of muscles to another is attended with a sensation of ease. For these reasons it is found that standing a long time is attended with a much greater feeling of fatigue than walking at a moderate pace, although the latter requires a far greater expenditure of muscular force. Again, as standing or sitting with the trunk perfectly erect, soon becomes wearisome, the body is often suffered to bend in some other direction, and very frequently forwards, because in that direction there is a greater feeling of security, and the muscles which extend the trunk are always more powerful than those by which it is flexed. Old persons, who often take but little pedestrian exercise, are observed to oscillate the trunk either backwards and forwards, or laterally, and in this manner alternately transfer the action of one set of muscles to their opponents. This kind of motion being accomplished with little expenditure of force, releases the system, with scarcely any exertion, from the weariness of a continued position in one attitude; and the muscular forces employed in the action and reaction being equal and opposite, no distortion of the figure results. The fatigue experienced after long standing in the erect position appears to have attracted the attention of military men, and to have given rise to the order, "Stand at ease." By this change of position, there is necessarily a transfer of action in the muscular system; but the ease experienced does not arise from this position being that of least muscular action, but from the extensor muscles, which are by far the most powerful, being called into action. It has been shown that the weights of the muscles which extend the trunk and lower extremities greatly predominate over those

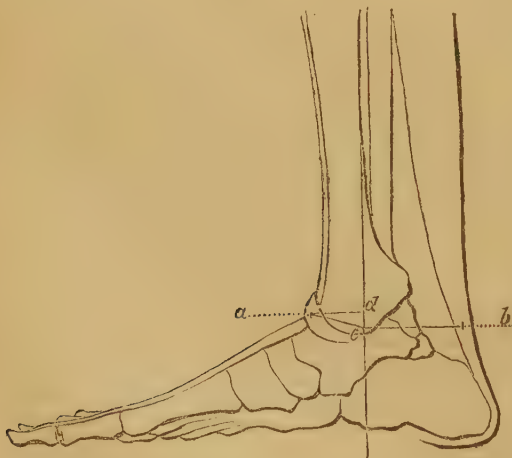
which bend them; and it is manifest that for equal lengths the transverse sections of the heavier muscles will be greater than those of the lighter, supposing them to be of equal density, and of equal lengths of tendon; and consequently the powers of the heavier muscles will be proportionably greater. When the whole body is taken into account, the weights of all corresponding parts of persons of similar figure are as the cubes of their heights; but since the power of the muscles to raise a given weight depends on the number of their fibres, their force must vary in the ratio of their transverse sections, that is, as the square of the heights of the persons. From this we see why the strength of persons does not increase in proportion to their bulk; for, if the weight of the person increases as the cube, and the muscular power as the square, it follows that the weight increases much more rapidly than the power, and consequently a small man is stronger, in proportion to his size, than a large one.* The powers of the extensor and flexor muscles of the limbs are always unequal; and in most instances, except in the case of the forearm and hand, the extensors are not only stronger, but also act at a greater mechanical advantage. Such is the case with the muscles which act on the hip, knee, and ankle joints, in which the distance of the force of the extensors from the axis of motion is greater than that of the flexors. For example: in the knee-joint, (fig. 1,) $a c$, the distance of the direction of the force of the ex-

FIG. 1.



tensors from the axis of motion c , is greater than that of the flexors $b c$; and, in like manner, in the ankle-joint, (fig. 2,) $b c$ is greater than $a d$.

FIG. 2.



From these considerations it may easily be seen, that a balance between the powers of muscles cannot be maintained by these

* This is Straus-Durckheim's view, but it only applies to the production of motion, without reference to its quantity.

muscles alone, and that the limbs can be kept in a state of equilibrium only through the agency of the nervous system. This property of controlling the muscles is placed under the influence of the nervous system; but how the nervous force is directed to keep the different parts in equilibrium is hitherto unknown. Independently of the mere functional contraction of muscles, already described, arising from the nearer approximation of their points of insertion, they may also be contracted either by spasm or paralysis, and distortions may be the result. When the spinal cord is the seat of irritation, the effect produced on the muscular system depends on the position of the parts irritated. If the motor column of the cord be transiently compressed in any portion of its length, spasmodic contractions of the muscles connected with that part take place; but if it be compressed permanently, paralysis, accompanied by deformity, is the consequence. When the contraction is spasmodic, as in cramps and transient local irritation, the deformity produced is always in the opposite direction to that which arises from paralysis, and the proper treatment of the disease is, in like manner, of an opposite kind. In spasm the contracted muscles violently overcome the force of their opponents; and the effect upon the limbs is similar to that which is produced by the same muscles in their normal state, but in excess. When the muscles are affected by paralysis, they lose their normal powers, and their opponents, being unresisted, draw the limbs in a manner directly the reverse of what takes place in the former case; so that different affections of the same nerves may produce opposite distorted appearances of the limbs. Some authors have imagined that distortions of the spine arise primarily from irritation of the spinal cord; but a careful investigation of cases tends to show that the spinal irritation is more usually the effect of distortion than its cause. If the irritation be in the posterior column of the spinal cord, the disturbance of the nervous system is greater, and the effect on the muscular system less; and our diagnosis of these complaints ought manifestly to be based on a knowledge of the influence exercised by the several portions of the spinal cord on the muscular and sentient systems.

MYOTOMY AND TENOTOMY.

It has been stated that a contracted condition of the muscles may arise from three different causes; the first mechanical, depending on abnormal attitudes, and occupations tending to disturb the relative proportions of muscular action in different parts of the body;—the second depends on deranged action of the spino-cerebral system, inducing spasmodic contraction of the muscles;—the third depends on a diseased state of the spino-cerebral system, producing a paralytic condition of the muscles. Hence it is evident that, as the causes of deformity are essentially distinct in their character, the remedies cannot be of one kind. Those cases of muscular contraction which depend on mechanical causes require mechanical means of treatment. Amongst the various methods proposed for this purpose, let us first consider the objects sought to be obtained by the operations of myotomy and tenotomy, and the effects really produced by them. Surgeons, more especially of the German and French schools, finding it difficult to stretch contracted muscles, have adopted the plan of cutting through either the muscles themselves or their tendons. By these means the parts held by the muscle are released, and it is found that after a longer or shorter time the fleshy or tendinous portions re-unite, although the points of attachment be at a greater distance than they were before the operation; they have therefore become elongated. When the tendon of a muscle is divided, the instant the section is completed, the segments recede from each other with great energy; the interval between the divided parts depending on the length of the muscle, and the distance between its points of attachment after the operation. This is deducible from the theory of Borelli, Prévost, and Dumas, and is also known by experience.

It may readily be understood how the divided portions of tendons are separated, but by what process they are united again with elastic fibrous tissue is not very easily demonstrated. It is probable that the tendon recovers its original strength, but not so the muscle; at least, such is the opinion of many of the French surgeons, who say that the muscle so mutilated loses a portion of its force. This may easily be understood to be the case from the experiments of Schwann, who observed that the force of a muscle is at a maximum when it is in its greatest elongation, and at a minimum when it is in its greatest contraction; so that the forces of muscles, in different stages of their contraction, vary in some way di-

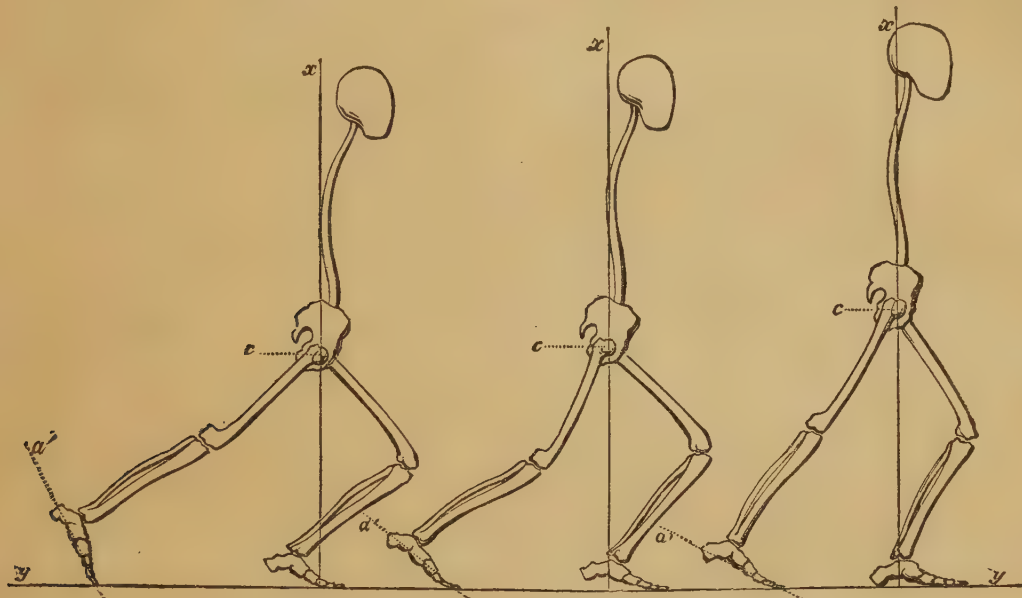
rectly as their lengths. Now, as the muscles, after their division, become shortened, and have no power to elongate themselves, their union must take place by the production of new matter, which fills up the interval between the divided parts. By this means the muscles are lengthened without being stretched, and do not acquire the tonicity and extension of their normal state; and hence their loss of power. Malgaigne relates a case in which a corpulent man, whilst dancing, ruptured the tendo-Achillis, and on the next day, before he was subjected to surgical treatment, walked six miles, though with pain and difficulty. He remarks that now

myotomy is become as common as the opening of an abscess, and is employed, not only in club-foot, but also for fractures, dislocations, contractions, &c. It is a point of great importance to ascertain the effect of the division of the tendo-Achillis on progression. It is said that a person can walk after the tendo-Achillis has been lengthened by the operation of tenotomy, an inch and a half or two inches; but Malgaigne observes that the question is, not whether they *can* walk under such circumstances, but *how* they walk? If the attention be directed to the action of the foot in walking, it will be observed that the heel is raised by the tendo-Achillis in

FIG. 3.

FIG. 4.

FIG. 5.



Scale one-twentieth the natural size, drawn with the assistance of a modified form of the stroboscope, by means of which the body is seen in the various instants of a step.

slow walking, (fig 5,) to the height of a'' ; in quick walking, (fig 4,) to the height of a' , and in quickest walking, (fig 3,) to the height of a . In each of these cases, the length of the step is proportioned to the elevation of the heel, and therefore, if after the operation the muscles which raise the heel are too long, the power of the legs in progression will be unequal, the speed will be diminished, and the gait in walking will be altered. Such is the effect of an over-elongated state of the extensor muscles of the foot.

In memoirs read before the Académie Royale de Médecine de Paris, M. Guérin stated that he had divided at a sitting forty-two tendons and muscles, in a young man aged twenty-two; and in a young girl he divided at one time thirteen tendons: he also made a statistical return of 155 patients treated for deformities by him at the *Hôpital des Enfants Malades*, of whom twenty-four were completely cured, twenty-eight relieved, four not relieved, one dead, and ninety-eight either under treatment or lost sight of. He stated that he had made 500 subcutaneous sections without producing any inflammatory action, or other injury, and that he had obtained the most satisfactory results from dividing the sacro-lumbalis and longissimus dorsi muscles, in curvatures of the spine. In order to ascertain the truth of these statements, Malgaigne investigated the condition of the patients placed under M. Guérin's treatment; and in a memorial addressed to the Academy reported* that, of the twenty-four cases described as convalescent, he could not find one that was permanently cured; that others, instead of being improved by the operation, were decidedly injured; and he detailed the cases in which this had occurred. This provoked a discussion in the Academy, of a violent and acrimonious character, and a commission was appointed to investigate the matter. The surgeons who were charged with this inquiry, reported that the statements of Malgaigne were very exact,

that M. Guérin had not succeeded in completely curing curvatures of the spine, and that spinal myotomy would prove a useless, if not a dangerous method of treatment. They stated, moreover, that they had never witnessed any good effects from dorsal myotomy.*

Malgaigne and Bouvier† contend that not only is the division of the sacro-lumbalis, and longissimus dorsi muscles not attended with any advantages, but the latter on the contrary maintained, very rationally, that the muscles in question are constantly required for the movements of the trunk, and that there is no advantage to be gained by their section which cannot be obtained by other means,—an opinion which ought to meet with the concurrence of every practical surgeon pretending to scientific attainments. An opposite view, however, is taken by some who recommend the division of the tendinous portion of the sacro-lumbalis and longissimus dorsi, for the relief of lateral curvatures of the spine; although one of them (Mr. Skey) appears to be well aware that the contraction of these muscles is the effect, and not the cause of the mischief, and therefore very properly mistrusts the utility of the operation in the majority of cases.

To prove the utility of the subcutaneous section of muscles and tendons, it is not enough to show that the operation may be performed with little pain, and trifling danger; although the truth is, that it is not so free from danger as Guérin and others suppose. The posterior tibial artery has been wounded in dividing the tendo-Achillis, and the internal plantar artery in dividing the plantar fascia. In both cases abscesses formed, and it was ultimately found necessary to tie the arteries. A case showing the danger of cutting paralyzed muscles is recorded by Mr. B. Phillips;—namely, that of a girl aged eleven

* Guérin still maintains that there is an advantage in the operation of myotomy in lateral curvature of the spine, and contends that the authorities of Messrs. Braid, Whitehead, Laycock, Child, Cocks, Robert Hunter, in England, and MM. Klein, Niemmann, Dieffenbach, de Haller, Hein, and Behrend, in Germany, are quite sufficient to balance that of Malgaigne.

† Archiv. Gen. de Med., Aout 4, 1843.

* Mémoire sur la valeur réelle de l'Orthopédie et spécialement de la Myotomie rachidienne dans le traitement des déviations latérales de l'épine: par M. Malgaigne.—Comptes Rendus, tom. xiii, 15 Avril, 1844.

years, who was paralyzed, and had all her limbs contracted, but was able to balance the trunk, and rotate it backwards, forwards, and sideways. Mr. Phillips says, that Malgaigne,* following the example of others, cut the refractory tendon, when all the limbs became straight and rigid, like an iron bar, with the arms lying close to the trunk. The child lay on her bed like a corpse, the head alone retaining the power of moving, and was consequently deprived of those limited movements which she previously enjoyed.

The Académie Royale de Médecine presented to MM. Stromeyer and Dieffenbach the sum of 5,000 francs; to the first, for having executed the operation for strabismus on the dead subject, and to the second, for having successfully practised it on living persons. It would be more desirable to offer double that sum for the discovery of the means of curing strabismus without the section of muscles and tendons; and we ought not to despair of attaining this end, seeing that the present practice is directed against effects, or at least against secondary instead of primary causes.

As muscles are incapable of elongating themselves, and, although they oppose great resistance to being stretched, are nevertheless susceptible of elongation, it becomes an important subject of inquiry whether some mode of producing this effect may not be practicable, without the necessity of subcutaneous sections. If a muscle is stretched by any force for a short period, it becomes contracted again as soon as the force is removed; but if the force is long applied, the muscle will not regain its primitive condition until after a lapse of time of greater or less duration, to be determined by future experiment. Now there are, it is true, some organs so constituted, and some muscles so situated, that it is either difficult or impossible to apply a force sufficient to effect the object in view. Amongst the difficult but not impossible cases may be mentioned that of torticollis, in which the sterno-mastoid muscle offers a considerable resistance to any stretching force that can be conveniently applied: amongst the impossible cases may be ranked strabismus, in which myotomy is at present found necessary, because the texture of the eye precludes the application of any force to it. When, however, the contracted muscles are situated in the back and lower extremities, we have ample means of promoting their extension; and in these cases, what excuse is there for dividing muscles and tendons which are only contracted mechanically? Is it rational to do this merely to lengthen them, when it is found that the same end can be accomplished by other and simpler means?†

When muscular irritation arises from some disturbance of the nervous system, to make a section of the affected muscles is obviously to attack the effect, and not the cause of the malady, and from such practice no good can be expected. In cases of partial paralysis of the limbs, the contracted side is always the healthy one, the partial contraction being occasioned by the loss of power in the muscles of the other side. If under such circumstances the healthy muscles be divided, as their opponents have lost their power, it is quite clear that the limb thus maltreated must, at least for some time, be motionless; and to divide the muscles on the paralyzed side would be still more absurd. In a paralytic girl aged fourteen years, Guérin cut twenty tendons, and these mutilations were only terminated by the resistance of the patient: but, according to Malgaigne, no relief followed the operation; the deformity remained as great as before, added to which, pains in both knees, about the level of the section, supervened, and the patient was deprived of the power of using her needle.

On a careful and rigid examination of the subject of myotomy and tenotomy, it appears that these operations cannot, in the majority of cases, be deemed expedient for the purpose of curing deformities, as nothing can be obtained from them which may not be effected by other and less objectionable means. The excepted cases, if any really exist, are strabismus, and other analogous affections; but even these are to be regarded with great suspicion. The best surgeons of the French school have already decided against the practice, and few of our most eminent English surgeons adopt this empirical plan of mutilating the body.

* Sur l'abus et le danger des sections tendineuses et musculaires, dans le traitement de certaines difformités. (Extrait d'une note de M. Malgaigne.)—Comptes Rendus de l'Académie des Sciences. Paris, 19 Février, 1844.

† Dr. Little recommends that when a muscle is too long, a portion of it should be cut out, and that when it is too short, it should be cut through.—See LANCET.

ON THE PATHOLOGY, DIAGNOSIS, AND TREATMENT, OF VENEREAL DISEASES.

By W. ACTON, Esq., Surgeon to the Islington Dispensary, and formerly Externe to the Venereal Hospitals of Paris.

ON THE MODERN DOCTRINES AND TREATMENT OF SYPHILIS WITH MERCURY.

Anomalous effects of syphilis and mercury considered; John Pearson's description of erythsmus mercurialis proving fatal; not met with in the present day, but chlorosis and anæmia are not unfrequently seen, and are, probably, modifications of erythsmus of older writers; Ricord's views on chlorosis; means of prevention; cases occurring in private practice illustrating author's opinions; on the employment of iron, sarsaparilla, iodide of potash; observations on eczema mercuriale; remarks on affections of the mouth, and necessity of distinguishing true salivation, the effect of mercury, from mucous tubercles, the result of syphilis.

WHEN mercury is given with the precautions alluded to in preceding papers, we rarely meet, in private practice, with the ill effects mentioned by the older authors. To go no further back than the writings of John Pearson, we find several chapters devoted to "Observations on some effects of Mercury." He thus describes a not uncommon affection, which he calls erythsmus:—"In the course of two or three years after my appointment to the care of the Lock Hospital, I observed that in almost every year, one, and sometimes two, instances of sudden death occurred among the patients admitted in that institution; that these accidents could not be traced to any evident cause; and that the subjects were commonly men who had nearly, and sometimes entirely, completed their mercurial course. I consulted Mr. Bromfield and Mr. Williams upon this interesting subject; but they acknowledged themselves unable to communicate any satisfactory information: they had carefully examined the bodies of many who had died thus unexpectedly, without being able to discover any morbid appearances, and they confessed that they were equally ignorant of the cause, the mode of prevention, or the method of treating that state of system which immediately preceded the fatal termination. As the object of my inquiry was of considerable importance, I gave a constant and minute attention to the operation of mercury on the constitution in general, as well as to its effects on the disease for which it was administered, and after some time had elapsed, I ascertained that these sinister events were to be ascribed to mercury acting as a poison on the system, quite unconnected with its agency as a remedy, and that its deleterious qualities were neither in proportion to the inflammation of the mouth, nor to the actual quantity absorbed into the body. The morbid condition of the system, which supervenes on these occasions during a mercurial course, and which tends to a fatal issue, is a state which, in a former work, I have denominated erythsmus, and which is characterized by great depression of strength; a sense of anxiety about the præcordia; irregular action of the heart; frequent sighing; trembling, partial or universal; a small, quick, and sometimes intermittent pulse; occasional vomiting; a pale, contracted countenance; and a sense of coldness: but the tongue is seldom furred, nor are the vital or natural functions much disordered. When these, or the greater part of these symptoms are present, a sudden and violent exertion of the animal power will sometimes prove fatal; for instance, walking hastily across the ward, rising up suddenly in the bed to take food or drink, or slightly struggling with some of their fellow patients, are among the circumstances which have commonly preceded the sudden death of those afflicted with the mercurial erythsmus.* I need not say that these results are no longer witnessed, but we still every now and then meet with effects of syphilis, or of syphilis and mercury, which deserve the attention of surgeons. M. Ricord has called this state of system syphilitic chlorosis: he has lately found that in the syphilitic diathesis there is an invariable alteration of the blood, and this consisted in diminution of the number of the red globules in various proportions, amounting, in some cases, to the same extent as in anæmia; there is the same depression of the circulation, and the dull eye and dirty complexion show that the blood no longer possesses its healthy properties; and we are told by Dr. McCarthy that we have the

* Pearson on Lues Venerea, p. 154, second edition.

same morbid sound accompanying the first sound of the heart, heard in the carotids in anæmia.*

If, then, these symptoms result from the syphilitic diathesis, can we be surprised at Pearson having met with them in an aggravated form, when he gave mercury so largely—a mineral which we know, from the experiments of Magendie, has the power of depriving the blood of a large portion of its fibrine? These are consequences which should be always borne in mind in the present day: it is in these cases that we see the worst forms of complicated syphilis, and which require only common attention to detect, in time to obviate the worst consequences. I have, in the course of my description of mercury, alluded to the occurrence of slight cases, and, with care, serious consequences are not to be dreaded: need I here say, that when they make their appearance, our attention should be called to the treatment which I proceed to describe? Pearson recommended all mercurial preparations to be left off, whatever may be the stage or extent or violence of the venereal symptoms; “the impending destruction of the patient (says he) forms an argument paramount to all others; it may not be, indeed, superfluous to add, that a perseverance in the mercurial course under these circumstances will seldom restrain the progress of the disease, or be productive of any advantage. The patient must be expressly directed to expose himself freely to a dry and cool air, in such a manner as shall be attended with the least fatigue. It will not alone be sufficient to sit in a room with the windows open; he must be taken into a garden, or a field, and live as much as possible in the open air until the forementioned symptoms be considerably abated.” I should not have here alluded at length to the treatment of John Pearson, did I not frequently witness syphilis and mercury producing, not the exaggerated consequences, it is true, here spoken of, but some minor ones, the treatment of which is conducted on the same principles as recommended by the late surgeon to the Lock, than which nothing can be more opposed to pathology. As soon as any symptoms of anæmia arise, many modern practitioners leave off mercury; but what is the result? The disease goes on unchecked in the constitution, and the chlorotic state increases. If the patient is exposed, as above directed, he gets an inflammatory sore throat, and then comes the puzzling question, what is to be done? At this stage it is difficult to decide; but to correct the error, we must retrace our steps—we must study the pages of writers like Ricord, who have investigated the natural history of syphilis. We then find that anæmia is the result of syphilis, not altogether of mercury, as Pearson believed. If this is once allowed, then we must treat the anæmia, and it is not absolutely necessary to leave off mercury, which checks the disease. In my own practice, when I find anæmia coming on, I give iron, combined with mercury; the result is at once often apparent; the iron acts in improving the general health, and the mercury acts equally well in curing the syphilitic diathesis. If, however, I am called to see a patient who is salivated, and in a chlorotic state, I recommend mercury to be left off: here Pearson's directions are quite available; but the surgeon should hesitate in leaving off mercury, when the symptoms under which a patient is labouring may depend upon chlorosis, brought about by the syphilitic diathesis; it is in these cases that modern improvements in the treatment of syphilis consist, and demand the attention of surgeons; they further prove, that one complaint cannot be properly treated by a practitioner inattentive to the other affections which may complicate syphilis. I beg to add a case which I have seen within the last few days, in consultation with Mr. Phillips, of Whitewell. Our patient is a gentleman of spare habit, with a few spots of secondary symptoms on his body, the hair falling, condylomata on the mouth and tongue, the gums spongy, a copious flow of saliva, not amounting to salivation, the breath fœtid from several decayed teeth; the powers of the system were failing, from indigestion and its consequences. The question to be decided was, what plan of treatment ought to be pursued, for the patient was getting weak, although the disease was just kept in check. And this brings me to the history of the case. Our patient contracted indurated chancre in September last: it was treated without mercury; within six weeks, secondary symptoms appeared, and he took iodide of potash in two-grain doses, regularly, twice a day. Since that period, now about four months, as his surgeon found the case making little, if any, progress, he had lately ordered him two grains of blue pill at night: however, at length, dissatisfied with his progress,

his friend, Mr. Phillips, had recommended him to call upon me. We agreed that this patient was labouring under the ill effects of the syphilitic diathesis, which iodide of potash was unable to cure, though it could hold it *nearly* in check; but as our patient's health was flagging, we thought it would not be advisable to give mercury at present. I explained my views on the efficacy of iron in these cases, and I trust this patient, like many others, will soon feel the effects of the change of treatment. I mention the case, as being one of a very large class met with in consultation practice. It points out the consequences of indurated chancre; it shows the inutility of iodide of potash when no mercury has been previously given; and I would ask, if the statement I made in my last paper is not true, that there is nearly as much inconvenience in not giving mercury, as there is said to be in employing the mineral? But the advocates of the non-mercurial treatment keep back these cases. They must, however, meet with many similar instances. They at length have recourse to homœopathic doses of mercury, and then complain how inefficacious or injurious is the mineral, forgetting that they have resorted to mercury because they believe that they cannot do without it; and I would ask, what chance has the mineral in the hands of those who so little understand its uses?

Of all the preparations of iron, I prefer the tincture of the sesquichloride, given two or three times a day, in the infusion of quassia, in doses of twenty or thirty drops; under it the system rallies, the hectic flush disappears, the colour returns to the cheeks, and the patient resumes his usual appearance,—when he may again resume mercury, or not, as the indications for its use may or may not be present. Together with this, the diet should be generous: change of scene is often advisable, and great good is often derived from being much in the open air, and enjoying regular exercise. I believe much more benefit may be expected from this treatment, than the old story of a course of sarsaparilla, acids, and more recently, iodide of potash. There are still a large number of patients who think you have not done them justice if you do not prescribe a long and expensive course of sarsaparilla; it is in vain to argue with them, and it is often necessary to lend oneself to these harmless prejudices; but I must agree with my master, M. Ricord, that sarsaparilla has usurped a reputation which it by no means merits, and, judging from its history, I should say, it gained its character by the older surgeons leaving off mercury when they began to give sarsaparilla; it formed an excuse for letting the constitution lay fallow for a time, and this inert substance allowed the system to rally after mercury had been largely given. Certainly, in the present day, it is fast falling into disrepute, and perhaps nothing has hastened its downfall so much as the introduction of iodide of potash.

I have, in speaking of frictions, alluded to eczema mercuriale, another bugbear of the older writers; I have spoken of its causes and the means of prevention. It would appear, by the account in Pearson's work, to have been much more common formerly than it is at present, particularly as frictions are no longer in general use. Lastly, I may be expected to speak of salivation as a consequence of mercury, and as making the present article complete; but I must acknowledge that I am almost ignorant of it: happily, in private practice it occurs very seldom; the gums are so slightly affected, and the precautions against its occurrence so simple, that it no longer requires the description or treatment which was formerly appended to articles on mercury. I must refer those curious on the subject to my “*Treatise on Venereal Diseases*,” where they will find its description given at length. There is, however, one circumstance which the reader will not find mentioned, and which may deserve the attention of the practitioner. I allude to a condition of the mucous membrane of the mouth, which I have more than once seen attributed to salivation, whereas it depends upon the existence of mucous tubercles or papules muquenses of the French, or condylomata, as some still call them; and mercury has not been used for long periods, for fear of increasing this presumed salivation. Such was the belief of the gentleman who treated the case mentioned at page 119, and yet mercury cured him; very probably, mercury was abstained from by the surgeon in the case mentioned in this paper, from the like alarm. And I have lately seen a female who has a similar state of mouth and constitution, and who has been taking iodide of potash for the space of nine months, with as little success, and yet her usual medical attendant objects to mercury: he thinks the iodide has not yet had a sufficient trial; and I am unable to convince him of the advantage of pursuing a different line of treatment.

If mercury be given in the manner here recommended, and

* *Bulletin Thérapeutique*, translated in *Cormack's Journal*, vol. v. p. 239, and *Thesis*, by Dr. M'Carthy. Paris, 1844.

if its ill effects be guarded against, the mineral will, I think, regain its former high position as a cure for syphilis. It is to be hoped it will never again be recommended so indiscriminately, or employed in such large doses, as formerly. What can prove more highly the estimation in which it is now held by its former opponents, than the avowal that they are unable to cure their patients without employing mercurial preparations, and this after abortive attempts, during many years, to find substitutes for a mineral they formerly refused to employ in any case, or in any quantity? No remedy, I may safely say, has gone through such an ordeal, or passed an examination more victoriously. Let me hope that its *abuse* has passed, and that all will turn their attention to its *use* in the cure of a disease which is becoming better understood.

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DISEASE OF THE MITRAL VALVE OF THE HEART, WITH REMARKS ON DIAGNOSIS, PATHOLOGY, ETC.

By J. J. FURNIVALL, Esq., M.D., London.

A GENTLEMAN, aged about sixty, suffered, some eleven years ago, from severe rheumatic fever, and was treated by colchicum in such a way as to have brought on an almost fatal prostration. He cannot now recollect whether any shortness of breath, or other symptoms of thoracic disease followed. In 1837 he was again attacked with rheumatism, in a severe form; the pyrexia was high, and one side was so swollen and painful, and all power of motion so completely taken away from it, that his friends thought he was labouring under paralysis; from which disease his father had died. The disease had been going on for some days before I saw him, and I found the chest participating in the disease, though not in the form of endocarditis or pericarditis. There was a great tendency to syncope, with hypertrophic impulse of the left ventricle of the heart at other times; but no tumultuous action, such as we have in endocarditis, nor any of the diagnostic symptoms of pericarditis. Unfortunately, his stomach was peculiarly irritable, and he could not bear alkalies in the doses I wished to prescribe them; indeed, hardly at all. He recovered, however,—better than the medical gentleman, with whom I was in consultation, and I, could have expected,—and went and rode about as usual, only that he would sometimes feel giddy, and once he suddenly fell down, after a little giddiness. Again, in 1844, he had another attack of rheumatism, with tightness at the præcordia, and undue action of the heart. Again he recovered, without any other evidence of heart-derangement being left, than that it was easily excited into undue action. At times he could even walk up hills without difficulty, and seemed to be in pretty good health. During the autumn of 1844 he suffered from repeated colds, mixed up with rheumatic pains, and early in 1845—viz., by the end of January—he again put himself under my care. His state was as follows:—Face livid and puffy in parts; no remarkable fulness of jugular veins; sleeplessness, he says, for many weeks; on going to bed, up two flights of stairs, he always suffered more or less dyspnoea; no pain, but tightness in the præcordia; the heart full of blood, and labouring under its load; instead of the first sound, a puff or blowing sound is heard below, and to the right of the nipple, midway between it and the sternum, very distinct; yet not heard at the base of the heart,—that is, at mid-sternum, and on a line with the lower margin of the third left cartilage and rib. This murmur was also heard subsequently in the back, near the lower angle of the left scapula; the sounds at the base were normal, and not at all changed. The pulse small, quick, feeble, unequal, but not intermitting, synchronous in both wrists, and with the heart; the right ventricle acting feebly, and seemingly rather dilated; right auricle also dilated; no pulmonic râles, but I thought respiratory murmur in lower pulmonic lobes less free than usual; distressing dry cough; orthopnoea, and waking in a fright, as if after nightmare. This last feeling shortens sleep, so that he never obtains more than an hour and a half's sleep before he is thus distressingly awakened; great languor and death-like syncope occasionally, at which times the cutaneous surface becomes of a dark, cadaverous yellow; the feet, hands, and skin always cold; urine scanty, and loaded with the lithates; ankles oedematous, but no ascites could be traced; bowels confined, and much flatulence at stomach, which invariably exacerbates; paroxysms like those of hysteria; every exertion exacerbates the symptoms.

In cases of regurgitation through the mitral valve, we generally meet with hypertrophic action of the right ventricle, as an effort of nature; but here there was a want of propelling power in it. The indications here were to increase the propelling power of this ventricle and auricle; to prevent as much as possible the right cavities from being over-distended; and to overcome the delay which must take place in the pulmonary circulation from the mechanical obstacle in the left ventricle; to lighten the labour of the left ventricle, by gradually lessening the mass of blood which must pass through the cardiac cavities; and, at the same time, to prevent the bad consequences from the congestion, by exciting the action of the hepatic, urinary, and cutaneous organs.

To have detracted blood by the arm to any considerable amount—to have exhibited digitalis or sharp hydragogues—would have caused a fatal syncope. In most cases of patulous or obstructed mitral valve, I find digitalis a most potent remedy; but then, such cases are generally accompanied by hypertrophy of the right ventricle, with much action in the heart. Here, the heart's action seemed as if about to stop many times in the day; and the coldness of the surface, the pulse, the extreme languor, all proclaimed debility, local and general. Still the congestion of the right cavities was so urgent, that I was obliged to order one cupping on the sternum; and although this loss of blood caused a temporary increase of the weakness, yet the dyspnoea was a little relieved by it. A combination of blue pill, and compound squill, and soap-and-opium pills, was ordered night and morning; gentle diuretics and tonics, with occasional purgatives; which last brought away motions, at first clayey and light-coloured, indicating that the liver had suffered from the heart-affection; dark motions followed. The pills removed the cough considerably, and enabled him to enjoy a little more sleep than before. Gin-and-water, or brandy-and-water, were allowed, to prevent or shorten the paroxysmal attacks of syncope; also foot-baths of mustard and hot water were ordered. His bed was brought down to the basement floor, so that he had no stairs to ascend; and, to maintain his body in a semi-erect position, he slept on a raised pillow.

He had several peculiarities as to certain medicines: thus, compound spirit of ammonia would cause both a spasm in his throat and sickness; alkalies always disagreed; sharp hydragogue cathartics would distress him severely; and a few grains of calomel and blue pill would cause salivation. On the 30th Jan., I found he had slept comfortably for seven hours; and, what he deemed a great improvement, he did not awake *en sursaut*; the languor and coldness of surface diminished; the systolic bruit de soufflet does not now completely take the place of the whole normal sound, but only of the first half; pulse rather fuller; a little more cough than on my last visit; bowels confined; altogether improving, though he often cries out for more breath. Ordered extract of colocynth five grains, in a pill, to be taken every three hours, until purging is produced. To continue his draughts of calumba and acetate of potash. Diet nutritious, but little liquid allowed, and never much at one time. Stimuli pro re nata.

Feb. 1st.—Yesterday, much better; to-day, worse; a bad night. This day the gentleman in attendance with me distinctly heard the abnormal sound, and observed the normal sounds at the base, and was satisfied as to the diagnosis. This recurrence of the abnormal murmur, in its full force, must be owing to the bad night's rest having weakened him; for the bowels had acted freely. Urine scanty; no improvement in the urine, nor oedema of the feet, nor in the shortness of breath. Ordered some blue pill for a few nights, and some jalap in compound infusion of orange-peel.

5th.—Yesterday, much better; but after one hour and a half's sleep he awoke suddenly, and fell into a state approaching syncope, which lasted an hour and a half, in spite of brandy-and-water, and mustard foot-bath. It appears he had been exerting himself too much in talking during the evening, and at supper his sago was prepared unusually thick. Indigestion occurred, and caused the above-stated fearful attack; for he only revived after passing a quantity of flatus from his stomach. Ordered some bicarbonate of soda in his mixture, and at night half a grain of nitrate of silver to be added to his pill. To try bread-and-milk for his supper, as milk has always agreed well with him.

8th.—Better in all respects, though it was thought that the oedema was increasing, and that ascites was coming on.

11th.—Much thoracic uneasiness last night; murmur still very distinct; pulse oppressed; has slept three hours at once. A hot foot-bath relieved the chest; to try a foot-bath with iodine every night. Ordered, tincture of foxglove, half an ounce;

soap liniment, half an ounce. Mix for an embrocation; a tablespoonful to be rubbed into the inside of the thighs night and morning. Aperients, tonics, and the soda, as before.

15th.—No marked improvement. The friends very anxious. The iodine foot-bath relieved the coldness of feet, but caused an annoying itching; feet still swollen. Ordered, calomel, half a grain; extract of aconite, one-eighth of a grain; extract of henbane, three grains. Mix for a pill, to be taken nightly. Repeat the mixture.

19th.—Worse; legs swelling more. On the night of the 17th,—he was thought to be dying; much flatulence again; nights sleepless; the stools are solid, and seem to be evidently the result of his diet, which is, perhaps, too good, and causes too much blood to pass through the lungs; yet he cannot bear less food. To have his supper early in the evening, so as to avoid the flatulence of digestion whilst in bed. To try some extract of rue and hydrocyanic acid for the flatulency.

22nd.—Becoming daily worse; all the phenomena aggravated; the sleeplessness, the sudden waking in a fright, and gasping for breath; dropsy increasing, *though both the bowels and urine are free*; attacks of dyspnoea severe; the increased secretions are not sufficient to relieve the labour of the lungs. The right ventricle was now again distended as it was when I first saw him on Jan. 7th; the pulmonary artery sound was not sharper than usual; there was evidently congestion in the lungs; the cough is increased; but no râles heard in the pulmonic lobes. I talked of a small bleeding, but agreed to wait yet a day or two, and ordered ten minims of tincture of foxglove to each dose of his tonic mixture, although I feared I should witness but little advantage from it; because when I first saw him, in January, I had then ordered the foxglove, which had disagreed increasingly with every dose he took of it. Night-pills of blue pill, squill pill, and extract of aconite, ordered.

26th.—A great amendment in all the symptoms, except the dropsy of the feet; the legs were swelled up to the gastrocnemii; a little nausea from the mixture. The tincture of foxglove was lessened to doses of seven and a half drops. Repeat the other medicines.

March 5th.—All symptoms of distress gone; sleeps, and eats well; wakes tranquilly from sleep; anasarca gone; feet, nose, and lips and skin, warm; natural functions all properly performed.

19th.—All has been going on very well indeed; the anasarca gone; ankles not even puffy; now breathes easily when quiet, and he has been walking about his house gently, up and down stairs, without suffering; no systolic bruit de soufflet to be heard, though the sound is not quite normal; since my last visit he has been attacked with giddiness, for which some leeches were applied to his temples. To be cautious, to ride out in his close carriage, and to leave off medicines gradually.

Thence till the 22nd, no ground was gained, when the digitalis, which once before had disagreed, and the aconite, with the mercurial, seemed to give great and, I may say, sudden relief. I should have ordered the first remedy sooner, had I not been deterred by the great languor and faintness, and by the peculiarities of the patient as to certain medicines. I explained to all around and to the patient himself, that all now depended on himself to keep off any future attacks, for the disease had not been cured, and I took my leave.

I was sent for on July 3rd, when I found he had been neglecting the precautions which had been laid down, and in the last week, in a fit of irritation, had exerted himself to move some shutters or steps, when in a house a little way from his home. He had great difficulty in reaching home. He has been suffering ever since with his old symptoms; great dyspnoea; restless nights, nearly sleepless again; almost afraid to go to sleep; urine scanty; pulse 130, small, unequal, but regular as to number; no œdema of the feet. The right ventricle acting now with some force; on auscultating, the old bruit was there, below and between the left nipple and sternum, and it was as distinct and as circumscribed as before, but not so long nor so loud. I ordered blue pill, with extract of henbane, night and morning; and a mixture of tincture of foxglove, half a drachm; spirit of nitric ether, a drachm and a half; compound infusion of orange-peel to four ounces; sesquicarbonate of soda, a drachm; mix. A fourth part to be taken three times, daily.

If wanted again, I was to be sent for; but I learned he was again relieved by these medicines from all his distresses, and in September I heard of his enjoying life in a summer tour, without any thoracic distress of any kind; and so he may go on for an indefinite time, if he will but take the necessary care, though he has been all along inclined to underrate his danger—indeed, to shut his eyes to it, and to neglect the precautions

recommended, considering himself to labour under asthma, notwithstanding all we could say.

On the 26th of November, I was again sent for, in an urgent message, and saw him early on the 27th, almost in *articulo mortis*; the pulse nearly gone from the wrists, and the air-cells of the lungs loaded with mucus, with the cold clammy sweats betokening approaching dissolution. He died at six P.M. I was told that the medicine I prescribed on the 3rd of July had relieved him very much, so that in a fortnight he discontinued all medicines, and went on his summer tour. He then neglected many of the precautions advised. He returned in September, with dyspnoea, and most of the old symptoms, and sought the advice of an eminent physician in London, who corroborated, in every respect, the diagnosis previously made. He became gradually worse till Monday the 24th of Nov., when he became suddenly worse; was delirious almost all Tuesday and Wednesday, and died on Thursday.

On the 29th November, a post-mortem examination was made: the heart was at least twice as large as it should be, and weighed one pound, six ounces; the right ventricle was a little enlarged, but not so much as might have been expected, from the continuance of the disease; the tricuspid valve was of about the normal size; its opening admitted three fingers, which is the approximative measurement laid down by Sir Charles Bell and some others; the left ventricle was both hypertrophied and dilated, its parietes about three-quarters of an inch thick; the dilatation was proportionally much greater than the hypertrophy. The mitral valve had no deposit upon any part of it, and looked healthy, excepting that the columnæ carneæ were hypertrophied, particularly those in the aortic division of the ventricle; the aperture of the valve would admit rather more than the two first fingers, and under distention the opening would become much larger. The normal size of this opening admits of two fingers only; on careful examination, it became evident that this valve could not duly close the opening, but that at certain times a very considerable portion of it remained unclosed, and that this would happen whenever the ventricle was much dilated or distended, or whenever its walls were in a temporary state of weakness; the left auricle was rather large, but not unhealthy; the right lobe of the liver was congested and morbidly hard, but chiefly in the fore part. Other parts examined were healthy.

Remarks.—And, first, as to diagnosis. This is founded on the physical and the general signs. Of the physical, we know that the sounds usually considered distinctive of mitral-valve disease, may not, at times, or in certain cases, be heard at all, and yet disease may exist; though when they are audible, there is, perhaps, hardly any other cardiac lesion which is more easily or more certainly detected by a good practical auscultator than this; or which, on the other hand, would more easily pass undetected by those who rely solely on the general symptoms, and who do not use the stethoscope. Accordingly, no good auscultator is likely, in these days, to deny the possibility of pointing out the diseased valve when signs are in any degree clear. The objection, that as all the valves are so clustered together as to be covered by the open end of the stethoscope, the source of each murmur cannot be made out, however probable it seems, has been removed, by attending to the line of direction in which the murmur is propagated, while our difficulty is further lessened by the fact, that the left or arterial heart is the part mostly affected in valvular disease. To any one who has dissected the muscular fibres of the left ventricle, and has observed how they are connected with the columnæ carneæ, and how they all converge to a point, almost at the apex of the heart, the reason becomes at once apparent, how the murmur from a diseased mitral valve is heard loudest at or near the cardiac apex. The practical man is contented with the fact that it is so, and that fact has been verified by symptoms during life, and by examinations after death.

We must not, however, forget, that although we may have, in the vast majority of cases, no difficulty in diagnosis, yet an exceptional case may occur in which the murmur may be masked by other sounds; or even may not exist; or after having existed, may disappear altogether. As to the masking by other sounds, the auscultator will generally, with care, avoid error; as to the murmur not being present while disease exists in the valve, I have read of such cases, but never met with them; and as to the disappearance of the murmurs, this may arise from the diseased action increasing, and so implicating the valve that too small an opening is left to allow of the formation of a murmur. But here the previous history will have shown what the case has been, and is.

The distinctive physical sign of a patulous mitral valve is an abnormal murmur, generally of a blowing character, heard with the systolic or first sound of the heart, low down, below the line level with the nipple, and between the nipple and the left edge of the sternum. In most cases, this systolic murmur is also heard in the back, to the left of the spine, about the sixth or seventh dorsal vertebra, and near the angle of the left scapula; and this last site of murmur is very diagnostic. The murmur is also sometimes heard in the axilla; yet at the base of the heart the murmur is either very indistinct, or not to be heard at all, the two natural sounds being distinct and clear, as was the case at the head of these observations.

This murmur may mask, or take the place of the whole of the first sound, or of only a portion of it. The systolic murmur, which may most readily be mistaken for this one proceeding from the mitral valve, is caused by some obstruction to the blood issuing from the left ventricle; and the disorder occasioning this last sound is called obstructive disease of the aortic valves. The distinction between the two is founded on the fact, that in the mitral-valve disease there is no propagation of the murmur up the aorta, and into the neck, which is observed in aortic disease; while, on the other hand, in this last disease there will be no abnormal murmur at the heart's apex.

But there are yet other sources of a systolic murmur; it may arise in a fit of hysteria. Here no mistake is probable; for as the murmur arose with the paroxysm, so it will usually cease with it, or very soon afterwards.

It is a not unfrequent accompaniment of chlorosis and anæmia. Here the history makes manifest the cause, and we shall hear, in the same case, various murmurs in many of the superficial arteries of the neck, and even limbs. In the neck, over the carotid artery, we shall not only have the bellows murmur, (and this alone is distinctive,) but also a humming sound, which has been described to be like that sound which reaches the ear from a marine shell. This sound is said to proceed from the jugular vein; it may be intercepted by pressing the finger firmly on the part of the vein above the stethoscope. If we press the instrument too forcibly on the vein, we shall not hear the sound at all.

We may have a systolic murmur from deformity of the chest so displacing and pushing about the heart, as to cause this first sound to become almost abnormal in character—quite a whiz, as a late writer expresses it. This whiz is produced by mechanical impediment, but the impediment is without the heart, and not within it. Here the deformity, which is visible to the eye, reveals the mode of formation of the murmur.

It has been said that the natural murmur of respiration may closely resemble this murmur, which is, as I have said, of a blowing character, not unlike that of the breathing; but this source of fallacy will never perplex the auscultator who causes his patient to hold his breath for a few seconds; and this precaution is invariably taken by every well-informed auscultator.

Finally, it has been lately said by Dr. Latham, and before him by Dr. Zehetmayer, that tuberculosis may cause a systolic murmur, and the corroboration of an interesting fact thus afforded by two practical men of professional eminence, living in different countries, must be calculated to fix the attention of our medical brethren on this hitherto unnoticed symptom.

Dr. Zehetmayer published in 1844, and Dr. Latham in 1845. The former says,—“Der erste ton in der lungenarterie ist bisweilen von einem geräusche begleitet, wenn eine insuffizienz der bicuspidalis besteht, (Skoda,) und dürfte von einer auflöckerung der inneren gefässhaut herrühren. Zu wiederholten malen hörte ich bei phthisikern, im zweiten intercostalraume, ein deutliches blasen statt des ersten tones der lungenarterie, an einer stelle, wo die gegenwart einer tuberculösen infiltration nicht zu bezweifeln stand. Die section zeugte keine anomalie in dem bezeichneten gefässe.”

“The first sound in the pulmonary artery is at times accompanied by a murmur, if there is an insufficiency of the mitral valve, (Skoda,) and it must take its origin from a loosening or softening of the internal coat of the vessel. I have repeatedly heard in phthisical persons, in the second intercostal space, a decided bellows murmur, instead of the first sound of the pulmonary artery, and in a place where one could not doubt that tuberculous infiltration was present. No anomaly in the vessel could be detected by post-mortem examination.”

Dr. Latham writes thus, at page 66 of his late excellent volume on Clinical Medicine: “Fancy a line drawn from the

left side of the sternum along the upper edge of the second costal cartilage, and continued an inch along the second rib; and another line drawn from the sternum along the lower edge of the third costal cartilage, and continued an inch along the third rib. Between these two lines a space is included, in the whole or part of which a murmur is often audible, coincident with the systole of the heart, when no such murmur can be perceived either in the præcordial region, or in the course of the aorta, or in the carotids, or in any part of the arterial system; but here, and here only. It is a gentle bellows murmur, quite obvious to the ear, and unmistakeable in its character.

“Of such a murmur, often audible in this situation exclusively, I am certain as a matter of fact, and certain, too, of its very remarkable accompaniment: I have witnessed it either in those who were undeniably consumptive, or in those who were too justly suspected of being so. I cannot say in what proportion of the phthisical it occurs; but I am continually meeting with it.

“Yet my knowledge goes no further than the living symptom. I have gained no explanation of it by dissection; I have only a clinical experience of the matter. But there is a practical usefulness in the mere experience of coincident facts, though their pathological relation be not understood. Thus, where, from my direct examination of the lungs I cannot get beyond a suspicion of tubercular disease, the murmur in the space indicated must always contribute to confirm it. Supposing the pulmonary artery, in its first division, to be the seat of the murmur, does it become such in consequence of its own disease, or by reason of pressure or impediment reaching it from diseased lung?”

The observations of these two gentlemen cannot but prove highly interesting, if not, also, very valuable to the practitioner, on many occasions of doubt and difficulty.

Some German auscultators have attempted to lay down a diagnosis, founded on the sharpness or alteration of the second pulmonary artery sound. Dr. Skoda, of Vienna, was the first, I believe, to tell us, that when we meet with a systolic murmur in the left ventricle, and also an augmentation of the second sound in the pulmonary artery, we may safely and certainly conclude that there is an insufficiency of the mitral valve; and he attempts to explain the asserted fact, by referring it to distention of the right ventricle and of the pulmonary artery, produced by the impeded circulation, first through the mitral valve, and then through the lungs; for the distended artery reacts with unusual force on the pulmonary semi-lunar valves. In the words of Dr. Ignatius Sauer, who published in Latin a compendious view of Skoda's work on Auscultation, this source of the increased sound in the pulmonary artery is thus stated:—“In hoc morbo statu circuitus sanguinis multum confunditur, æquidem sub quavis contractione cordis pars sanguinis ex ventriculo in atrium sinistrum refluit, et in hoc atrio, venis pulmonalibus, pulmonibus et arteriâ pulmonali accumulatur, quâ, propter requiritur intensior cordis activitas ut sanguis à dextro ventriculo in arteriam pulmonalem ceteroquin sanguine turgentem prematur columnâ sanguinis majori pressione in valvulas semi-lunares arteriæ pulmonalis allidens, sonum sub diastole intensiorem efficit.”

Skoda seems to place such reliance in diagnosis on this augmented sound of the pulmonary semi-lunar valves, that he goes on to say, we must look to it, when the abnormal murmur is sometimes absent, under certain circumstances:—“Si igitur è defectu strepitus et soni valvularum bicuspidalium statum explorare non possumus, oportet attentionem figere in sonum secundum arteriæ pulmonalis, et ad sonos ventriculi sinistri sub diastole cordis. Dum igitur in hoc rerum statu sonus secundus arteriæ pulmonalis, intensior non percipitur, et simul in ventriculo sinistro sub diastole sonus debite auditur, valvule bicuspidales connivent; è contrario vero sono secundo arteriæ pulmonalis intensiori, et in ventriculo sinistro sub diastole strepitu percepto verosimillimum est valvulas bicuspidales esse insufficientes. Si deficientes sono et strepitu in ventriculo sinistro sub systole cordis sonus secundus arteriæ pulmonalis quidem intensior est, sed in ventriculo sinistro sub diastole sonus adest sine strepitu, aut hic quoque abest, ad insufficientiam valvularum conclusio tunc solum valet, si nulla alia ratio detegitur hypertrophie ventriculi dextri favens; uti; scoliosis, exudata pleuræ, &c.” In another place, he says, if no increased sound in the pulmonary artery be heard with a systolic murmur, this latter depends then on some roughness of the aortic valves, impeding the exit of the blood from the left ventricle.

The celebrity and professional eminence of Dr. Skoda seem

to have secured the general acceptance of these statements as to this point of diagnosis amongst the medical practitioners of Germany; for very lately, only in 1844, Dr. Zehetmayer has followed Dr. Skoda, and seems to rely on the foregoing rules.

In his work, published in 1844, "*Die Herzkrankheiten*," at page 280, he speaks of several functional sources of a systolic murmur over the left ventricle, and goes on to say—"Der mangel der verstärkung in 2 tone der pulmonal arterie, die bei endocarditis, wohl nie felt, wenn sie am ostium venosum sich fixirte; dies alles zusammengenommen dürfte bei einem nur einigermassen gewandten und aufmerksam arzte wohl kaum eine verwechslung zu stande kommen lassen." "The absence of an increase in the second sound of the pulmonary artery, which is *never absent in endocarditis*, when this latter disease is situated on the ostium venosum: all these considerations taken together would never allow an ordinarily clever and attentive physician to make a mistake." At page 335, again he says—"Niemanden wird es wohl befallen, von einem systolischen blutgeräusche dort zu fasseln, wo der zweite ton der pulmonal arterie accentuirt, und der rechte ventrikel hypertrophisch gefunden wurde." "To no one could it easily happen to be so silly as to make a mistake about a systolic blood-sound, where the second sound of the pulmonary artery is found abnormally increased, and the right ventricle hypertrophied."

Dr. Zehetmayer states, at page 63, that a systolic murmur in the left ventricle may proceed from one of two sources,—from either an insufficiency of the mitral valve, or from the friction of the corpuscles of the blood, as they are propelled over roughnesses of the ostium arteriosum. He then lays down the following rules for our guidance:—"Wenn im linken ventrikel über den herz spitze, statt des ersten tones ein geräusch gehort wird, welches seine grösste intensität nach aussen in der gegend der mitralklappe hat, wenn zugleich der zweite ton der pulmonal arterie verstärkt ist schliessen wir auf eine insuffizienz der zweispitzigen klappe." (In der aorta sind beide töne normal.) "Wenn hingegen das erste geräusch mit grösserer stärke mehr nach rechts und einwärts gehört wird sich in die aorta so fortpflanzt, dass man in derselben statt des ersten tones ebenfalls ein geräusch unterscheidet, der zweite ton der pulmonal arterie nicht verstärkt ist, so sind rauhigkeiten an der arterielle mündung der aorta vorhanden."—Exerescenzen, Atheromatöse Ablagerungen am Endocardium an der Unteren Fläche der Klappe, &c. "If in the left ventricle a murmur is heard over the heart's apex, instead of the first sound, which murmur has its greatest intensity externally in the neighbourhood of the mitral valve, and if, at the same time, the second sound of the pulmonary artery is increased, we conclude that there is an insufficiency of the mitral valve." (Both the sounds in the aorta are normal.) "But if, on the other hand, the first murmur is heard more towards the right and inwards,—if it is continued up the aorta, so that we hear a murmur instead of the first sound in the same,—if the second sound of the pulmonary artery is not increased, then there are rough deposits on the opening or mouth of the aorta."—Exerescenzen, Atheromatous Deposits on the Endocardium at the Under Surface of the Valve, &c.

These, then, are the rules at this day guiding the diagnosis of our Teutonic fellow-labourers in this branch of practical medicine. Were they correct, how certain and how easy would this part of cardiac diagnosis become. How important it is that we should thoroughly test and examine rules which have been put forth by, and derive importance from, the authority of their eminent propounders, who also are known as having devoted especial attention to auscultation.

I do not recollect reading any author amongst the British who has directed attention to the second sound in the pulmonary artery as a diagnostic sign, except Dr. Hope, and he makes the augmentation of it to depend on hypertrophy of the right ventricle. Drs. Skoda and Zehetmayer both seem to think that this augmented sound is distinctive of, and caused by, three states,—1st, of hypertrophy of the right ventricle; 2nd, of distention of it; and 3rd, of mitral-valve disease.

There is little doubt that this increased sound generally accompanies advanced hypertrophy of the right ventricle, because there is an increased power of propulsion in the ventricle, from increased substance and action of its muscular parietes. As to the second cause, this case may be cited as subversive of the opinion; for distention was repeatedly observed and made manifest by the slow upheaving of the ventricle, and the general signs; yet I never heard this increased sound, although on the watch for it. To the third cause of its existence, this case, as well as several others within my personal experience, gave a decided contradiction.

We must not expect to hear this sound so loud as that of the second sound of the aorta; for, according to the seemingly accurate experiments of Dr. Valentin, published in Henle's "*Zeitschrift*," "the mass of the right ventricle stands to that of the left in the exact proportion of one to two, and it may be concluded that in equal intensity of contractions, the muscular power will exhibit an analogous proportion. The hydrostatic blood pressure of the pulmonary artery must amount to half the hydrostatic pressure of the aorta, and the whole resistance of the bodily circulation must be exactly double that of the pulmonary circulation."

When investigating this sound, the proper place to examine is to the left of the sternum, on a level with the upper part of the third costal cartilage; while the second sound in the aorta is to be heard on the same level, but more on the sternum—i. e., a little more to the right. It may well be supposed that an ear practised in auscultation is necessary, both to distinguish between these two second sounds, and to ascertain the plus or minus of intensity in the sounds themselves. And when I read or hear of gentlemen who deny our power to ascertain these sounds, or to say which valve may be diseased under all circumstances, I cannot but think such gentlemen do not possess an average acuteness in hearing, or that they lack either the necessary practical discernment, or requisite patience; for the practitioner who relies on one, or even more examinations, may miss hearing this sound, as well as other sounds, because we know they vary with circumstances of comparative fullness of the heart or its reverse, or with deficiency or surplus of propelling power.

The general signs of this lesion are very distinctive in the early stages. And first, of dyspnoea. One moment's reflection on the immediate effect of the retropulsion of the waves of blood through the patulous mitral valve into the left auricle, and then into the lungs, will teach us to expect dyspnoea as the very first as well as the most constant sign. And so it is. If we find dyspnoea to exist, and yet no signs of pulmonic disease, or of other manifest cause for it present, we may suspect disease of the heart, almost from this symptom alone. In some cases which I have published, of diseases of the heart and their treatment, this shortness of breath was the only symptom for a long time observable, and it appeared long before the characteristic murmurs of diseased mitral valve could be detected. This dyspnoea causes congestion of the pulmonary vessels, and that is for a time relieved by medicines, without expectoration, or, in some cases, by an effusion of mucus on the mucous membrane; and thus the dyspnoea may continue without expectoration, or there may be, also, cough with mucous sputa.

Another early and very distinctive sign is, the peculiarity of the pulse, which peculiarity is not met with in any other disease so early as in this. It is very quick; not intermittent, but irregular, or rather, unequal, in the volume of each pulsation: first, a full artery is felt, then a seemingly half-filled one, and the coat of the artery cannot be felt distinctly; it is a soft pulse if no inflammation be present. A late reviewer found fault with me for over-rating the importance of this pulse as a diagnostic, and affected to think there was some misprint; yet nevertheless, I wrote from very considerable experience; and the more I see of diseases of the heart, the more I am disposed to rely on the accuracy of what I have written thereupon. But it is best to leave the flippancy of reviewers to be dealt with by the good sense of the members of the medical profession, if they will but examine for themselves. I will repeat, that when we meet with such a pulse as the one described, either with or without other signs of heart disease, excepting dyspnoea, at an early period, we shall not do wrong, if we conclude that there is a patulous state of the mitral valve; for when it occurs in other diseases, it will do so only at the very latter stages.

In some persons, headach is early complained of; and headaches, both severe and long-continued, cause much suffering. These are doubtless caused by cerebral venous congestion, in consequence of the jugular and other veins being partly prevented from emptying themselves into the right auricle and ventricle. In some instances, this and other cerebral symptoms have been so prominent, as to mask and draw our attention from the original and originating disorder. Here the reflex function is sometimes called into action, and the brain becomes involved in that way. These symptoms are not so frequently met with in disease of the mitral valve as in pericarditis. In this latter case, is the phrenic nerve the medium to transmit the irritation, or is the cause a congestion of the vessels of the medulla spinalis induced by the blood being hindered flowing freely from it, in consequence of the highly impeded circulation in the large returning veins?

The liver also speedily feels the influence of this impeded state of the circulation. The *venæ hepaticæ* have mouths which are large and valveless; they therefore easily admit of reflux; and the *vena cava abdominalis* itself is over distended, from not being able to pour its contents into the cardiac cavities. Congestion of the liver follows. Hence the colourless motions so often observable in this disease, and various symptoms of gastric derangement, &c., which results have a pernicious reaction on the original disease, the gastric irritation adding to the cardiac irritation, and aggravating the paroxysms of dyspnoea as well as exciting them; while the retention of those matters which should be excreted from and by the agency of the liver, deprives us of one of our principal means of relieving the load of labour which is imposed upon the heart. This congestion of the liver may lead on to structural disease, to hardness, cirrhosis, or enlargement, which would soon be followed by ascites. The enlargement usually occurring in mitral-valve disease, takes place in the anterior parts of it, and as these parts make room for themselves, by pressing on the abdominal parietes, which easily give way, ascites does not most commonly occur. If the *lobulus Spigelii*, or the parts adjacent to it, were enlarged, direct pressure would probably be exerted on the *vena cava abdominalis*, and ascites must follow.

Œdema of the feet and ankles is likewise an early symptom, for puffiness of the ankles soon occurs; and if the cardiac disease has taken place suddenly, or there has been a sudden increase of disease, the dropsical effusion involves the whole of the legs and thighs, and creeps up to and over the abdominal integuments with most alarming rapidity. In one of the cases which I have recorded, this increase of the dropsy was manifest at every morning and evening visit, till the skin seemed on the point of bursting, and becoming gangrenous from mere distention.

This effusion is not caused by lack of power in the absorbents, which continue to act with normal activity; and the gangrene, when it does occur, proceeds from distention, whereas the gangrene, which is sometimes met with in this country, but often in Germany, from disease of the aortic valves, partly arises from a want of the proper supply of healthy arterial blood, as well as from local congestion. One of our usual means of checking the progress of the effusion is here of little avail; I mean, laying the legs up on a level with the body, and so long as the mechanical difficulty remains in the heart unrelieved, this œdema goes on increasing, and ultimately augments the dyspnoea, &c.

The rationale of this early œdema is found in the fact that the blood in the *vena cava abdominalis* cannot pass freely in its proper course; it presses on the nearest valves in one single column, the apex of which is the heart, for there are no valves in this large abdominal vein or sinus. These valves are situated at the top of each femoral vein, and are raised by the pressure, and then the femoral and crural veins become distended, and relieve themselves by an effusion of serum into those parts which offer the least resistance, and where there is most cellular tissue—viz., about the ankles, from which point the effusion spreads upwards.

Amongst the later and sometimes earlier sequelæ of this disease we have hæmoptysis, arising from the congestion; in some cases emphysema pulmonum occurs.

Effusion may take place into one or both pleuræ, and into the pericardium, whereby the dyspnoea and danger are both much increased. In the head, we may have apoplexy or paralysis from venous congestion, and effusion or extravasation may be found post mortem; and as the venous blood is often not returned from the medulla spinalis, we may see various signs of spinal irritation, or of failure of the spinal functions, which signs may, through the reflex function, cause some mystification.

The kidneys also suffer; for as the renal veins enter the *vena cava* at an obtuse angle, they are subjected to the pressure of the delayed blood in that vein, and thus they cannot relieve the kidneys by emptying themselves; effusion into the renal pelvis takes place, the urine becomes charged with albumen, or with components of the blood itself; it becomes scanty, high coloured, and loaded with deposit, and renal disease is added to the list of evils, soon exciting diseased action in the brain, if it have not occurred before, and causing, more or less speedily, a fatal issue. These are the chief results, and this is the progress, of insufficiency of the mitral valve.

Pathology.—First of the pathological anatomy and pathology. The pathological processes are numerous through which the integrity of the valvular functions may become impaired; we may view them and their causes as affecting or

implicating—1. The valves themselves, (the membranous part only); 2nd. The *columnæ carneæ*; 3rd. The *chordæ tendinæ*; 4th. The ventricular parietes.

1st. The morbid changes in the valves may occur in consequence of a deposit of a bony or calcareous nature, causing a shrivelling or shrinking, or they may consist of concretions in them, curling up their edges; but these changes are most frequent in the aortic valves, (chiefly from gout,) and are seldom observed in the mitral valve. The valves may be lacerated, and assume various forms from inflammatory infiltration into their texture, and this change is met with in this valve; lastly, atrophy may affect them, and cause perforation.

2ndly. In the *chordæ tendinæ*. These may be thickened by an organized inflammatory product; they then lose their transparency and elasticity, become enlarged in their transverse diameter, and diminished in their longitudinal, making them too short for normal action. Several cords may be matted together in one thick inelastic cord. Some of these cords may become attached to, and concreted with, the under surface of the valve, whereby the unfolding of the valve is effectually prevented.

Inflammation may cause the deposit of calcareous products; but this form of disease is not often met with in the mitral valve. Finally, the cords may be lacerated.

3rdly. In the *columnæ carneæ*. These are, generally, more or less implicated in this disease; they are generally hypertrophied, and from an inflammatory effusion into them, they may be deprived of their power of contraction, and of their elasticity. A deposit of callus may take place in them, which would destroy the muscular fibre, and cause a shortening of the entire mass. There may be a suppurative softening of them, or a fatty degeneration in them. These masses may be lacerated or torn up by inflammatory softening, by the formation of pus, or of fatty matter.

4thly. In the ventricular parietes. Here, in consequence of dilatation from inflammatory softening, or from other causes, we meet with an abnormal dilatation of the opening, which the enlarged and attenuated valves cannot completely close, leaving a constant opening, more or less large. And this seems to have been the chief, if not the only, cause in operation in the case at the head of these remarks. We can thus account for various signs observed during life—viz., whenever, from debility of the system, or from retention of the excretions, or from a free discharge of them having been neglected, or from too much fluid drank, there was a temporarily increased fulness of the left ventricle, then the distinctive murmur made itself almost loudly heard, and it would continue during the whole of the systolic sound, completely taking its place. Indeed, it has seemed to continue so long, as to encroach on the second sound.

Even one night's want of rest caused weakness enough to make this murmur more evident the following day than it was before; and, again, the same effect would result whenever some days had been suffered to elapse without having secured a free discharge (almost a vicarious discharge, one might say) from the kidneys, skin, and bowels. The reason of which is given above—viz., that the more the ventricular walls were distended, the larger became the abnormal opening, the less able was the valve to close it, and the greater was the regurgitated wave of blood. On the other hand, if proper means were resorted to, and continued sufficiently long, the murmur disappeared, and the normal first sound would again be heard. For this reason, I was induced to think favourably of the case, and to believe that there was no binding up of, or change of structure in, the valve, from inflammatory deposition; for when there is much disease of structure, the murmur will hardly ever be absent, though it may be louder at one time than another, from various causes.

Thus far, we have been considering only insufficiency of the valves; but the cardiac openings may be contracted, and the mitral valve may be prevented from admitting the blood into the left ventricle, and this is called obstructive disease. The Germans call this form of disease, stenosis. The most common cause of this contraction is a rigidity of the valves from inflammation; they lose their elasticity, and remain fixed in such manner as to cause obstruction to the ingress of blood into the left ventricle.

This state is not, according to my individual experience, a common one, and it is certainly far from being so often met with as that of insufficiency.

The way in which this form of disease causes obstruction, and the way in which the valve projects towards the auricle, in a kind of infundibuliform shape, cannot be well shown by description in words only.

As to the proximate cause, we must first say, that gout generally attacks or involves the aortic valves, while rheumatism generally affects the mitral valve. From the foregoing sketch of the pathological anatomy, the fibrous structure appears often very little involved, and sometimes not at all. In above stated case, the muscular fibre was alone implicated. Can one, then, justly concur with those pathologists who, in reasoning on the connexion between rheumatism and heart disease, try to solve the difficulty by referring to fibrous structure as being the chosen seat and sole originator of rheumatic action and metastasis; and is it not very probable,—I would almost say, can any one doubt,—that during the rheumatic seizures already described, the blood must have undergone some morbid change, whereby it was rendered a cause of irritation to the serous membrane and the muscular fibres of the left ventricle? There were no deposits of coagulated lymph anywhere, neither were there implicated any parts endowed with what is called fibrous structure. May not hyperæmia have been set up in the first instance, and then a slow sub-inflammatory action, causing an increase of growth, or a softening, and then a disability to act as muscles? Then results a tendency to yield to the centrifugal pressure, exerted by the contained mass of blood, and this tendency is increased in proportion to the force of the propelling power, and to the quantity of the mass.

It must be borne in mind, that the boundaries between morbid excitement and inflammation have never yet been clearly laid down.

This appears to me the best mode of accounting for the origin of this heart disease, and for the mode of operation of the juvenia and lædientia in the case above described. The failure of colchicum in the largest doses to prevent heart disease was very manifest, as it has been in many other cases.

The unfavourable issue was both unexpected and disappointing; for there was nothing in the symptoms of the living person, nor in the appearances of the dead body, to warrant an apprehension of so early a death. There seems to be little doubt that in this as in many hundreds of instances of cardiac disease, life might have been preserved, in a state of tolerable enjoyment too, for several years even, and he had recovered several times under my care from states of the most imminent danger. Had the patient strictly obeyed directions, and had the heart been kept free from repletion or distention, while mind and body were preserved, the one free from irritation, and the other from all undue exertion, he might still have been alive. From his position in life, not engaged in trade, nor otherwise troubled by business, but enjoying all the comforts which an easy, if not affluent, competency could command, every requisite for a judicious and successful management of the case was united in him. How different was the course pursued, how fatally different the result! Cases like this require a medical man's almost continued watchfulness, rather than an attendance only, when dyspnoea or other symptoms of thoracic distress force the patient to seek him; for professional aid may sometimes come too late; but a system of prevention will, in similar cases, hardly ever fail to preserve life, it may be, for many years.

Weymouth-street, Portland-place, Jan. 1846.

AGGRAVATED CASE OF CHOREA.

By J. B. BRYANT, Esq., Surgeon, Lambeth.

I BEG to offer for publication the following case of chorea saltans which lately came under my notice.

William C—, aged ten, a boy of delicate constitution, and sedate and studious habits, had suffered with diarrhoea for about a week. His mother administered astringent medicines, which restrained the action of the bowels. On the 26th of November, 1845, he was seized with violent headach; the pain came on suddenly, while he was reading. He started from his seat, ran to his mother, and clung to her, apparently in great alarm. In a little while the pain abated, and calmness was restored. On the 27th of November, at ten A.M., when he was engaged in looking at a map, he rose up suddenly, and after sweeping all the ornaments from the mantel-piece, he darted into an adjoining room, and began dancing and jumping in the most violent manner; the movements being entirely involuntary. His mother endeavoured to restrain these gestures, and took him into her lap; he was quite overcome by the exertions he had undergone, and fainted. It was at this time, when he was recovering from the fainting fit, that I first saw him. He still complained of very severe headach, especially

over the occiput. I prescribed three grains of calomel and a purgative draught. In the evening the headach was much relieved. Early on the following morning his mother observed that there was a wild expression of countenance, and was apprehensive, from these and other symptoms, that another attack was coming on; she held him tightly for a little while, and these threatenings subsided. I now gave him three grains of bicarbonate of ammonia, with syrup of orange-peel, three times a day, and a pill with equal parts of compound extract of colocynth and blue pill every night. Since that time he has had no attack, although the pain of the head has returned occasionally, which has always been removed by the mixture and pills. The pulse is generally weak, and the tongue coated.

Bridge-road, Lambeth, February, 1846.

LIABILITIES OF THE MUSCLE IN DISEASE.

By JAMES A. WILSON, M.D., Physician to St. George's Hospital.

CHOREA.

In the York Ward, a young tradesman—self-poisoned, and unable to move. At the next bed in our round, in the King's Ward, a shoemaker's apprentice, who cannot keep himself still—paraplegia and chorea. This it is to walk the hospital—this is clinical! In both these cases the leading and distinctive symptoms are those afforded by impaired contractility of the voluntary muscle. In both they are associated with evidence of marked constitutional disorder. In the one instance, arsenic, and with it palsy, has been determined by paralysis to the toes and fingers. The exhaustion of bodily fatigue has been followed by incessant restlessness of the fibre in an arm and leg of the patient now before us. On Sunday, October 26th, this young mechanic, (J. G—,) aged seventeen, who has scarcely "done growing," by way of relaxation on his day of rest, walked a distance of between thirty and forty miles. Though complaining of stiffness and headach during the greater part of the day, he remained on his legs till bedtime. Early in the following week he felt "ill all over," with pains in his chest, back, and limbs. On Sunday, Nov. 1st, his right leg became painful, and began "to twitch." A few days after this, the right arm was affected in a similar way.

The leg then became comparatively quiet, and the feelings of general illness were somewhat abated. When the lad first came to us, both limbs, especially the arm, were in frequent restive action. Strange perversion of the human will! that in the living body it should be thwarted and defied by the very instruments of its power. Ten days back, this young lad was brandishing his fist in his own face, and, within a limit, would have kicked his best friend. Had his muscles been so many distinct independent animals, they would not have acted in more complete disregard of his comfort and wishes. By the contemplation of this grotesque behaviour of the muscle, we learn little more than wonder. It is not spasm,—it is not convulsion. There is no help in the phrase of the day. "Nervous irritation," in this inquiry, expresses much, but explains nothing. If "irritation," and irritation exclusively of the nerve, then, of which nerve,—and of how many,—how proceeding, and how applied,—from which of the two brains,—from which division of the spinal marrow,—from the double symmetrical nerves,—from the ganglionic system, or from both, and both together? It is reasonable to suppose that a direct local irritation of the nervous centres, capable of inducing such violent and protracted efforts as those of chorea in the muscle, would leave, after death, by congestion or other organic lesion, some traces of its operation in the nervous structure. It is well known, that, upon the most careful dissection, in fatal cases of this disorder, such morbid appearances have not been found; on the other hand, by no extent or degree of vascular congestion,—by no external disturbing cause,—by no known variety of lesion in the nervous structure, can chorea be developed in the voluntary muscles, unless under circumstances implying, by their contest, an impaired condition of the general health. It is as easy to conceive an effect of relief, as one of prejudice, to the central nervous functions, by this large expenditure of contractile force at the distant structural extremity of the muscular nerve, where it is organized in triple union with the blood and fibre. It is impossible to watch the muscles in chorea, and not to think of galvanism. There is further warrant for this open analogy, from the recent experiments of Matteucci, establishing for the voluntary muscles a power of generating the electrical principle in their own composite structure, independently of that which follows

from the brain and nerves. If electricity be coincident with nutrition in the muscular structure,—if, like contractility and animal heat, it is a function, one among many, of the organ when healthy and complete; then, like the other animal functions, it is liable to occasional error and interruption. Thus, under circumstances of impaired nutrition in the muscles, we should expect a corresponding irregularity in the results of its electro-nutritive functions,—a rapid succession, it might be, of unequal discharges, with a consentaneous, fitful action of the affected fibre, instead of a full, constant, even generation of the electrical current. By whatever phrase or image we may prefer to illustrate its effects on the voluntary muscle, chorea must, in every instance, be treated in close reference to the other evidences of disorder, by which it is accompanied in the system. To the physician with large opportunities, it is well known that cases of chorea are not unfrequently fatal in their close. Not a month ago, a young girl died in this hospital, after most aggravated symptoms of this disorder, with extensive purulent deposits on her chest, and suppurative inflammation in certain of the articular cavities. In this sad instance of the disease, as in the milder one before us, the mutiny of the muscles against the will was but a part of the entire case, like the pleurisy, the empyema, and the arthritis, an evidence the more of some disturbing agency that was general throughout the body. The chorea of the muscles, in this instance of the disorder, (a further illustration of its constitutional character,) lasted between two and three weeks, with but slight remission of the symptoms, the average duration, that is, of our ordinary epidemic fever, or other idiopathic illness.

Consistently with these views of the disorder, the exhausted young pedestrian is now fast recovering, under remedial means, that are addressed to the great common business of the system. He has been well fed; he has been indulged with rest; a shower-bath has refreshed him in the morning. The medicines administered were, in the first instance, purgatives; latterly he has taken, in small doses, the Fowler's solution of arsenic; medicines, it will be observed, not specific to the nerve—not “nervous medicines,” but tonic and alterative in their operation on the system—principles that influence the nerve like the structures from which it arises, and of which it forms a part, by improvement, that is, of the general faculty of nutrition. And thus, from the symptoms, as in the cure, of this strange disorder, we find continual inference for belief, that, as of structure, in its varieties, the nerve is but a part, so, in the business of structure, the office of the nerve is in all cases secondary, partial, and subordinate,—that the “nervous system,” so called, is in truth an anatomical convenience rather than a physiological centre,—that the two brains—the double spinal marrow, and the ganglionic web—have no common universal function, and are capable of simultaneous influences only through the blood. Our practice in chorea is far in advance of our nosology. In this, the most nervous of the neuroses, how false and futile the physic, that for redress of the muscle would rest upon the nerve alone!

St. George's Hospital, Feb. 1845.

ON THE EMPLOYMENT OF THE VAPOUR BATH, WITH ABSTINENCE FROM DRINKS, IN THE TREATMENT OF DROPSIES.

By THOMAS CATTELL, M.D., M.R.C.S.L. &c. Braunston.

THE importance of abstinence from drinks, co-operating with the employment of the vapour-bath in the treatment of dropsies, may be somewhat exemplified in the following case:

Miss B—, of the age of twenty-seven, up to the time she applied to me, had been suffering for five years with an abdominal enlargement, produced by the secretion of an ovarian cyst, which then so far interfered with the functions of the lungs, as to place her life in imminent danger. The countenance presented a pallid aspect, the pulse was exceedingly weak and slow, and the cutaneous surface, with the extremities, was of an unusually low temperature. Indeed, she said she had not known the comfort of feeling a glow of heat for the three preceding years.

With such formidable symptoms to combat, I perceived that no plan of treatment would be of any avail that did not both suspend and counterpoise the further secretion of the cystical fluid, at the same time it excited the temperature of the external surface.

The adoption of the foregoing method appeared surprisingly to consummate the desired objects, whilst the administration

of calomel, opium, tartarized antimony, and sometimes a little pulverized digitalis, in a pilular form, operated adjutively in maintaining their effects.

The facility with which this patient sustained the loss of her accustomed drinks was truly extraordinary. The only precautionary or palliative measures employed were, a bullet kept in the mouth—a small piece of pyrethrum root, or an occasional teaspoonful of brandy-and-water. It must be regarded beyond a doubt, that if abstinence from fluids be in any degree effective in diminishing the section of ovarian dropsy, it would be much more so in ascites and anasarca.

As to the vapour-bath, its *modus operandi* in awakening the dormant action of the skin, in arousing the depressed circulation, and in removing the interdiction under which the functions of the system appeared to lie, was gratifying in the extreme.

The baths were administered sometimes every successive, but more frequently every alternate morning; and it was the more remarkable, that subsequently to the first bath, the patient did not experience the least coldness on the surface of the body, as she had heretofore done. And such was its remote effect, that, assisted by the influence of the medicine, profuse perspirations supervened on the slightest exercise, and more abundantly at night.

Though the treatment here recommended was only applied for a period of three months, in consequence of her removal, still a reduction of at least two-thirds in the quantum of the fluid of the cyst occurred.

Enough has been said in these brief remarks, if sufficient interest be excited to cause its pursuance in similar cases.

Braunston, Northamptonshire, February, 1846.

ON NATURE'S TEMPORARY HÆMOSTATICS.

By C. H. HALLET, Esq., Assistant Demonstrator of Anatomy in University College, Edinburgh.

PHYSIOLOGISTS and surgeons have long been agreed about Nature's hæmostatics, in the case of lesions of the external parts of the body. They have described two classes of these, the temporary and the permanent, and four conditions combining to the production of the former—namely, retraction and contraction of the coats of the injured vessels, the formation of coagula, and a tendency to syncope. The two first—the effects of the action of the vital properties of the vascular texture—act by diminishing the rapidity of the flow of blood through the cut orifices, and thus favour the superintention of the third—the formation of coagula. The fourth, or tendency to syncope, contributes materially to these results. “These important changes,” says Professor Miller,* “are contributed to by the natural result of loss of blood in considerable quantity; a growing faintness and tendency to syncope. The heart's action abating, and the general circulation becoming more and more feeble, the contraction of the arterial orifice is favoured, as also the formation of coagula.” Although coinciding fully in the opinions which are universally held respecting the extent to which these several conditions act in arresting, or conducing to the arrest of, hæmorrhage, I believe we must take into consideration a fifth and most important element—the relatively increased amount of fibrin in the blood following on its loss.

We have been for some time aware that the loss of blood causes a change in the relative amount of its principal constituents; a diminution of red corpuscles, and increase of fibrin. Now, as the coagulation of the blood depends on the fibrin, we should naturally be led to expect the accession of that phenomenon to be accelerated by the abstraction of the vital fluid. Such is really the case. “Thus, if a large quantity of blood be withdrawn from the vessels of an animal at one time, or within short intervals, the portions that last flow coagulate much more rapidly, but much less firmly, than those first obtained.”† A familiar example will suffice to illustrate this. A medical practitioner determines to phlebotomize a patient, and desirous of observing the state of the blood, causes it to flow into a number of small receptacles—say teacups—successively. On arresting the flow of blood, he proceeds to examine that which he has designedly abstracted from the patient's system, and observes that the last cupfull has coagulated as soon as the first; in fact, has solidified immediately on removal from the vessels.

Such an important change in the constitution of the blood, and such an augmentation of one of its most re-

* Principles of Surgery.

† Carpenter's Physiology, p. 476.

markable properties, cannot but be of great service as an hæmostatic. The phenomenon is so striking as to be worthy the attention of the profession. In fact, the advantage to be derived in one form of hæmorrhage—that accompanied and complicated by the hæmorrhagic diathesis—from an increased fibrinous state, and consequent heightened coagulability of the blood, has been brought prominently before the profession by Professor Miller. He writes, (op. cit., p. 513,) "We shall endeavour to increase the blood's power of coagulation, more especially its power of forming a dense coagulum. If possible, we would increase the proportion of fibrin." But the fact of hæmorrhage inducing not only a direct effect on the powers of the system, but also a change in the blood favourable to its own arrestment, seems not to have attracted that attention which I am led to believe it deserves. The formation of coagula during syncope, or a state approaching it, is well known. Thus Druitt ("Surgeon's Vade-Mecum," p. 280) says: "Now if a very large artery, such as the femoral or subclavian, is wounded, and if the aperture in it is large, and if the flow of blood is in no manner opposed, the loss of blood will be so rapid as to occasion death almost instantaneously. But if the wound in the artery is very small, it may be closed firmly by coagulated blood during syncope, and the patient may survive." He does not give any explanation why the coagulum forms during syncope, but appears to ascribe it to the occurrence of syncope, not to the change in the blood, as the following sentence will show. "Fourthly, the faintness induced by hæmorrhage both checks the current of blood from the heart, and gives it an increased disposition to coagulate." A statement opposed to all we know on the subject.

When a vessel has been divided, I consider Nature's proceedings towards the salutary results of occlusion of its orifice, and arrest of hæmorrhage, to be as follow:—On the immediate occurrence of the injury, the coats of the vessel retract and contract, an effect which lessens the diameter of the arterial orifice, retards the current of blood through it, leaves a space between the vessel and sheath, in which they stagnate, and exposes a rough surface on which the blood may be entangled as it flows past, and nuclei formed around which the blood may coagulate; a result to which these various states tend. The wound being small, or other conditions being favourable, these may be adequate to the purpose; but if they should fail, the hæmorrhage will, of course, continue, and another series of actions will be brought into force. Nature's local powers having proved insufficient, she calls the whole system to her aid. A faintness or tendency to syncope—syncope itself in extreme cases—is induced; and the blood is become more fibrinous. Both these conditions operate essentially in the same manner as retraction and contraction of the vessel, that is, retard the current of blood through the arterial orifice, and favour by this, and by increased coagulability of the blood—the result of the latter condition—the formation of occluding coagula, although these would be less firm, and therefore more liable to be broken up by the returning force of the circulation than those formed by the first set of conditions. In the more severe cases, as hæmorrhage from wound of vessels of the first or second magnitude, even these may prove insufficient, and the issue, unless the surgeon is opportunely able to prevent further loss by the exercise of his art, must necessarily prove fatal.

The chief element, it will be observed, in Nature's temporary hæmostatics, is the presence of coagula within the sheath and open extremity of the vessel. To procure these, I conclude, from the foregoing observations, that two consecutive series of auxiliaries are brought into play by Nature: these I shall name, for the sake of distinction, the primary and secondary series. Each series will be found to have the same action, at least, tend to the same results.

To retard the current of blood, we have the retraction and contraction of the vessel in the primary series, the sedative result on the heart's action from the loss of its wonted stimulus in the secondary. To assist these in the formation of coagula, we have the rough surface of the sheath to entangle the blood, and the space between the sheath and vessel in which the blood may be at rest in the primary; the change in the relative amount of the constituents of the blood, caused by the previous excessive depletion, and causing an increased amount of fibrin, and hence, increased tendency to coagulation of the blood in the secondary. The only distinction which seems capable of being drawn between the two is, that the primary series depends on local, the secondary, on constitutional changes.

In ordinary slight cases of hæmorrhage, the primary is always the principal agent in causing occlusion of the injured vessel. In more severe cases, the secondary is indubitably the more efficient, since the primary has failed in its attempts to achieve a salutary effect. Still, it must be remembered, that the action of the latter cannot possibly exist without the former, except where the hæmorrhagic diathesis is present; for here the primary is almost, if not wholly, in abeyance, whilst the secondary is Nature's chief reliance in the hour of need. With this exception, therefore, we observe that Nature has both series in action when the secondary has been induced at one and the same time.

This would appear to lead to the conclusion that the secondary was only accessory to the primary series. But the phenomena are so striking, the relation, as pointed out between the two, so close, their order of occurrence so natural and so regular, their results so similar, that I am led to place the secondary on the same footing with the primary, even higher in the scale of importance, in severe cases, and to consider it as Nature's greatest safeguard in those severe cases where the primary has failed.

Edinburgh, February, 1846.

ON FRACTURES AT THE BASE OF THE SKULL.

By A. WOLFF, Esq., Surgeon, Shoreditch.

WHAT are the symptoms, by the presence of which we may be assured of the existence of fracture at the base of the skull? Is fracture of the base of the skull so generally fatal an accident as is usually supposed? The two foregoing questions naturally suggested themselves to me during the progress of the following case:—

Henry W—, a healthy intelligent lad, about eleven years of age, residing in Gloucester-street, Curtain-road, was amusing himself, on Sunday, July 19, 1845, by drawing three other children in a chaise-cart up a gentle acclivity, pulling by the shafts, from which the horse had been removed. Something having attracted the attention of the children, they suddenly rushed to the back of the cart, which was forcibly tilted up, and Henry W— was thrown violently over the cart, falling some yards behind it. He was picked up insensible, and vomited freely a few minutes after the accident.

I saw him about twenty minutes after his fall (noon), and found him lying on a bed, perfectly insensible; the surface of the body cold; the pulse hardly perceptible; blood flowing in considerable quantity from the interior of the left ear, and a severe contusion on the left side of the head; breathing stertorous.

I directed a cold lotion to be applied to the left side of the head, the administration of a small quantity of a stimulating mixture at intervals, and that he should be kept lying on his left side.—Three o'clock p.m.: No change whatever; blood continues to flow freely from the ear, pupils dilated and insensible to the stimulus of light.—Ten o'clock p.m.: Slight reaction has taken place; the surface of the body somewhat warmer; blood continues to flow from the ear; he moves his head about a little, and moans feebly; the rectum has emptied itself.

20th.—Appears to recognise his parents; irides contract slightly from the stimulus of light; blood continues to flow from the ear, but in smaller quantities; pulse not so feeble as hitherto, but irregularly intermittent.

21st.—Appears better; attempts to speak; blood continues to flow from the ear. The bowels not having been relieved, an aperient was administered.

22nd.—More sensible; speaks but feebly, indistinctly, and incoherently; is conscious of the passage of fæces from the bowel; blood continues to flow from the ear; the aperient to be repeated; the application of the lotion, and the position on the left side, with the head raised, to be persevered in.

23rd.—Better in every respect; is partially sensible when roused, but quickly relapses into a lethargic state; pulse continues feeble, but does not intermit; blood continues to flow from the ear, but in smaller quantity; respiration natural.

25th.—Still improving in every respect; there is no bleeding from the ear, but a little serum flows from it when the head is moved; pulse 80; is conscious of what is passing around him; there is partial loss of sensation in the left cheek; the features on the left side of the face slightly distorted; continues to take an aperient daily. Ordered, two grains of chloride of mercury every night.

27th.—All bad symptoms are gradually disappearing; has sat up for a short time to-day; does not refer at all to the acci-

dent, and when questioned on the subject, denies the possibility of its having occurred.

29th.—Stronger and better; walks about the room, but in a staggering manner, like a drunken man, and with an invincible impulse to move to the left. I discontinued visiting the boy about this period, and did not see him again until some months after the accident; he was then in perfect health, the only trace of the effects of the injury being a slight distortion of the features on the left side of the face. I questioned him about the accident, but he does not retain the slightest recollection of its having occurred; he remembers going out to play, but forgets having drawn the cart. He has returned to school; and it is remarked that he is not less intelligent than he was previous to the occurrence of the accident. What was the exact nature of the injury in this case? Was there a fracture of the base of the skull, or was it merely a case of severe concussion, with laceration of the cavernous sinus? The treatment hardly calls for a remark. I, of course, contented myself with closely watching the natural reparative process, prepared to interfere if the symptoms indicated the necessity for artificial assistance.

I consider this case worthy of being recorded—

1st. As suggestive of the questions placed at the commencement of this report.

2ndly. As a good example of the extreme caution with which medical men should give a prognosis.

3rdly. Because, although isolated cases are of limited value, and insufficient evidence from which to deduce principles of treatment, yet interesting cases are worthy of record, as being the stones with which the future architect may erect a stately edifice.

Shoreditch, London, Feb. 1846.

ON THE "VIS NERVOSA" AND GANGLIONIC INFLUENCE.

By CHARLES RADCLYFFE HALL, M.D. Lond., Holmes-Chapel.

IN the report, in *THE LANCET*, of Mr. Rainey's interesting paper on the ganglionic character of the arachnoid membrane of the brain and spinal marrow, the author argues, "that unless the fibres going from the arachnoid to the vessels of the pia mater be organic nerves, the brain, compared with other organs supplied by the sympathetic, would not have a supply of nervous influence proportional to the activity of its formation, and the quantity of blood it receives, and therefore, in this respect, would present an anomaly." (p. 220.) That any influence supplied to less important organs for the regulation of their actions should be withheld from the brain, is not to be expected, but there is nothing improbable in surmising that the mode in which the supply is furnished may be peculiar in an organ to which no other is precisely analogous. The superficial situation of grey matter in some parts of the encephalon, and of white matter in others, has probably an additional purpose to fulfil, besides that of convenience of packing. The main trunks of the encephalic bloodvessels are not in immediate contact with the grey matter, but the minute twigs from the capillaries of the pia mater are so. The intimate connexion between the pia mater and the grey nervous cells which it invests may be for the purpose of associating the activity of nutritive changes directly and immediately with the activity of nervous action; so that any grey mass, when excited, shall, by the direct operation of its own nervous energy on the minute vessels of its vascular investing membrane, receive an increased supply of arterial blood. I believe that it will ultimately be proved, that the *vis nervosa* is one and the same kind of force, by whatever nervous centre generated, regulated in its action by the same laws, and producing variety of results solely from variation in the relative arrangement of the nerve-tubes at their centric and peripheric connexions. In that case, we could scarcely avoid the inference, that the *vis* generated by the grey cells of the brain must produce a similar influence on the small bloodvessels of the pia mater to that generated by the ganglia and conducted to the capillaries of other organs by the ganglionic nerves. On the nature and extent of this ganglionic influence, it is true, we at present know nothing with certainty; but, assuming that one effect of the nervous energy on the capillaries is that of causing an afflux of blood to, or a more rapid circulation through, the part, we should have a direct correspondence between cerebral excitement and activity of capillary circulation—a correspondence which, however we may account for it, experience sufficiently declares. It is certainly a pure conjecture, that the *vis nervosa* can pass from the outer surface of the nerve-

cells, but it is a very reasonable one. The microscopic anatomy of the nervous centres is unintelligible without it. If we admit this, with reference to the nerve-cells in the midst of a grey nervous mass, we may admit it of those nearest to the surface of the same mass, amongst which the capillaries more especially ramify.

By these observations, I do not wish to express any doubt of the accuracy of Mr. Rainey's anatomical researches, although I think that they scarcely suffice to substantiate his conclusions, but merely to show that the very small number of sympathetic nerve-fibres traceable along the arteries of the encephalon may be explained, without admitting the ganglionic character of the arachnoid membrane, or conceding that the brain departs from the analogy of other organs, by assuming that the surface of every grey nervous mass acts immediately on the vessels of the vascular membrane which covers it, both in the encephalon and in the various ganglia. Perhaps, also, this may be a key to one of the offices of the pineal and pituitary bodies.

Holmes-Chapel, Cheshire, Feb. 1846.

ON THE IMMEDIATE CAUSE OF STAMMERING, AND THE MEANS OF CURE.

By HENRY BUTTERFIELD, M.A. Cantab.

HAVING been engaged for some years in the treatment of stammering and defective speech, I propose to notice, in *THE LANCET*, some of the practical results of attentive observation and experiment. Upon the remote cause of stammering I produce no opinion; but I confine myself to the immediate cause. Much has been written upon the question,—“why one person should stammer, and another speak fluently?” But from inattention to an important rule of Sir Isaac Newton, “that no more causes of phenomena are to be admitted than are necessary to explain them,” little good has resulted to the public from such inquiries. Would it help us to teach French or Italian, by inquiring into the origin of different languages being spoken? Is not the proper mode that which analyzes the difference between our natural law of speech and the natural law of speech in others? This point must surely be conceded. Now I have contented myself with this process in cases of stammering and defective speech. The result of continued observation enables me to state,—1. That stammerers try to form a note of sound with a wrong position of the lips or tongue. 2. That the vocal chords of the throat then refuse to act, as the effort is made contrary to the natural law of speech. 3. That bad habits and propensities of the nerves and muscles of speech, producing all the phenomena of stammering, soon follow a few wrong efforts to sound with improper position.

It is important to notice here the difference between a child's speaking with a wrong position of the tongue or lips, and a stammerer's trying to speak so. The child, very quietly and unconsciously, combines the vowel of the syllable, whether the consonant position has been right or not,—thus, it says t for k, in the word key; d for g, in the word game. But the stammerer does not combine the vowel with the consonant; he will produce numerous notes of sound, but no vowel will follow in combination, as in the case of the child's prattle; until, with great effort, he has, by chance, approximated to right position, or until he has attained it: then, out bursts the vowel of the syllable, and several syllables or words continuously follow.

The practice or experiment connected with these observations is extremely simple, although it must be specially adapted to every individual case.

I endeavour to produce the first intention of cure by alienating from the bad habits and propensities of the nerves and muscles of speech. This is done by my teaching the method of respiration used by the best professional singers and speakers; and by the use of an alphabet formed to act upon the attention of the mind and the vocal chords of the throat at the same instant.

The subsequent training is derived from the nature of accent and from the grammatical combination of words in a sentence. I teach the stammerer to think and speak his sentences in grammatical parts, and show him that good accentual speaking produces the greatest distinctness and force upon the ear with the greatest ease to the throat, lungs, and organs of respiration. And with this method carried on to the practice of extempore narration, I find that even those who “creep unwillingly to school,” and puzzle their tutors, by stammering wilfully with their mouth, to hide the stammering of the mind,

can be made with certainty to read and speak properly when they please.

My engagement for some years as extra master, at Eton, for the treatment of stammering and defective speech, has enabled me to pursue my course of observation and experiment with the greatest advantage; and several eminent surgeons have recommended me to extend my treatment of this calamity, in conjunction with their medical or surgical treatment when required.

Sackville-street, Piccadilly, Feb. 1846.

* * The insertion of this brief article demands from us the remark, that the treatment and cure of stammering belong to the profession of medicine.—Ed. L.

SCARLATINA IN THE BAHAMAS.

SUPPOSED LATENCY OF THE DISEASE FOR ELEVEN WEEKS.

By FREDERICK DUNCOME, Esq., M.D., Nassau, Bahamas.

The following circumstances will probably be deemed of sufficient importance and interest to merit a place in *THE LANCET*, as illustrating the extent to which the latent period of scarlatina may be protracted. In this colony, the disease in question is not known to have occurred for the last forty years.

During the past summer, this malady had prevailed in some of the American cities, to an alarming and fatal extent. Amongst the sufferers was a family belonging to this place, then on a visit to Philadelphia. One young man was cut off by it, and of the four daughters, three took the disease. The youngest, aged about six years, had been secluded from the others for six weeks in a separate house, and escaped the fever. Every precaution was taken to prevent fomites. Three weeks were spent in America after the reunion of the family, and after a fortnight's passage, they arrived at this place on October 13th. Upon the 20th of December the youngest girl was attacked with "scarlatina anginosa." This case was seen by Dr. Chipman and myself, and was succeeded by some of the usual sequela, as otorrhœa, wry neck, œdema, and albuminous urine, the latter being marked by inflammatory symptoms.

In this history, fourteen weeks elapsed between the time our little patient was restored to the company of her convalescent sisters, and the subsequent date of the fever breaking out in her. At any rate, we have an interval of eleven weeks between the period of embarkation from America and the breaking out of the disease in this place; so that, for at least eleven weeks, and probably longer, the infection must have remained latent in her system. Upon minute inquiry, there does not appear any reason to suppose that the malady was introduced into this place by fomites. This case did well, and the fever has not as yet spread.

Nassau, Bahamas, Jan. 1846.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

MARCH 10.—DR. BABINGTON, VICE-PRESIDENT, IN THE CHAIR.

AN ACCOUNT OF A CASE OF PARTIAL DOUBLE MONSTROSITY (ISCHIO-PAGE SYMELIEN OF GEOFFROY SAINT HILAIRE, UTERADELPHIA OF VROLIC).—By WILLIAM ACTON, Esq. Surgeon to the Islington Dispensary.

The subject of the monstrosity is a healthy male child, a native of Portugal, six months old, brought to this country for exhibition. The parents, and a brother and a sister, exhibited no peculiarity of any kind. The infant is lively and good-looking, and well proportioned both in the upper and lower extremities. The peculiarities are confined to the parts below the umbilicus. To the right and left of the mesial line are two distinct penes, each as large as the penis of a child of six months. Water is passed from both organs at the same moment. Each penis is provided with a scrotum, the outer half of each scrotum containing one testicle; the inner half of the scrotum is far removed from the outer, and the two inner halves appear like another scrotum between the two penes. Between and behind the legs of the child there is another limb, or rather, two lower extremities, united together in their whole length. The upper part of this compound limb is connected to the rami of the pubis by a short narrow stem. Immediately beyond this stem, and concealing it, the compound limb assumes a size as large as the com-

bined natural thighs. The leg is of comparatively small size, though larger than either of the healthy legs, and terminates in a double foot, with the sole turned forwards, and provided with ten toes, of which the two outer on each side are webbed. The anus is in its usual situation. Viewed posteriorly, the compound limb assumes a roundness and fulness equal to the buttocks of a young child, and a slight depression is observed, as if for the anus. The compound limb is motionless; the upper portion alone appears endowed with sensibility, and its vitality seems low.

The author states that he has consulted most of the original works referred to by authors who have described this species of monstrosity, but he has been unable to find exactly analogous cases, or any description or plate of two penes on one body, as in the case before the Society. He believes that this instance of double penis does not depend upon a division of one organ. The distance at which they are placed one from the other, and the existence of two canals, by which urine is passed at the same moment, renders this little probable.

With reference to the question of removal of this compound limb, the author considers that every circumstance is in favour of an operation. He notices the health of the child, the narrowness of the medium of communication, which contains probably no important part, but especially the low vitality of the limb, as the history of partial double monstrosities shows that any, however slight, scratch or contusion heals slowly, and generally ends, at first in the death of the part, and subsequently of the child. If the infant escapes this source of danger, its system is found incapable of supporting this additional limb, and the child perishes from debility. He thinks, therefore, that an operation will be necessary to give the child a chance of arriving at puberty, and that, in the absence of any one counter-indication, the sooner this is performed the better for the security of the child.

The parents brought the subject of this curious monstrosity to the rooms of the Society, where it was examined by the fellows present previous to the meeting.

Dr. BABINGTON observed, that in Mr. Acton's paper, the only point for discussion seemed to be the propriety of an operation.

Mr. LLOYD did not agree with the author of the paper with respect to the propriety of removing the supernumerary limb in this case. Recollecting how small a quantity of blood might destroy so young a child, and looking at the size of the limb, which, no doubt, was supplied by considerable vessels, he could not see how hæmorrhage could be prevented from going on to a fatal termination. Mr. Lloyd then alluded to the danger of hæmorrhage from the removal of nævi; he thought that in this case peril would also arise from the division of a great number of vessels at once.

Mr. ACTON was afraid that Mr. Lloyd had had an imperfect view of the child, and had not distinctly heard the paper; he should therefore refer to some points, in order to show the facilities which existed for the operation. The toes of the lower compound limb were blue, showing the languor of the circulation in them, notwithstanding all the precautions taken by the parents. It was found, in all similar cases, that very slight abrasion resulted in ulceration difficult of cure, and frequently terminating in death of the part, and sometimes of the child. Even if the infant were free from this contingency, the powers of one individual were insufficient to nourish the additional limb, and atony ensued. He was still of opinion, after careful and repeated examinations, that an operation should and could be performed. The connexion between the two limbs consisted of a stem, about as thick as a finger, at the rami of the pubes. No pulsation of large vessels was to be detected, nor any vital organ which might be injured by the operation. Hæmorrhage, from the position and small size of the stem, might be readily controlled. This case offered more chances of success, and showed the greater necessity of an operation than any on record.

ACCOUNT OF A CASE IN WHICH THE CORPUS CALLOSUM, SEPTUM LUCIDUM, AND FORNIX, WERE IMPERFECTLY FORMED.—By JAMES PAGET, Esq., Lecturer on General and Morbid Anatomy, and Warden of St. Bartholomew's Hospital.

The case here related is that of a servant-girl who died with pericarditis. She had displayed during life nothing very remarkable in her mental condition. She was of good moral character, trustworthy, and fully competent to all the duties of her station. She had a good verbal memory, and as much knowledge as is commonly acquired in such slender education as she had received. She was good-tempered, happy, and very heedless. Her mother was insane

while pregnant with her, and in some previous and following gestations.

The middle portion of the fornix, and the whole of the septum lucidum, were absent; and in the place of the corpus callosum there was only a thin fasciculated layer of white nervous matter 1·4 inches in length, but of which the fibres (minutely described in the paper) extended into all those parts of the brain into which those of the healthy corpus callosum can be traced. Behind this imperfect corpus callosum, the optic thalami, the middle commissure, (which was very large,) the posterior commissure, and the pineal gland, lay exposed after the removal of the velum. The lateral parts of the fornix and the rest of the brain were quite healthy.

After relating the particulars of the only other cases of uncomplicated deficiency of the corpus callosum which he can find recorded with histories of the patient during life, (the cases of Reil, Mr. Solly, and Mr. Chatto,) the author points out some considerations illustrated by them, concerning the anatomy, development, and physiology of this organ. He shows that it is probable, that in the perfect corpus callosum the fibres are not all transverse, but that some of them pass from the anterior part of one hemisphere to the posterior part of the other.

He shows, also, the probability that in its early embryonic state, the corpus callosum, though very small, may be in connexion with all the parts which it afterwards more evidently connects; and that the development of the septum lucidum is not dependent on that of the corpus callosum, though its situation may be, since its analogues are found in all those cases of defect, connecting the hippocampus with the inner margin of the cerebral hemisphere, and forming the inner wall of the lateral ventricle.

And, in reference to its physiology, he endeavours to prove from these cases, and from other considerations, that its functions must be connected with the highest operations of the mind; since it appears that when it is very deficient, or even absent, the mind may still possess a moderate or average power and capacity of knowledge, and be exercised in all the ordinary acts of persons in an inferior station of life; and that, in the like case, all the lower functions of the nervous system are perfectly discharged.

Mr. SOLLY expressed himself in high terms of Mr. Paget's paper, and of the admirable manner in which the case had been drawn up. In the present uncertain state of our knowledge respecting the functions of different portions of the brain, this case was one of deep interest. He (Mr. Solly) did not question that the commissures of the brain possessed the same conducting powers as the nerves, although what kind of force they conducted, it would be difficult to say. He thought that the office of the great transverse commissure was to enable the corresponding hemispherical ganglia on the opposite sides of the mesial line to compare the impressions brought to them by the nerves of sense. The connexion of different portions of the hemispherical ganglia by means of the longitudinal commissure, favoured the opinion of those anatomists who considered that this ganglion was not a single centre of power, but was composed of several, which performed different offices. The consentaneous absence of the septum lucidum, and body of the fornix, was of interest to him in respect to that anatomical fact—a fact which he thought he had been the first to notice, though he thought it had been too much neglected by subsequent writers—namely, that it was not a mere layer of medullary matter, forming a wall between the two ventricles, but that it consisted of fibres in a longitudinal direction, going from the anterior portion of the brain to the body of the fornix, and thus forming an essential portion of the longitudinal commissure system. He thought the fornix did not consist of transverse fibres, but that these fibres, which were seen, belonged in reality to the corpus callosum beneath.

Mr. COOTE observed, that comparative anatomy proved that in mammals the corpus callosum made a progressive advance with the supra-ventricular accumulations of white matter; in birds, where it was absent, the hemispheres were almost entirely composed of grey matter. The history of its development was still involved in obscurity. Tiedemann assigned too late a period for its first appearance; he (Mr. Coote) had seen traces of it in a fetus of about the fourth month of utero-gestation. Mr. Paget's interesting case rather corroborated the opinion that the higher intellectual faculties were connected with the perfection of the commissural system. The girl, so far from being of even ordinary capacity, was scarcely able to read, and the art of writing was beyond her.

The abrupt, flighty manner, and neglect of cleanliness, the inability to make a common purchase, combined with the fact of the mother's insanity, certainly warranted the supposition that the weak points of intellect already manifested, might, in after life, have driven her to a madhouse. Mr. Solly, in alluding to the structure of the fornix, denied the accuracy of Professor Owen's account of the transverse fibres called the lyra. He (Mr. Coote) believed that the Professor was in every point incorrect; these fibres belonged essentially to the fornix, to form a transverse commissure to the hippocampal lobes. In the septum lucidum, he had made out vertical as well as longitudinal fibres, and he would be glad to know if Mr. Paget had examined the connexion between the corpus callosum and the fornix, in the case now before the Society.

Mr. PAGET did not think that there was any just ground for supposing that his patient would have ever been the subject of insanity. There was no remarkable character in her mind, and it was difficult to say, if they had been tested, at what point her reasoning powers would have failed. They served her sufficiently in her occupation of a servant, and nothing worse could be said of them, than that she did not exercise them in any high intellectual pursuit, neither was it the custom of persons in her station to do so; and it could not be fairly said, that, because she did not attempt such pursuits, that she had less capacity than persons generally in her station of life. Two points only in her mental condition seemed to require particular notice; one was, the fact of her possessing a good memory, though some most acute reasoners had persuaded themselves that the functions of the corpus callosum were as a centre for reference, in which the organ of memory should lie. The second point was, her remarkable want of forethought, which was to such an extent as would lead to the suspicion that the faculty of judging of the probable events of things was that to which the corpus callosum was a necessary minister. With reference to the septum lucidum, many of its fibres were doubtless longitudinal; but it possessed, most probably, others which were almost entirely vertical, since it acted as a connecting band between the hippocampus and fornix, on the one hand, and the inner margin of the cerebral hemisphere on the other. Thus it formed the inner wall of the lateral ventricle, whatever might be its other relations. It could not be looked upon as a commissure peculiarly belonging to the corpus callosum, inasmuch as whether there be a corpus callosum or not, its analogues existed. He differed from Mr. Solly with respect to the transverse fibres forming the lyra, and believed that these really belonged to the fornix, for the corpus callosum was strictly the commissure of the cerebral hemispheres; it was developed commensurately with them; it was absent in marsupials and the lower vertebrata; it coincided with the reduction of their hemispheres; and its lateral connexions were always with the substance of the extra-ventricular masses of the hemispheres. In marsupials, however, the transverse commissure, which was the analogue of the lyra in other mammalia, was not connected at all with the extra-ventricular parts of the hemisphere; and its size was proportioned to the parts with which it was connected—namely, with the hippocampal convolutions, and with the fornix.

Dr. BABINGTON added his testimony to that of Mr. Solly, to the high value and excellence of Mr. Paget's paper. He expressed his surprise that the corpus callosum should be supposed by any one to minister to the higher functions of the mind, at least if considered as an originator of those functions; since he believed it to be composed of white fibrous matter, without any admixture of grey granular substance, and consequently, to be only a conductor, and not an originator of any functions whatever. He had recently made a minute examination of the structure of the corpus callosum in man, and found, what was not described in books, that it was composed, not of mere independent fibres, but of vertical laminae, like the leaves of a book placed in apposition to each other, and extending transversely into the hemispheres on either side, a few fibres perforating these at right angles, and thus running longitudinally through them. Mr. Paget, he believed, confirmed the general accuracy of this description.

Mr. PAGET thought he had advanced in the paper the same views which Dr. Babington had expressed. The corpus callosum was certainly lamellar in structure, and proved that it could not be a nervous centre, in the common acceptation of the term, for it was composed only of fibres, such as in other parts had no more important office than that of the conduct of impressions.

THE LANCET.

LONDON, SATURDAY, MARCH 21, 1845.

IN THE LANCET of the 7th instant, we gave an account of the measures recently adopted in Belgium for arresting the progress of syphilis in that country, and we stated that those measures had been attended with very marked and beneficial results. It will be remembered that the efforts of the Belgian authorities have taken two different directions. First, an endeavour has been made rigidly to enforce a system of medical police and examination, and thus exercise a direct influence in obstructing the propagation of syphilis, by obliging those who are the usual agents of its dissemination to submit to medical treatment. Secondly, by calling to their assistance the restraints of a military discipline, the authorities have endeavoured to make the army a means of giving additional efficacy to the police regulations. The latter part of this system is so novel, at first so startling, and has proved so singularly successful in its operation, that it demands a closer scrutiny and a more detailed notice than it has yet obtained in our pages.

In order for the army to be rendered useful in the crusade against syphilis, the active and friendly co-operation of the military authorities was absolutely necessary; and this active and friendly co-operation having been freely given, the army has really become a powerful and effectual means of controlling the general sanatory regulations. It will be remembered that the soldiers, presenting any symptoms of syphilis, are called upon to declare at once to a police-magistrate, before they can be submitted to treatment, by whom they have been infected. The declaration having been made, whenever the culprit is a woman of the town, she is seized, examined, and if found infected, sent to the hospital. As, on the one hand, the soldiers who do not obey this regulation are threatened with summary punishment; so, on the other, those who do, are relieved from all stigma, and treated like ordinary patients. This was not formerly the case. They have been found willing—anxious, indeed, we understand—to conform to the demands of their superiors. Under this state of things, as is justly remarked by the editor of the *Paris Gazette Médicale*, the soldiers throughout Belgium may be said to constitute a sanatory body for the discovery of syphilis.

This system has so well succeeded with the common soldiers, that it is now seriously proposed to extend it to the junior officers, in order that a higher class of females may come under its operation. In other words, it is proposed to refuse the professional services of the regimental surgeons to the junior officers who do not reveal the origin of their ailments to the proper authorities. It is considered, however, probable, that a mere appeal to the reason of these young men would convince them of the great importance to society at large of their submitting to some regulation of the kind. M. VLEMINCKA, the originator of these sanatory measures in Belgium, also wishes to obtain a decree, by which it would be illegal for the proprietors of "houses" to refuse admission to military men. This decree, he considers, will become indispensable, if the measures we are discussing continue to be rigorously enforced, on account of the dread

with which the military will, perhaps, be viewed by the miserable inhabitants of such houses.

The introduction of these measures has also greatly tended to diminish the frequency of syphilis in Belgium, in another way. They have made the females who lead a dissolute life more cautious as to the state of their health. Being constantly exposed to compulsory examination, and subsequent imprisonment if they communicate disease, it is evidently to their interest, in every sense, to apply immediately for relief, as soon as they perceive themselves infected. This, it appears, is daily becoming more and more the case, which will account for the fact of syphilitical diseases having become less severe in Belgium, as well as less frequent.

If so much has been done in the course of a very few years in Belgium, with the assistance of so small a body as the Belgian army, which does not number above 30,000 troops, what might not be accomplished in France, where the army exceeds 400,000 men, and, in every part of which, police regulations, with reference to women of loose character, are in full force? It is not, therefore, without considerable interest and curiosity, that we learn that cautious experimental attempts in the same direction are now being made by our Gallic neighbours. In the latter part of 1842, Marshal SOULT, the Commander in Chief of the Army, requested, through the French Ambassador at Brussels, that all the sanatory measures and police regulations which had been adopted in Belgium might be communicated to him. This request was complied with, and latterly an attempt has been made to apply them in the military hospitals of several large towns, and more especially in that of Lyons. The results of these experiments have not as yet transpired; but it is generally expected that they will soon be made known, and that both the military and the civil authorities will then unite to give much greater extension to the trial of the Belgian system.

The above sanatory measures have not been adopted in Belgium, or tried in France, without opposition. They have been termed arbitrary, inquisitorial, tyrannical. There can be no doubt that they are arbitrary, so much so, indeed, that were they not directed, through motives of the purest benevolence, to the suppression of a severe and fatal disease, they would nowhere be tolerated for a moment. We, however, agree entirely with those who think that, in this case at least, the end to be obtained justifies the means. We must not, also, forget that the privacy intruded upon by the guardians of the public health is the privacy of vice; and that those who are arbitrarily handled expose themselves to such treatment by their contempt of all the laws of morality, and by the open and professed dissoluteness of the life which they are leading. They constitute a moral pestilence, it is true, but one which society inevitably engenders, as the experience of the world proves; and those whose duty it is to protect society against the dangers which beset it, ought not to be blamed, if they attempt to deprive so great an evil of its physical sting.

This necessarily brings us to the consideration of a delicate and important question, which has not, as yet, attracted sufficient attention in this country. We allude to the *propriety* of the government, or the police authorities, interfering or not with prostitution for sanatory purposes. The question is one which is of vital importance to the health, as well as to the

morals, of the community, and is certainly one of those neglected subjects which demand the most public attention. It has long been the custom with us to disapprove of the "sanction" which the sanitary regulations of our continental neighbours, with reference to abandoned women, are said to give to vicious practices. It is, however, very questionable whether our scruples on this score may not be carried too far, whether they may not encourage vice by allowing it to clothe itself in that secrecy and obscurity which it generally seeks, whilst there can be no kind of doubt but that those scruples allow one of the most fatal and most deadly of the diseases that afflict humanity, to multiply its ravages to an extent probably unknown in any other European capital. Be it remembered, also, as we have already stated, that those ravages fall not so much on the guilty parties themselves as on their innocent progeny. An amount of disease that will only slightly embitter or curtail the life of the individual who has contracted it, often consigns his children to an early grave after years of dreadful suffering.

We sincerely trust that this subject will, ere long, meet with the attention which it so well deserves, both from the public and the profession. We shall acquaint our readers with whatever may transpire on the subject, either in France or Belgium.

DR. CHAMBERS holds a very exalted position in the medical profession of this country. The words of such a man, therefore, on any point of medical ethics, can hardly fall to the ground: they must either do good or harm. We regret to be obliged to comment unfavourably on some portions of his Address at the annual meeting of the Royal Medico-Chirurgical Society. Speaking of the death of Dr. ROBERT WILLIAMS, he is reported to have said:—

"It will be readily believed that a mind of this enthusiastic cast was not exactly fitted for the dull and often repulsive realities of the study and practice of medicine. Perhaps, however, I ought not to say the study of the science, for I believe he had never been deficient in his application to the pursuit of medicine as a science, as was sufficiently evinced by his elaborate work on the 'Elements of Medicine,' but his mind was not, I think, calculated for prosecuting its practice with success. *He had, in truth, little faith in physic;* nevertheless, he could not be said to be idle in the therapeutic research, for he had early imbibed a strong opinion in favour of the efficacy of specifics in the cure of disease, so that he was always more or less engaged in seeking them and applying them to his practice; and he was sanguine in the belief, that in good time we should discover specific remedies for many maladies which are now considered irremediable, and that even phthisis pulmonalis itself would bow its head to the power of some agent derived from the animal, mineral, or vegetable kingdom. I wish I could say that the researches of our late friend and president had been as successful in these investigations as his zeal and benevolent perseverance richly deserved."

To the spirit of this entire passage, we take the most decided exception.

It is a painful thing to see the portrait of a man of "little faith in physic," who was long a public teacher of medicine, and physician to a public hospital. How such a man could have conscientiously performed his duties to the poor entrusted to his charge we are at a loss to divine: he must either not have prescribed at all, or he must have been in the position of a preacher, who, disbelieving the truths of religion, goes on administering its rites. What should we say of the one?—what shall we say of the other? Dr. WILLIAMS had

formerly presided over the meetings of the Medico-Chirurgical Society. What a solemn humbug and misplaced superstition the majority of its proceedings must all the while have seemed to him. Was it honest, just, and true, that this should have occurred?—and does it not argue the existence of a professional laxity and unconscientiousness that would hardly be borne in either of the other professions? Again, as regards the mode of practice described. We have the spectacle of a well-educated man, spending his life looking among all the imaginable substances of the three kingdoms of Nature for specifics. Chance-work entirely it must have been, degrading to science, in the libertine spirit of the astrologers and the alchemists, Paracelsus at work in the nineteenth century! And then, for the experiments in this search for specifics, men and women must have been the subjects of them to a great extent. Is such a matter honest? Is it just to treat living fellow-creatures like the inanimate elements of the chemist's laboratory? Ought a physician to give a patient anything that he would not give to his own child under the same circumstances? and would any man act thus towards his own offspring? Such proceedings, and the record of them, let alone their eulogy, are a degradation to legitimate medicine. In speaking thus, we have not forgotten the maxim, "*de mortuis nihil nisi bonum*," but it is as a member of the profession, that we have been criticising the reputed unbelief of Dr. WILLIAMS, and the profession never dies.

We regret that Dr. CHAMBERS should have dwelt on such topics without pointing out the dangerous spirit that lay beneath. But his own words are scarcely free from censure. We should be sorry to think with him that "the study and practice of medicine are dull and repulsive realities." If so to him, on the pinnacle of professional eminence, how dark the matter must be to those below him! If the physicians in high practice sustain such a low professional tone in their intercourse with patients of rank, it is scarcely matter of wonder that quackery of all kinds should find its supporters among the aristocracy. The Address, we observe, is advertized for publication, with a dedication to her Majesty. We hope that which is offensive will be expunged or altered. A medical sceptic is hardly a fit subject for a panegyric intended to meet the Queen's eye. Now, if ever there is need of an orthodox spirit in those to whom the profession look up as an example, we certainly should have expected much in this respect from Dr. CHAMBERS.

A SHORT time ago, we bestowed some remarks on the extra-professional honours attainable by medical men. Our attention has since been directed to some of those distinctions which ought naturally to fall to eminent members of the profession, we mean scientific honours and rewards.

Among the first of these, and the one we shall consider on the present occasion, is the Fellowship of the Royal Society. This is the blue ribbon to many of the cultivators of medical science; its value is of course commensurate with the fairness and probity with which it is bestowed on the laborious and deserving, and withheld from the drones and butterflies who pretend to the honour undeservingly. Besides the Fellowship of the Royal Society, some of its offices and its medals are just objects of ambition with a few of our medical brethren; the office of secretary, the Royal and Copley medals, are of

this number. It must be confessed, that at the present time there is a very general feeling that the Royal Society, or rather, the medical section of it, has degenerated into a mere clique; that the pathway to honour and reward is not clear and open as the temple of Minerva ever should be, but that a man may more surely and securely advance by sacrificing to those who officiate, than to the goddess herself; that any one ambitious of its honours had better, in fact, fawn and cringe to individuals than devote himself to the advance of science.

May we be permitted to ask whether the office of secretary has become perpetual? There are many and valid reasons why the secretaryship of the Royal Society should not for ever be held by the same individual. The conduct of that individual may not be unattackable; he may not always have borne "his faculties so meekly" as he ought; he may not always have acted fairly towards his compeers: with such possibilities, many reasonable grounds of change might be urged.

Besides, others may wish to pursue the same career of ambition and emolument, and why should one man be allowed, for a long series of years, to obstruct the fair and honourable path of all the rest! There is another view of the subject: the secretary has, properly enough, it may be, much influence in the Society, in the election of its fellows, and the distribution of its rewards. This influence he may not always have exercised in the manner wisest; discreetest, best. There is, indeed, a dark rumour afloat at this moment, concerning the award of the last royal medal, which is damaging the Royal Society in the opinion of many estimable men. This is a matter to which we shall return with an unflinching determination to sift the chaff from the wheat. The truest interests of the Royal Society itself call for this proceeding.

It is not all that can afford to despise the money rewards which are dispensed so sparingly to the scientific labourers. The present secretary has, we believe, received the not insignificant sums of one thousand guineas for his *Bridgewater Treatise*, and one hundred guineas a year for fifteen or sixteen years. It may be asked, what new fact, or law, or principle, in science has he discovered, for which these comparatively rich gatherings may be considered a just remuneration? It can hardly be said, with truth, that there is in the profession any want of fit and proper persons to fill such offices. We have spoken before of Professor GRANT; he is one, especially, who would have graced the list of officers of the Royal Society, if a vacancy had occurred, and he had been elected to fill it. How is it, we would ask, that, so far from receiving any of the emoluments, he has for ever been studiously excluded from a place in the Council? Is it, forsooth, because he would not consent to correct, for a certain *Bridgewater Treatise*, which shall not be at present particularised, notes which were taken from his own lectures? Why, indeed, was not Dr. GRANT appointed to write that treatise? Does the scholar generally know so much more than his teacher, as to be placed before him? Or is it that Dr. GRANT has such a handsome remuneration for his labours in his splendid and eloquent lectures? The secretaryship of the Royal Society for half the last fifteen years, would, indeed, have been useful to one of the brightest ornaments of our profession. It would have combined high honour and merited reward. But the rule of right is strangely reversed. Is it because a man has done *something*, and has received no just reward, that

he is therefore to be excluded from offices for which he is so incomparably more competent than those who hold them as rewards for doing *nothing*, which he would so grace, and which would be so appropriate and useful to him? Other names, of fair and honourable fame, might be mentioned, who have advanced science, but who have tasted none of its rewards. Will such a state of things be allowed to continue?—Will that which aims at being the first scientific Society in the world be allowed to sink still further into cliquism, to become, indeed, under Mephistophelian influences, a scientific Inquisition instead of a scientific Temple? We think not. On a former occasion we made some strictures on the management of the Royal Medico-Chirurgical Society, and there was forthwith a change of measures and of men. There are points which will ill bear the light of professional and scientific opinion; our present remarks are merely the first notes of a truthful prelude.

A SINGULAR question is being agitated at the Lincoln County Hospital. There are three physicians, Drs. CHARLESWORTH, ELMHIRST, and NICHOLSON; and the following absurd practice has long prevailed:—The physicians attend each a month at a time, so as to make four professional cycles in the year; and at each month, as the physician changes, all the patients of the hospital are turned over *en masse* to his successor. Nothing so preposterous of the same kind, we should suppose, can exist in any other hospital in the three kingdoms. It must be subversive of cordiality among the medical officers, and greatly detrimental to the patients. It has been asked of the governors—Would they like to have their families attended by three medical gentlemen of the city in similar monthly rotation? There is nothing like the *argumentum ad hominem* in such cases. If the governors have any respect for justice or propriety, their decision can only be of one kind. The feelings of the poor ought, when it is at all possible, to be consulted as scrupulously as the feelings of the rich. The relation of patients to their medical advisers in hospitals and private practice is the same. It is of vital importance that they should place confidence in the professional attendant; but it is quite impossible that patients, poor or rich, can transfer their confidence from one practitioner to another every month. More than this, practical medicine is a rational science; the same ends may be obtained by different methods, with the same quickness and regularity. And this is no proof of the uncertainty of medical science, as is often asserted, for the same holds good of a problem in Euclid—Hardly any two men would think exactly the same or act exactly the same throughout in any given case. This renders such a practice as that we allude to in the highest degree improper. Without bad intentions, it must happen that a change of the kind, on a large scale, must prove injurious to the patients. It can hardly fail that sometimes that which had been done in one month will be undone in the next, or valuable time will be lost in trying medicines which the preceding physician has already tried. Let our readers fancy, in chronic cases, a doubtful case, in which each physician holding a different opinion, the patient undergoes three different kinds of treatment, all probably judicious, but not agreeing with each other, and each physician taking up his own practice again at the end of every

three months! Difficulties of the kind might be multiplied to any extent; but we trust the good sense and integrity of the governors will at once abrogate such a senseless, unprofitable, and unfeeling plan of administering medical relief.

THE MEMORIAL TO THE QUEEN FROM THE GLOUCESTERSHIRE MEDICAL AND SURGICAL ASSOCIATION.

TO THE QUEEN'S MOST EXCELLENT MAJESTY.

MAY it please your Majesty—We, the President and Council of the "Gloucestershire Medical and Surgical Association," humbly desire to approach your Majesty with a statement of certain grievances under which the majority of our body, being members of the Royal College of Surgeons of England, are labouring, by reason of recent changes in the constitution of the said College.

In the month of September, in the year of our Lord 1843, your Majesty was graciously pleased to grant to the body politic, then called the "Royal College of Surgeons in London," a certain Charter, or letters patent, embodying several important changes in the government, and in the powers and privileges, of the said College.

Among the numerous objects embraced by the said Charter, it was declared therein to be your Majesty's gracious intention to create a new class of members of the said College, to be called "Fellows," to which should be entrusted the power of electing the Council in future. And it was further declared, that the creation of such new class was intended to serve the purpose of more effectually promoting the study and practice of surgery, by affording a mark of distinction to such members of the College as might be considered worthy of the honour.

Accordingly, the Council, or governing body of the College, was empowered by the said Charter to nominate, within three calendar months from the date thereof, a number of the members, not less than two hundred and fifty, nor exceeding three hundred, to the Fellowship; and also, at any time after the expiration of the said three calendar months, and before the expiration of one year from the said date, to appoint any member or members of the College, as they should think fit, to the same dignity, none being afterwards eligible without undergoing a special examination.

It was further provided by the said Charter, that the Fellows alone should be hereafter eligible to the Council, to the exclusion of the other members of the College, who previously enjoyed the privilege of such eligibility, subject to certain restrictions, and that the said Fellows should be eligible to the Council, according to their seniority in the nomination lists.

In the administration of the powers thus entrusted to them, your Memorialists humbly submit to the notice of your Majesty, that the Council of the College adopted no intelligible principle of selection, and that they elevated to the new dignity a number of persons, whose claim to such distinction is by no means apparent, entirely overlooking the relative age, education, or professional attainments, of the parties: thus inflicting the grossest injustice upon the other members of the College, and defeating, as far as it was possible, your Majesty's laudable and gracious purpose of affording a stimulus to professional exertion, and by that means improving the practice of surgery in this country.

It would be impossible to exaggerate the feeling of dissatisfaction to which the conduct of the Council, on this occasion, has given rise among all classes of the medical profession; but there was reason to hope that during the discussion of a measure lately contemplated by your Majesty's government, for the better regulation of the profession of medicine and surgery, the injustice perpetrated by the Council of the College of Surgeons would have received the attention of the Legislature, and some means have been devised to remedy the evil.

The circumstance of your Majesty's Right Hon. Secretary of State for the Home Department having declared his intention to abandon the said measure, has entirely disappointed these hopes, and your Memorialists have therefore no alternative, but most humbly to beseech your Majesty to grant to the College of Surgeons such a Supplemental Charter as shall, as far as possible, rectify the injustice alluded to, and, with all submission, to offer to your Majesty's notice a few suggestions, relative to such Supplemental Charter, as would, in the opinion of your Memorialists, tend greatly to remove the

unpleasant feeling at present pervading the divided ranks of the said College, and impairing its utility.

1st.—That the Council be, in the full meaning of the term, a representative body; and that to this end, every member of the College, after ten years' possession of its diploma, and being of unblemished character, be allowed to vote in the election of the Council.

2nd.—That the Fellowship for the future be conferred upon the members, upon just and intelligible principles.

3rd.—That all members of the College, who have been in possession of their diplomas ten years anterior to the Charter of 1843, be admitted to the Fellowship by right of seniority; gentlemen in possession of the diploma of the College when the Charter of 1843 was granted, for a less period than ten years, be made Fellows in succession, on their attaining the term of ten years' membership; but that in all cases it be necessary that the members produce testimonials of character from ten members or fellows of the county or neighbourhood in which they reside, or have resided, and likewise that they neither vend medicines, nor make the supply of such, the means of professional remuneration.

4th.—That members of the College, admitted since the Charter was granted, may obtain the Fellowship by examination only, or this honour may be conferred at the discretion of the Council, as a reward for professional eminence.

5th.—That the practice of the obstetric art shall not disqualify any Fellow from being elected upon the Council.

6th.—That all Fellows, of forty years of age and upwards, shall be, and so long as they continue Fellows of the College shall remain, eligible to a seat at the Council Board.

Your Memorialists humbly pray that your Majesty will be graciously pleased to take into your royal consideration the case of the members of the Royal College of Surgeons of England, and to grant to the said College a Supplemental Charter, embracing the topics which, in the foregoing suggestions, your Memorialists beg leave most respectfully to submit to your royal consideration and approval.

And your Memorialists, as in duty bound, will ever pray,
&c., &c.

Dated this 4th day of March, 1846.

Signed on behalf of the Gloucestershire Medical and Surgical Association.

PARIS T. DICK, M.D., President.

HOSPITAL REPORTS.

UNIVERSITY COLLEGE HOSPITAL.

ON PERICARDITIS.—By JOHN TAYLOR, M.D., Professor of Clinical Medicine in University College, and Physician to University College Hospital, London.

(CASE 27.—Concluded from p. 310.)

SUMMARY OF THE CASE, WITH REMARKS.

Symptoms, Diagnosis, and Morbid Appearances.—Brain: 1. We see here the changes which occurred in a coagulum of blood in the brain in the course of a full month which probably elapsed from the time of the hæmorrhage to the period of death. The clot was surrounded by a delicate capsule, like a serous membrane, of a deep fawn colour. The external portion of the blood had the same colour from partial absorption of its colouring matter, but the central part remained unchanged.

2. The general paleness of the mass of the brain and the membranes is what is generally observed in the advanced stages of Bright's disease, and would here be further increased by the pressure of the coagulum, and by the copious bleeding during life.

3. There was evidence of inflammation of the arachnoid of an older date.

4. Was the softening around the clot the cause or the consequence of the effusion of blood? I am inclined to consider it as the cause; for (a) the appearances of the softened portion show that this change had occurred some time before death, and, very probably, at least as early as the hæmorrhage. The colour was the same as that of the exterior part of the clot, and was mixed with dots of a deeper tint. These dots must have been the remains of partially absorbed points of blood, such as are known to occur in inflammatory softening of the brain, without larger hæmorrhage; (b) I know that softening is a cause of hæmorrhage, having found the two changes together in cases in which death had occurred suddenly, and in which, therefore, the softening could not have been the sequel of the hæmorrhage; (c) the symp-

toms are those generally found in cases of hæmorrhage combined with softening, as distinguished from cases of simple hæmorrhage. Cases of suddenly occurring hemiplegia may be divided into two classes, broadly distinguished from each other by the presence or absence of coma. In one class of cases the patient will suddenly fall down insensible: the insensibility may continue until death supervene, or it may pass away in a longer or shorter time, and the patient is found to be hemiplegic. In the other class of cases, the patient, with or without any premonitory symptoms, suddenly staggers or falls from hemiplegia. There may be giddiness or confusion of intellect, or there may be neither; but the patient never loses his consciousness for a single moment. Or the patient may go to bed in his usual health, and awake, to his surprise, hemiplegic, feeling well in all other respects. Cases of an intermediate kind may occur, of which the present is an example, in which there is a greater or less degree of stupor, but no loss of consciousness. The cases of hemiplegia without coma are of much more frequent occurrence than the apoplectic cases. After death, in the apoplectic cases, I have generally found a rather copious effusion of blood, either with or without softening of the brain. In the cases without coma, I have often found no morbid appearance, except softening of a circumscribed portion of the brain. In other cases a coagulum of blood is found in the middle of the softened portion, variable in its size up to that of a walnut. The larger the coagulum, the greater is the degree of stupor usually, and these cases constitute the intermediate class already described. When the intellect has been unaffected, there is usually little or no hæmorrhage. Such is a statement of facts, in respect both to the symptoms and the morbid appearances with which they are associated. In reasoning upon the causes of the difference in the symptoms, we may suppose that in cases of hæmorrhage without softening, the effusion is either more abundant, or takes place more rapidly, hence sudden pressure within the head is produced, and consequent coma. The presence of hemiplegia is important, for it distinguishes such cases from cases of apoplexy, in which no morbid appearance is found, and many of which depend upon the circulation of poisoned blood, as in Bright's disease. In cases of softening of the brain, leading to hæmorrhage, perhaps owing to the lesion of smaller vessels, the effusion is commonly less abundant, and perhaps also occurs more slowly. There is therefore less pressure, and it is gradually made, so that the brain accommodates itself to the change, and no coma follows. The paralysis in both cases would seem to depend upon the injury done to the structure of the brain, and the coma upon the amount and suddenness of the pressure produced. In some cases of perfect loss of sense with paralysis, both softening of the brain and hæmorrhage are found, but in these the blood effused is almost always considerable in amount.

5. The case, then, was one of inflammation of the cerebral substance leading to softening, and this again to hæmorrhage. Of this inflammation other symptoms are to be noticed. There had been headach and giddiness during the preceding six months. This pain was chiefly on the right side of the head; the same with the disease; and such is frequently, but not constantly, the case in inflammatory softening. For three or four weeks there had been a mistiness before the eyes, and sometimes double vision, and also numbness of the fingers and thumbs of the left hand. It is probable that to the softening the hæmorrhage was added on Feb. 18th, when the giddiness was so much increased that the patient fell and the mind was confused. This was the condition on admission, when there was a degree of heaviness or slight stupor; the intellect was blunted, the pupils dilated, and the pulse slow. Many of these symptoms resulted from slight pressure, and they diminished after free venesection. There was neither rigidity nor convulsions of the limbs. Andral has shown that these symptoms are very often absent in cases of softening, but he believes that when they do occur they are of considerable importance in the diagnosis. Both opinions are consistent with the present case. Notwithstanding the undoubted presence of inflammation of the brain, there was no increased heat of the surface of the body, and the pulse was even slow.

In respect to the paralysis, it is to be remarked,

1. That it was incomplete. It equally implicated both sensation and motion, but they were impaired only and not abolished.

2. It was partial. The parts supplied by the *portio dura* were paralyzed, and the articulation was impaired, but there was no deviation of the tongue when protruded. The leg was not at all affected, and of the upper extremity, the hand alone

was paralyzed. Various French writers maintain that paralysis of the upper extremity is occasioned by a lesion of the optic thalamus, and that of the lower extremity by a lesion of the corpus striatum. Every case of paralysis is not adapted either to support or to invalidate this conclusion: for example, the arm alone may be paralyzed, and after death a coagulum found on the surface of the brain only, but this is quite consistent with the view that the motor influence of the arm is derived from the thalamus, because this coagulum would compress the whole brain, more or less, and may have compressed a particular part (as the thalamus) more than the rest. A single case, however, in which the thalamus was extensively destroyed and the arm not paralyzed, would prove the absence of the supposed connexion between these two parts. So of our case, it proves nothing with respect to the connexion between the arm and the thalamus; for although not the seat of the hæmorrhage, this part may have been much pressed upon; but it seems quite decisive against the supposed dependence of the lower extremity upon the corpus striatum, for it shows us this part extensively destroyed, and still more extensively diseased, without any loss of motor or sensitive power in the leg.—*Heart*: The hypertrophy with dilatation corresponded with the increased force and extent of the impulse, and with the extent of space, yielding a dull sound on percussion during life.

Looking at the morbid appearances apart from the symptoms, it might be disputed whether inflammation of the pericardium had existed. The redness, however, had the characters of that produced by inflammation, as far as such characters can be considered to be distinctive. The unequivocal double friction sound, with nothing else to explain it, appears a decisive argument in favour of the same view. The friction sound, then, may be produced by inflammation, accompanied by mere redness, and without effusion of lymph, or otherwise the inflammation must have been in process of cure, and the effused lymph had been absorbed. Seeing that the sound had disappeared for several days before death, it is probable that the latter is the true view. Upon either supposition, the case proves that pericarditis, attended with a friction sound, may be cured without any adhesions, and probably without any other traces of the disease, remaining.

The pericarditis probably existed from the 24th of February. The sound then heard was like a bellows murmur, but a comparison of the various subsequent reports with each other renders the opinion more probable that it was in reality a friction sound, the characters of which were not yet fully developed; and this view is supported by the absence of any such changes in the valves as could have produced the sound. The sound at first was systolic only, and limited to a small space; afterwards it accompanied both movements, and was diffused over all the cardiac region; this may be explained by supposing that more serous effusion existed at first, which was afterwards absorbed. The sound also became louder as the freedom of the heart's movements increased, after the relief of the pressure upon the brain by venesection.

The pericarditis was unaccompanied by pain throughout; the pulse was at first full and firm, not jerking, and each beat was tardily executed; no doubt, owing to pressure upon the brain, there was an intermission occasionally only. After the venesection the firmness became less and the frequency greater, and a jerking character was superadded; this sharpness was one of the effects of the hypertrophy of the left ventricle. March 14th, the action of the heart was much disturbed; the movements became tumultuous and confused, incapable of being clearly distinguished from each other.

Lungs and pleuræ.—1. There was unequivocal anatomical evidence of pleurisy on the right side—viz., copious effusion of turbid and bloody serum and coagulable lymph, yet there was no redness of the pleura.

2. There was dulness on percussion on the right side behind, and the rhonchi of bronchitis were feebler than on the left, but they were audible, even to the bottom of the chest. This observation proves that these rhonchi can be transmitted through a very considerable amount of fluid in the pleura.

3. There seems to have been pneumonia in the stage of grey hepatization in the lower lobe of the right lung. This lobe was not merely compressed by the serous effusion, for it was brittle, not tough; it sank in water, and a sero-purulent fluid could be scraped off its cut surface. The upper lobe, on the other hand, exhibited the appearances produced by slight mechanical compression. The pneumonia was unaccompanied by any expectoration, or by crepitation or bronchial respiration. The absence of bronchial respiration was probably connected with the pleuritic effusion. In four-fifths of the cases of serous effusion combined with hepatization, which M. Gri-

solle examined, he found no bronchial respiration, nor any description of morbid sound.

4. There was no pain occasioned by the pleurisy or pneumonia until the day before death, and then only below the limits of the chest. There was nothing in the abdomen to explain this pain, and I ascribe it to the inflammations referred to, because I have repeatedly found pain and tenderness complained of below the ribs, when no disease existed which could explain it, except in the chest. In respect to pneumonia, the same remark has been made by M. Grisolle.

5. The thickening and contraction of the bronchi are to be connected with the symptoms of bronchitis stated to have occurred during the several last winters of the patient's life.

Erysipelas.—1. Towards the termination of the case, erysipelas supervened, at first on the right side of the face, and without any redness of the skin. That the affection was erysipelas, is proved by the vesication, as well as by the appearance of the disease in the ordinary form on the other side of the face.

2. The integuments of the chest in the vicinity of the right clavicle were also puffy, either from erysipelas without redness, or from oedema. There was no pitting on pressure. This swelling led to an examination of the urine, which was thus ascertained to be albuminous, and of low specific gravity. Hence it became highly probable that Bright's disease likewise existed.

3. About the same time there were symptoms of laryngeal obstruction, and a considerable accession of bronchitis leading to great dyspnoea and general constitutional disturbance.

4. After death there was found a considerable amount of dusky redness about the upper part of the larynx and pharynx, just such as is frequently observed when erysipelas affects these parts at the same time with the face. The rima glottidis was open, and the symptoms of obstruction there had subsided before the patient's death. This is one of the most serious complications of erysipelas of the face or neck, a very slight attack of which is sometimes accompanied by the most imminent danger of suffocation from the inflammation attacking the throat.

Kidneys.—1. There was an advanced degree of granular degeneration of the kidneys, yet the urine contained but a small proportion of albumen. This confirms Dr. Christison's remark that the quantity of albumen bears no proportion to the degree of advancement of the disease, being often very trifling in the worst cases.

2. There was no oedema of the ankles or of any other part, unless about the right clavicle, so that until the urine was tested the renal disease was completely latent. The absence of dropsy may be explained in accordance with the principles suggested in a former case, for there was no great amount of dyspnoea until within a short time of the fatal result.

Causes.—1. *Of the hypertrophy of the heart and the renal disease.* There is nothing to show which of these two affections existed first, nor, therefore, whether either was the cause of the other. The patient had been long subjected to two of the most influential causes of renal disease—viz., habitual exposure to cold, and excess in drinking. The cause of the enlargement of the left ventricle is not obvious. The patient was said to have had several attacks of acute rheumatism; but if this were the cause, one of two conclusions must be admitted, neither of which have as yet been generally received—viz., either that rheumatism may impart a morbid stimulus to the nutrition of the muscular fibres of the heart, without first inducing inflammation of the endocardium or pericardium, since there were no traces of the previous existence of such inflammations to the requisite amount here; or the inflammation of the pericardium may be cured without leaving any adhesions, or even thickening or opacity, of the membrane as its result. That this last conclusion may be true, other portions of the history of the very case before us seems to prove, as has been more fully shown in the remarks upon the pericarditis. The enlargement of the right ventricle was less considerable, and was no doubt occasioned by the correspondingly moderate but long-continued obstruction in the lungs.

2. *Of the internal inflammations.*—The other inflammations which have been referred to were probably either altogether, or in great measure, the effects of the renal disease. The first of these was the cerebritis and its consequent hæmorrhage, both of which I have very frequently met with in these circumstances. The enlarged heart may have had something to do with the brain disease, but the connexion between apoplexy and disease of the heart, about which so much has been said, appears to me to require to be established upon a more satisfactory basis. Next followed pericarditis, pleuritis,

pneumonia, bronchitis, and erysipelas, with inflammation of the mucous membrane of the larynx and pharynx. The patient ascribed the erysipelas to a draught of cold air in the ward; but even if the reality of this exposure be admitted, it must appear very subordinate in importance to the unhealthy state of the constitution, (probably consisting in a vitiation of the blood,) when we consider the number and variety of inflammations present, and the successive appearance of several among them.

Treatment.—The complicated nature of the case rendered the patient's ultimate recovery hopeless; but there are several circumstances in the treatment which deserve to be noted. 1. Within the first two days, thirty-four ounces of blood were taken from the arm, on account of the head affection. After this, the pulse rose from 60 to 84, and then to 96, no doubt in consequence of the removal of pressure upon the brain, for the paralysis diminished at the same time. Two days later the patient was cupped at the nape of the neck to ten ounces, and this was repeated after a fortnight more. At the end of another week, pericarditis being manifestly present, eight ounces more blood were removed by cupping over the heart, and this operation was once repeated, making a total of sixty-eight ounces within about three weeks. This is a large quantity to be taken from a man with Bright's disease, but the existence of the renal affection was not yet known, and the man was muscular, and bore the bleeding well. 2. Blue pill was given from the first, and the gums were affected in four days. It was resumed eighteen days later, on account of the pericarditis, and the mouth was made very sore again. 3. The inflammation in the pericardium and pleura, and probably that in the brain, may be said to have been cured; the friction sound diminished soon after the second salivation was produced. 4. Next appeared the erysipelas and inflammation of the larynx. These affections, therefore, were not prevented, even if they were not favoured, by the mercury. 5. Leeches to the throat afforded immediate relief to the inflammatory obstruction of the larynx, the symptoms of which subsided immediately, and the anatomical appearances were correspondingly trifling.

LONDON HOSPITAL.

COMPOUND DISLOCATION BACKWARDS OF THE FIRST PHALANX OF THE RIGHT THUMB.

(Communicated by J. C. WORDSWORTH, Esq., House-Surgeon.)

THE patient, a middle-aged, muscular man, while walking in the street, stumbled over the curb-stone, and the accident happened through his attempting to save himself, by throwing forward his hands. Being just then in the immediate vicinity of the hospital, he lost no time in applying for relief. When admitted, he was suffering great pain, and was faint.

On the palmar surface of the thumb was a wound of about an inch and a half in extent, through which the extremity of the metacarpal bone protruded, the first phalanx being on its dorsal surface. An attempt at reduction was made in the usual manner, but proving unsuccessful, a more careful examination was instituted, and the tendon of the long flexor was found to have been carried backwards with the phalanges, and become firmly fixed between the extremities of the bones, and to their ulnar side. It could not be removed from its new position without division. A small blunt-pointed bistoury was therefore introduced through the wound, and the tendon divided; and reduction was immediately effected without any difficulty. The wound was then closed, and the water-dressing applied, and an opiate administered. Little union by adhesion occurred, but the wound quickly granulated up, and he left the hospital, having a very useful thumb, with a tolerable amount of power of flexion and extension.

Remarks.—It is evident that, so long as the tendon remained between the extremities of the bones, reduction could never have been effected, either by pulleys or division of the lateral ligaments, as recommended by some surgeons. Is it not probable, that in many of those cases which baffle the skill of the most ingenious and eminent surgeons, this circumstance of displacement of the tendon is the cause of failure? In a case which occurred at this hospital, division of the lateral ligaments was made for this same accident, and no power appeared capable of returning the bones to their proper position even then. If the tendon does not stir from the median line of the thumb, of course it ought to form a prominent band over the extremity of the metacarpal bone, and be perceptible on examination. A case, in which this was the state of things, occurred at this hospital only three weeks ago, and was reduced easily by extension only.

ON THE DIVISION OF FEES IN THE PRACTICE OF MIDWIFERY.

To the Editor of THE LANCET.

SIR,—The facilities you so liberally offer to the profession, by admitting into your excellent journal the free discussion of subjects connected with its welfare, urge me to solicit further space on the subject of the "division of midwifery fees." I am thus induced to trespass on your time, from reading a letter on the above subject, by Mr. Robins, in your number of February 21.

The different views already expressed on the subject show that some arrangement of the question is necessary, and instead of offering scattered individual opinions, they would be far more effective, issuing as the results of the deliberations of a public meeting.

Since submitting to the profession resolutions approved by more than seventy gentlemen, and kindly published by you in *THE LANCET* of November 1, 1845, I have ascertained that there are three classes of opinions on the subject: one, as Mr. Robins, approves of securing the fee to the gentleman engaged; a second, that of the Society to which I have the honour to be secretary, considers division of the fee the most just; and a third party thinks that to him who performs the duty the fee should be paid. Mr. Robins develops pretty fully the reasons of the first class; and these I will now examine. He says, "It is only in cases of great emergency, that a stranger's attendance is required;" that, generally, "the child is born, and the stranger liberated, in half an hour." Is it just, when dangers are most likely to occur, when the great responsibilities of midwifery are to be borne, when any carelessness in his unremunerated exertions may destroy his reputation as an accoucheur, when, indeed, it might prove convenient (if a dangerous case were suspected) for the engaged practitioner to shift the risks upon a stranger—is it then, I repeat, just to expect all this accomplished with the necessary care without remuneration?

The man who pays the greatest attention, and is the most experienced practitioner, cannot submit to occupy his valuable time in the affairs of others; they will therefore, most probably, fall to the lot of the least occupied and skilful.

Mr. Robins does not reflect, that perhaps at the time when so employed, patients of his own may be lost to him; for midwifery is not a practice which can be postponed to a convenient half hour, like many cases of disease. He speaks somewhat slightly of the matter, and apparently without a just appreciation of its responsibilities, when he remarks, that "the portion of the duty considered so important may be finished in ten minutes," when it must be evident to every person engaged in the practice, that those few minutes are generally the most important in the whole case. Mr. Robins has not carefully examined the "several communications" of which he speaks so authoritatively, or he would not have fallen into the error he does, when remarking, that "according to this new-fashioned, cormorant-like doctrine, he is to be rewarded with half the other's hard-earned fee,"—(does Mr. Robins mean hard-earned, by doing nothing in the case?)—"whatever may be its amount;" for in the third resolution, passed at the meeting of practitioners above referred to, it is specifically declared, that "as it frequently happens that presents are added to what may be regarded as the usual payment, the amount of fee is not to be considered to extend beyond two guineas, nor to be less than one." The suggestions that Mr. Robins offers, that "the friends of the patient could not complain of having to pay an additional fee for the services they required under such circumstances, any more than they could in paying the fee of a consulting physician or surgeon," if not so completely inapplicable to the subject under consideration, would be, indeed, a capital joke, though I think we should have some difficulty in persuading the public to join in paying a double fee. What does this suggestion amount to, but an admission that "the labourer is worthy of his hire"? But let us consider Mr. Robins's illustration of his position. The consulting physician does not appear in the place of an absent and pre-engaged physician, but in his own. If Mr. Robins, holding a consultation on one of his patients, had sent for Dr. A, who happened to be out, and a stranger, Dr. B, came instead, gave his advice, and wrote a prescription, would Mr. Robins, acting on these odd ideas of justice, present the fee to Dr. A? Mr. Robins has entirely forgotten that the necessity for a second practitioner arises from the individual act of the first, and for which it cannot be fair to expect a patient to pay. Mr. Robins has applied

some very hard expressions to those gentlemen who differ from him in opinion, such as, "cormorant-like doctrine," "mulet a brother practitioner of half his fee," "the acceptance of such proffered bounty," &c.; he did not reflect, that unless truly thrown they would rebound with increased violence upon himself. With respect, however, to the title of the first-engaged practitioner to some remuneration, we must not put it out of our remembrance, that with every inclination to be present, the cause of his non-attendance might be entirely beyond his control; that, indeed, he may have submitted to inconvenience and loss of time in waiting; but these circumstances only speak more forcibly for an equal division of the fee.

It would, Sir, be a matter of congratulation if medical gentlemen would co-operate, with the view of establishing a rule on this subject, and setting at rest many little professional differences which have sprung up, to the destruction of mutual good feeling.

Apologizing for taking up so much of your valuable space,
I remain, Sir, your obedient Servant,
Gt. Portland-st., March, 1846. GEORGE WILSON, Hon. Sec.

MEDICAL FEES AT ASSURANCE OFFICES.

To the Editor of THE LANCET.

SIR,—I do not know if the enclosed correspondence will be of sufficient interest to appear in *THE LANCET*, but as it is an attempt to resist one of the many robberies practised on our profession, it may by you be thought so.

The first note (No. I.) is a reply to the printed demand for answers to the string of questions put by insurance companies to the usual medical attendant of the person wishing to insure his life, the others tell their own tale. I was not successful in obtaining a fee from the office, for they did without my answers, taking in their place the answers of two non-medical referees.

I would urge on my medical brethren a resistance to the demands of insurance companies, in every instance, when no fee is sent; and should they not get it, they will, at any rate, be free from the annoyance of answering questions which, if truly answered, in many instances, would prevent the insurance being effected, and very likely lead to the loss of the gentleman and his family as patients; for it is pretty well known, in spite of the confidential assurance of the insurance companies, that they do not hesitate to say "the answers of your medical man are not satisfactory." If insurance companies want true answers, they should adopt some method which would not compromise the medical man with his patient, and they should pay him. On the whole, I am inclined to think it would be most conducive to our interests to be rid altogether of the responsibility of returning answers to queries which must often involve a breach of professional confidence. Let that be as it may, in every case the demand for advice gratis should be boldly and universally resisted. Sir, your obedient servant,

ALEX. STOKES.

(NO. I.)

Mr. Stookes' respects to Widow Sutton and Sons, (agents of the European Life Insurance Company,) takes leave to inform them that he, in common with many of his professional brethren, has pledged himself not to answer the queries of insurance Offices without a fee is sent by the Office.

25th January, 1846.

(NO. II.)

Widow Sutton and Sons have to acknowledge the receipt of Mr. Stookes' note. Mr. Stookes is not, perhaps, aware that the Company have a fixed medical referee here, (Dr. Formby,) and that he is paid by the Company on all occasions. Mr. Stookes is not referred to by the Office, but by Mr. F—, and all we can do in the matter is to advise Mr. F— of Mr. Stookes' refusal to reply, as it is the business of Mr. F—, whose insurance cannot be completed without it, to pay Mr. Stookes his usual fee. Were the Company to pay Mr. Stookes, it would be, in fact, adopting him as their referee, which would be inconsistent with the terms of the proposals made to the Company, and which require the party proposing to give one.

Widow Sutton and Sons have several times had to explain these things to other medical men here, who have not afterwards refused to reply to the queries; and as they think it probable Mr. Stookes may take the proper view of it, after perusal of this explanation, they defer writing to Mr. F—

until they get his reply, which they hope to have to-day, as the delay in the matter is of consequence. Dr. Formby is our referee.

European Assurance Company, January 27, 1846.

(No. III.)

Mr. Stookes regrets to say, that the explanation of Widow Sutton and Sons is not to him satisfactory. They seek from him certain professional information which it is supposed he can supply better than any one else. If their medical referee can do so, why apply to Mr. Stookes? If not, why refuse him remuneration for his services in this case any more than they would refuse to pay two medical men if called to them in sickness? If it were necessary to take the opinion of counsel on a point of law, would not Widow Sutton and Sons expect to pay him, and also the attorney?

Again, if they wanted fifteen private and confidential answers, for their own guidance and benefit, from the attorney of Mr. F——, would they expect them for nothing? Mr. Stookes wishes it to be distinctly understood, that it is from no ill feeling to Mr. F—— or the Office that he refuses to answer, but because he contends that the parties seeking information for their own benefit are the persons who should pay for this information; and having pledged himself not to give such information, without a fee from the assurance company, he must again respectfully decline doing so. Mr. F—— will, most likely, write and say that he will pay the fee; but as Mr. Stookes is contending for a principle, and not merely for a guinea, Mr. Stookes would be obliged to decline the fee and also to answer the questions without payment is made by the Company, who require the answers for their own purposes. It is obvious that the mere fact of paying their own general referee can be no reason for refusing to pay for special advice and information.

28th January, 1846.

NATIONAL FACULTY OF MEDICINE & SURGERY.

To the Editor of THE LANCET.

SIR,—I trust every medical practitioner has now read, and carefully reflected on, the proceedings of the Congress lately held in Paris, as fully reported in your journal at the time. The contrast between the methods of transacting important business by reformers of medical abuses in France, and the miserably vain attempts which have been made in this country, is not only very remarkable, but truly humiliating.

You, Sir, are eminently deserving of the highest praise and deepest gratitude of the whole medical profession, for the warm and unwearied interest you have ever evinced in maintaining their legitimate position, and advancing the justice of their cause. May we still hope that you will continue to lend your powerful aid in endeavouring to acquire order, peace, and stability for a distracted profession, and that you will unceasingly watch over its best interests?

Surgery is beneath the notice of the English physician; midwifery, and, I may add, medicine, are abominations to the pure surgeon; while the Doctor of Medicine of Paris is properly educated for, and expected to practise, all three, medicine, surgery, and midwifery,—in fact, and in common sense, to be enabled to act as a sound and judicious practitioner in any case which may fall to his lot. Really, Sir, it is wonderful how interested factions can disguise and withhold the truth, and how tenaciously they can grasp their own rottenness!

Now that we see what a fortnight can do in Paris—now that we have the business-like example of the French before our benighted and sleepy eyes—would it not be possible to make a last, but firmly-united struggle—would it not be possible to call a medical congress in London, publicly to discuss the whole system of medical reform—not in a corner, not with closed doors, but in the face of the people and the nation?

Let the standard of a national faculty of medicine and surgery be now firmly planted, and, I doubt not, thousands will immediately and devotedly rally around it, stand by and protect it, until the time come when you shall again pluck it up, and lodge it triumphantly above the head of the first president of one of the most useful and scientific institutions in the world.

I, for one, solemnly implore every member of our distressed profession to merge at once all minor differences, and rally as one man around this noble standard. Let us, like the French, have a faculty of medicine and surgery, and an

answer to all your queries in THE LANCET of Saturday last will soon follow. Let us have one degree, which shall qualify us to practise every department of medicine: thus shall we uproot all petty jealousies, unseemly bickerings, and useless distinctions, and place the practitioner of medicine in that position before the public which it ought to be his proud privilege to enjoy.

May you, Sir, continue diligently and perseveringly to wield your pen in exposing the dreadful doings of miserable quacks, so shall you earn the grateful and sincere thanks of every injured practitioner of the healing art.—I have the honour to be, Sir,

Your obedient servant,

Cheapside, Halifax, March, 1846.

FRED. SMITH GARLICK.

ASSOCIATIONS OF SURGEONS AND CHEMISTS AT PORTSMOUTH.

To the Editor of THE LANCET.

SIR,—A new move has taken place here among the medical men, and the following firms are now in full vigour. How the M.D.'s and surgeons may escape if anything happen to the secondaries remains to be shown.

New Firms and Copartnerships.—James Stewart, Surgeon, R.N., Rotterill Meggenson, Chemist.—Dr. Ingledue, W. Bentham, Chemist.—J. Williams, Surgeon, R. N., W. Wright, Chemist.—H. Slight, Surgeon, W. Godfrey, Chemist.—J. Stewart, Surgeon, R. N., T. Mallory, Chemist.—J. Martin, Dentist, W. J. Hay, Chemist.—J. Mortimer, Surgeon, R. N., W. Padwick, Chemist and Tobacconist.—J. Simmie, Surgeon, R. N., T. Collins, Tobacconist and Chemist.

I will send you a continuation of the mercantile lists in a few days, when I have ascertained exactly the names in the several copartnerships.

Portsmouth, February, 1846.

I am, &c. &c.,

SPECTATOR.

ON THE PAYMENT OF THE MEDICAL OFFICERS OF THE POOR-LAW UNIONS.

To the Editor of THE LANCET.

SIR,—In THE LANCET for January 31, there are some very judicious remarks on the subject of remuneration for vaccination, as performed by the union medical officers, which merit from those thus engaged their warmest thanks. It is hardly to be supposed that any medical officer would expect to make his fortune in attendance on the sick poor; but he ought surely to expect a fair and adequate remuneration. Eighteen pence is by no means "a fair remuneration." You are aware, Sir, that there are in each medical officer's district, vaccination stations, varying from two to six or more miles distant from the vaccinator's residence, at which he must attend, every week in some cases, in others, monthly. I have myself attended at these stations, four and five miles distant, for several weeks in succession, and found none to vaccinate; at other times, perhaps one or two or three to vaccinate: these have to be visited again two or three times, besides keeping up the books, giving certificates, &c. &c.; and all this for eighteen pence, each taking up several hours of very valuable time. "What, indeed," (as you very justly observe) "would lawyers say if their public services were paid for after the same manner?"

These remarks are only introductory to what I consider still more oppressive, the remuneration for attendance and supply of medicines &c. to the sick poor—a subject on which I have often reflected, and indeed have proved to the poor-law guardians themselves by facts and figures, but no attention has been given to it, only that they did not intend to alter; and what redress has an union medical officer? If he has the means of living without this sort of practice, all well and good! if not, he is bound to accept the proffered terms, or subject himself to the chances of annoyance from some adventurer in physic thus introduced, or he may be starved out by his opponents; but where is the justice and generosity of such a scheme! Alas! ye liberal-minded commissioners and poor-law guardians!

It is a fact, Sir, as you have stated in your very valuable publication for February 7, "that the great burden of medical relief has been borne for many years by the medical profession;" and acting upon your suggestions, it has occurred to me that Union medical officers would do well to submit bonâ fide statements "to the representatives of the constituencies to which they may happen to belong," the amount,

for the supply of medicines, exclusive of time and labour, for which every carpenter and bricklayer charges, besides his nails and bushels of mortar, &c. I have for many years kept strict accounts of this kind, charged at a very low rate, and which, Mr. Editor, perhaps you will allow me to submit to your attention, and insertion in a subsequent number, if you deem them befitting a place in your columns, as it will show the inadequacy of the remuneration. I have taken the three past years, and find the number of cases attended was 1120, the amount for medicines supplied, 255*l.* 4*s.*, sum received, 132*l.*, leaving me minus 123*l.* 4*s.* It is very true, it may be said, there are extras for vaccination, labours, &c., but for these a full and adequate amount of time, talent, and labour &c. is given. I trust, Sir, you will excuse so lengthened an address. The subject of the payment of Union medical officers is one of vast importance to our common humanity, and very few are aware of the almost thralldom attached, the annoyances of one kind or other so frequently met with, the great amount of labour, and time, and medicine bestowed; and I can prove that more attention is required and given to the sick poor, than many of our private patients expect or desire.

I have the honour to remain, Sir,
Your obedient and obliged servant,
AN UNION MEDICAL OFFICER.

February, 1846.

TOOTH-ACHE TREATED WITH VIENNA PASTE.

To the Editor of THE LANCET.

SIR,—It may not be without interest to the medical profession generally, more especially to those gentlemen who practise in the country, to know that very great relief may be afforded, in attacks of tooth-ache, by the application of anhydrous lime and caustic potass, commonly called *pâte de Vienne*. I have used it for a considerable period of time, and with almost uniform success.

The method which I generally adopt for its application, consists in making a thick paste of the above powder, by means of pure alcohol. I then take a sufficient quantity, in the shape of a small pill, on the end of a silver probe, and introduce it into the cavity of the tooth, which should previously be well dried.

After remaining in contact with the carious portion of the tooth for three or four minutes, the paste may be removed, and the mouth well rinsed with tepid water; after which fill the cavity with fine cotton.

Great care is requisite to guard against any portion of the paste falling into the mouth, or upon the fauces, the effect of which would be instantly to create a painful slough.

I am, Sir, your obedient servant,
CHARLES STOKES, Dentist,
Member of the R.C.S. Eng.

Brook-st., Hanover-sq., Feb. 1846.

ON THE MEDICAL TITLES, "PHYSICIAN," "SURGEON," "ACCOUCHEUR," AND "GENERAL PRACTITIONER."

To the Editor of THE LANCET.

SIR,—With part of Mr. Lawrence's "Oration" for my text, but as briefly as possible, for you have not much space:—

"The public, knowing pretty well what is meant by a physician, a surgeon, or an apothecary, will be sorely puzzled when they come to deal with the general practitioner."

And why? I suppose, on account of the name; because the word "practitioner" does not necessarily imply the sciences practised. Let us see whether, in their origin, any of the other three terms are at all more significative:—

"Physician," in English alone, by common usage, means a person who visits medical cases only, and writes prescriptions. The word properly means, a man acquainted with physics or natural sciences, not necessarily medicine. In a certain well-known title-page, the words, 'Francis Moore, Physician,' can only mean that the author is an almanack-maker. The word "scribe" would more accurately define the present practice of physicians.

"Surgeon"—corrupted from "chirurgion" from the Greek, *χειρ* *εργον*—signifies, properly, any one who works with his hand. A carpenter, a shoemaker, or a barber—all are equally entitled to be called "surgeons," for anything the word really means.

"Apothecary"—"apotheca" in Latin—signifies a warehouse. The old apothecaries were shopkeepers; they literally sold everything. The term "apothecary," in the present day, is,

if anything, less applicable than either of the other meaningless appellations.

Another word, now much used—"Accoucheur"—means a person that puts another to bed. A chamber-maid, therefore, is an accoucheur, or rather, perhaps, an accoucheuse.

Certainly, no one is "puzzled" with these appellations, because common consent and common usage have invested them with certain meanings. If the word "practitioner" is as well understood, which it now is, it is as good a word as any of them.

Mr. Lawrence insults the general practitioners, and calls them "tradesmen," because the word "apothecary," now becoming obsolete, means shopkeeper. As well might Mr. Lawrence be called a mechanic, because the word "surgeon" means handicraftsman. It is certainly at the almost obsolete name of "apothecary" that the insult is directed. Mr. Lawrence can hardly be so ignorant as not to be aware that in everything but name, the physicians of old (the medici) were, to all intents and purposes, what is now well understood by the term "general practitioners;" they practised surgery as well as medicine, and supplied what drugs or applications were required. If we are "tradesmen," so were they.

I am, Sir, your obedient servant,
Hogsthorpe, March, 1846.
R. U. WEST.

OBSERVATIONS ON THE WATER MANIA IN THE LAST CENTURY.

To the Editor of THE LANCET.

SIR,—THE LANCET of the 20th of December last contains a letter and remarks, headed, "The Water Cure in the Olden Times." Your correspondent might readily have found abundant authenticated evidence of the water mania having been in full cry at a considerably earlier period than the one he mentions. In 1701, at all events, the *omni*-curative properties of aquæ puræ were as highly vaunted and insisted on by one party, and as rationally questioned by another, as they are at the present day;—moreover, the means and appliances then directed for its external use, together with the rules for its internal exhibition, are all but identical with those which have been the most recently proposed. In fact, the chief perceivable difference between the old and the modern practice consists merely in the latter being represented by the elegant term hydropathy.

Of the popular origin of the water cure (properly so called) there is no reason to doubt. For a long time previous to the commencement of last century, it appears to have been a common, though strange enough custom, with the denizens of certain of the English manufacturing districts, after enjoying a dip in some river, or other convenient cold bath, to put on their dry body-clothes over the dripping linens which they had purposely worn whilst in the water; and, thus habited, to pursue their usual avocations all day, for sake of the cooling and exhilarating effects said to have been thereby induced! The supposed benefits derived from this kind of experimenting on those in health—together with reported cases of cures effected on invalids after (in spite of?) their accidentally tumbling into water, &c.—speedily suggested the notion of the curability of disease by a similar plan of treatment. Accordingly, patients of all sorts were subjected to the wet-linen system for almost every variety of ailment and with variously stated success. Nor was this usage confined to adults; children, from a year old and upwards, affected with rickets, &c. &c., were, for weeks together, every night encased in shifts and caps wetted with the coldest spring water, and in this condition carefully muffled over head and ears in dry warm blankets, and kept steaming in bed till morning. More resolute procedure assuredly never was ventured on by advice of any modern school of hydropathists!

Simple immersion of the body in cold water has, in all ages, been held in high estimation, as a remedial measure, by most nations of the world. The remotest histories of Greece and Rome furnish ample proof on the subject; every reader of the classics can remember numerous quotations in point. It is amusing to peruse the extensive, incongruously assorted, catalogues of bodily ills, which medical writers of antiquity have confidently asserted to be removable by this means alone.

It need hardly be added, that, in our own country, the uses and abuses of bathing, cold as well as hot, have long been thoroughly understood by every judicious, scientific, regular medical practitioner, and require no further allusion.

Your most obedient servant,
Edinburgh, 1846.
JOHN MAYNE, M.D.

NEWS OF THE WEEK.

CURE OF HERNIA BY LONG REST.—*To the Editor.*

Sir,—I take the liberty of advertising to a communication lately made public by Dr. Diffenbach, of Berlin, to the effect that he had succeeded in reconciling several of his patients to the use of a truss, in cases of large hernia, by directing them to lie on the back for eight days, and this most strictly; and he directs the adoption, during that time, of liquid nourishment only. Now I would suggest, that if it shall be made appear that the benefit is derived from this posture being kept for *so long a period*, a cure of some descriptions of hernia might result from a more extended period. And why not? I feel borne out in my belief on this subject, on reference to the very old surgeons' mention of many cases of *radical* cure, effected by lying on the back during *thirty* days successively. Of course, the plasters common at the time might be, and indeed were, prescribed. I would refer particularly to "Paulus Ægineto," lib. 6, c. 26; also "Borrough," l. 3, c. 52. The composition, ingredients, &c., might amuse, but hardly would instruct, the practitioner of the present day. Yet it should seem that Dr. Diffenbach's cases might well justify resort to the means suggested for a further end than that obtained by that eminent surgeon—viz., the effecting a permanent cure of the rupture.—I remain, Sir, your very obedient servant,
Bexley Heath, Kent. THOS. LEE.

DR. MARSHALL HALL.—We are always gratified by any honour paid by foreigners to our countrymen, and are glad to state, that Dr. Marshall Hall's work on "the Diseases and Derangements of the Nervous System," and his "New Memoir," have been translated into the Dutch language by Dr. Fock. (Amersfoort: W. J. Van Bommel Van Vloten, 1845.) This is one of those facts which testify to the high estimation in which the researches of this distinguished physician and physiologist are held abroad.

A correspondent at Leeds remarks, that having seen anhydrous phosphoric acid and pure lime advertised as a new cement for stopping decayed teeth, in order to test the efficacy of the remedy, he obtained an ounce of the former and two ounces of the latter. He states that he has tried these agents, over and over again, on members of his family, and also obtained the assistance of a scientific chemist of this town, but both have "come to a conclusion that the above remedy is nothing but an article of a cheat, and very dangerous to the patient;" and being himself a dentist, we will take his dictum on the matter.

BOOKS RECEIVED FOR REVIEW.

The Chemistry of Poisons. A Concise Arrangement of the most Deadly Mineral, Metallic, and Vegetable Preparations. By John Horsley. London: H. Silverlock, 3, Wardrobe-terrace.—This is a chart three feet in length by two feet in breadth, folded in a cover, and showing, by means of coloured illustrations, the effects of tests on different poisons. It appears to have been compiled with care, and is both ingenious and useful, manifesting the advantage of pictorial delineation over mere verbal description.

Report upon the various Plans proposed for rendering available the Manure contained in Sewage Water of the Metropolis, &c. By Thomas Wicksteed, Esq., Engineer to the London Sewage Company. 8vo. London: Kinder. We are glad to see a pamphlet on the above subject. While in Flanders, China, and other countries renowned for careful agriculture, every particle of liquid and other manure is carefully collected to subserve the purpose of improving the soil; in London we suffer what would annually fertilize one fourth of the area of England to be swept, without remorse, into the Thames. At page 38, a detail is entered into of the proposed plan for conveying this manure by a new system of sewers to Barking and Greenwich marshes, where the author contemplates that works should be established for pumping it into reservoirs, whence the farmers might be supplied. The pamphlet deserves perusal.

APOTHECARIES' HALL, LONDON.

Names of gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, March 5th, 1846:—William Paine Fisher, Dartford; James Fenn Clark; Samuel Scholfield, Tordmorden; Henry Jacobs, London.—Thursday, 12th March: Robert Richard Crucefix; Barzillai Augustus Harling, Chester; William Gibbs, Yalding, Kent.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted members on Friday, March 13th, 1846.—C. E. Sloper, J. Hirschberg, A. Gaved, J. Self, O. S. Winstanley, W. H. Holman, and J. S. Ramskill.

CORRESPONDENTS.

An Old Reader of THE LANCET, *News-monger*, and others on the same subject.—It was an error of the reporter of the *Morning Chronicle*. The erroneous statement was noticed by Mr. AGLIONBY, in the House of Commons, on Tuesday last, and we extract the following report of his observations from *The Times* of Wednesday:—

"HOUSE OF COMMONS, Tuesday, March 17th.—*Breach of Privilege.* On the motion that the orders of the day be read, Mr. AGLIONBY begged that the house would afford to him its indulgence while he corrected an error which had gone forth with reference to some observations he had made on a previous evening, with that liberality which it always evinced on every occasion when the personal feelings of one of its members were concerned. His attention had been drawn to a report in the *Morning Chronicle* of Saturday last, of his speech on the evening previous, on the distress in Ireland, and in which report was the following expression:—'The hon. member for Finsbury (Mr. WAXLEY) had indeed shadowed forth something, but in such vague and indistinct terms that he feared nobody had understood him, though he did not believe anybody cared whether they understood him or not.' Now, he did not complain of the mistake into which the reporter had fallen, for he was very willing to make all allowance for the difficulties of a reporter's situation; but he was bound, in justice to the hon. member, to state that he had never said anything of the sort set down in the *Morning Chronicle*, and not only that, but that he had never entertained any such sentiment. He had known the hon. member for a great number of years, had watched the assiduous manner in which he had performed his public duties, and had never refused to acknowledge and admire the ability with which he had spoken of and advanced the interests of his poorer fellow-subjects. (Hear, hear.) What, in reality, he (Mr. AGLIONBY) had said, was, that the hon. member for Finsbury had, on this particular night, shadowed forth his meaning so indistinctly, that he had not seemed to care whether he made himself understood or not. (Hear.)"

J. L.—Yes.

A British Graduate.—A doubt cannot be entertained of all the British graduates being placed in that position. A general feeling of disgust would be created by adopting different courses of policy with respect to gentlemen who are already recognised by law as entitled to practise medicine or surgery.

We can only advise *A Youth* to avoid both the causes of his calamity and the quacks, and apply to a respectable surgeon.

Humilitas.—"Without frequent pulse" is an incorrect term. If our correspondent means to ask if such a disease can exist without being attended with an increase of the pulse in frequency, beyond the healthy standard, the answer is—Yes.

Mr. J. S. Levison, (Brighton).—The case will be inserted, and the articles on dental quackery, if they embody facts, will be acceptable.

A Student of Medicine.—In Scotland, the Universities of Edinburgh, Glasgow, St. Andrew, and Aberdeen; in Ireland, the University of Dublin. The medical degrees obtained at all those universities were placed on an equal footing in the Medical Bill of the Government, and would doubtless occupy a similar position in any Bill which would pass the legislature.

The criticism signed *Babbage's Calculating Machine* has been bestowed on a work which is not entitled even to a condemnation in our columns. It is too absurdly and innocuously quackish to call for any serious notice.

A Subscriber.—The Royal Humane Society do publish accounts of their proceedings, which may be had at the office of the Society, 3, Trafalgar-square.

By attending at the recognised hospitals and schools, in four years *Tyro* would be entitled to be examined at the College of Surgeons, under the existing regulations of that institution. It is not necessary that he should be articled as an apprentice.

To a correspondent who makes inquiry on the following subject, we reply, that candidates educated abroad must present a certificate of having attended an English hospital, of 100 beds, for a twelvemonth. The rule is never departed from, and no proof of any amount of attendance on foreign hospital practice is received in lieu of the said certificate.

In reply to the question put to us last week, respecting Mr. Jenkins, (the witness who gave medical evidence in the late trial of Lieut. Pym,) a correspondent informs us that "he is a highly respectable man, and a member of the College of Surgeons."

A Subscriber.—Diluted mineral acids have sometimes been employed to render sponges more pliable, but there is no known method of softening those which are naturally hard, without injuring their texture.

Communications have been received from—Mr. Richard Hindle, Blackburn; Mr. Bowes; Mr. Bascome; Mr. J. Underwood, (Colchester); Mr. Thomas Ward; Mr. David Jones, (London); Dr. Conolly, (Hanwell); *Philaetheus*; Dr. Robert Barnes, (Notting-hill); Mr. Lane, (London); Verax; Mr. Davidson; M.R.C.S. Eng.; Mr. John Grove, (Wandsworth); Mr. Hugh McDonnell; Mr. Becroft, (Hyde); Mr. Morgan, (Henfield); a Worcestershire Subscriber; Esculapius Dr. Letheby; Mr. J. H. Horne; Mr. Bovill, (Brighton); and X.Y.Z.

CLINICAL LECTURES

ON THE

PRINCIPAL FORMS OF INSANITY,

DELIVERED IN THE MIDDLESEX LUNATIC-ASYLUM
AT HANWELL.

BY JOHN CONOLLY, M.D.,

PHYSICIAN TO THE ASYLUM.

LECTURE XIII.

Description and Treatment of Puerperal Insanity.

Your physiological studies have not left you unacquainted with the strong sympathies existing in the female system between the organs of reproduction and the great nervous centres. The stimulus given to the development and modification of the bodily frame at the period of puberty, and the expansion and even change of mental character accompanying it; the phenomena of general excitement or disturbance at the monthly periods, including various sensations of fullness and pain, with vertigo, or with peculiar affections of the sensations, or even of the affections and propensities, and all the complicated perturbations, called hysterical; the altered appetites or longings of pregnancy, and the sickness, mental depression, apprehension of death, and general uneasiness often accompanying that state; as well as the not unfrequent loss of several of the female characteristics, mental as well as bodily, at the period of the cessation of the uterine functions, must all have been brought, at various times, before your notice. You have already had your attention directed, in these lectures, to cases of insanity dependent on morbid conditions of the unimpregnated uterus; to cases in which puberty seems to be prematurely attained, and the thoughts receive a tinge from the cause of the malady; and to cases of chronic insanity connected with ovarian diseases; and you also know that violent convulsions may ensue in the puerperal state. All these circumstances have prepared you to find that insanity may occur during pregnancy, and after parturition, and during the important period of nursing; the brain occasionally becoming disturbed to a degree incompatible with the proper performance of the intellectual functions.

As puerperal insanity is not, however, a very common disease in England,—even Dr. William Hunter, as mentioned by Dr. Gooch, having only met with twenty or thirty cases of it in the course of his long life and extensive practice,—it is only in lunatic asylums that any extensive opportunities can be afforded for studying this affection. Yet it is an affection which is almost certain to occur, at some time or other, in your practice, and one for which you ought to be especially prepared, the attack being generally unexpected, sometimes insidious, sometimes sudden, always alarming, and, without careful management, liable to be fatal. We have generally some examples of the disease in its recent state in the asylum, and, of course, some chronic and incurable cases. Out of all the female patients admitted in the six years from 1840 to 1845 inclusive, thirty-one had become insane soon after confinement, or during the period of nursing. Almost all of these patients were young women, and it is in such, about the age of twenty-five or thirty, that the malady most frequently occurs. Esquirol, who notices this, also observes that such is the most frequent age of mothers, or the age of the maximum of fecundity. To several of these cases, now with us, your attention has been this morning directed, and I shall have occasion to refer particularly to some of them.

The period of the coming on of insanity, after delivery, has varied much in these cases, and seems to be very variable in different instances. It commonly, I think, comes on as early as a day or two after delivery, or within seven days, or within three weeks. Cases occurring at later periods, and during nursing, are spoken of with these; but it may be supposed that the cause of the insanity in such cases is scarcely to be considered the same as in those occurring actually in the puerperal state. In ward No. 14, there is a case of this kind. R. H—, thirty years of age, unmarried, but a mother, nursed her infant sixteen months. She had then shiverings, and pain of head, became melancholy, and complained especially of pain at the top of the head, and fixed pain in the forehead. A disposition to suicide came on. Her mind has never been excited; but she is fretful, and seems likely to fall into imbecility. Her small flat head and large occiput are not in her favour. She has also become very stout; the uterine functions

are regularly performed, and the mind has not improved, circumstances affording an unfavourable prognosis.

The usual premonitory symptoms of puerperal insanity are, a quick pulse, always an indicator of some mischief when continuing after delivery, a pulse above 100, perhaps 120 or 130, together with want of rest and sleep, a remarkable quickness and irritability of manner, and a disposition to interfere with all the arrangements of the nurse, the doctor, and everybody else. At the same time, there is often an observable carelessness as regards the infant, as though without a want of affection for it: sometimes the indifference to it is complete; and sometimes it becomes an object of aversion. In some cases there is a very imperfect recollection of having had a child. The patient soon begins to talk quite foolishly, and the disease assumes the form of acute mania or of melancholia, although far more frequently, I believe, of the former, melancholia seeming to be the form more commonly seen when the malady supervenes on nursing which has produced exhaustion. Heat and pain of the head are frequently present. I have not found the milk to be so commonly suppressed or diminished in quantity, or any irregularity in the lochia so frequent as usually described. Feverish symptoms are not constant accompaniments, but their presence or absence is a circumstance of considerable importance. The pulse continues to be quick and feeble, and is sometimes rapid. Pain in the lower part of the back is a frequent symptom, as well as pain in the head; and sometimes there is much tenderness in the lower part of the abdomen, not only in cases occurring a few days after delivery, in which the mental affection is, perhaps, rather the delirium attending an inflammatory condition of the uterus or its appendages, than simple insanity, but in cases occurring later, which have put on a chronic form, and in which it is very probable that the mental affection is symptomatic of chronic uterine irritation. We must not by any means expect all these symptoms to be present in all cases of puerperal insanity. There may be no fever, and little pain anywhere; the tongue may be clean, the bowels regular, the appetite pretty good, and the pulse tranquil; and this, not only when the disease has continued for some time. Such is the state of E. H—, in female ward No. 12. She is thirty-five years of age, has been two months in the asylum, (1844,) and when admitted had been insane only about seven weeks, having become so very soon after the birth of an infant. Her state is nearly the same at present: she is sometimes melancholy, and occasionally excited and disposed to be violent; but it is a case in which we expect recovery. (She left the asylum seven months afterwards, quite recovered.)

The maniacal attack is most frequently of a lively character. The patient sings, talks incoherently, and laughs much; is sleepless and restless, and very active; dancing, undressing herself, running about, overturning chairs, breaking windows, kneeling down and praying loudly, and sometimes manifesting sexual excitement: but the patients are still generally sensible enough to become tranquil when spoken to, and to converse rationally for a short time. In the melancholic form there is a general apathy and listlessness, mingled with anxiety about domestic affairs, and self-reproach for neglecting them; the patient is indifferent to food, very silent, and exhibits no affection towards her infant or her husband. The countenance is anxious, the brow wrinkled; fretfulness, vague suspicions, various delusions, and a disposition to self-destruction, ensue.

In the greater number of cases, there is no reasonable or manifest physical cause for the occurrence of the malady, beyond the mere circumstance of the previous delivery; and we have nothing more satisfactory to say of the physical cause of puerperal insanity, than that it proceeds from a peculiar state of the brain following delivery. Whatever this state is, it is certainly not acutely inflammatory, if inflammatory at all; and, as we see in mania in general, it does not bear active depletion. In some instances, it has seemed to depend upon, or at least to be associated with, irritations arising from a retained placenta, according to the patient's representation, and certainly with morbid and offensive uterine discharges, only ceasing about the period of recovery; the bodily and mental malady being prolonged eight or ten months. It has been said that one of the most frequent causes of puerperal insanity in the poorer classes is the application of cold, or premature exposure to cold, in the puerperal state; but I have not met with cases in which this seemed to have been the cause of the malady. The complaint appears to be more common in other countries, (especially in France,) than in this country; and I imagine the cause may often be connected with the habit, among the labouring classes of that

country, of allowing scarcely any interruption of their usual occupations to be occasioned by delivery. It is said, also, among the same class, frequently to succeed to weaning, or it should, perhaps, rather be said, to long-continued nursing. The debility thus induced is not unfrequently a cause of mental derangement, melancholy, and even imbecility of a certain duration, in the poorer classes of women in England, and in the poor Irish women resident in London. True puerperal mania has sometimes supervened on exhaustion produced by great uterine hæmorrhage, or by an imprudent venesection. The fifth case introduced in Dr. Gooch's admirable essay on this disease illustrates this occurrence; and I need scarcely tell you that all Dr. Gooch's observations are well worthy of your careful attention. You will find that many of the cases inserted in his essay strikingly illustrate his position, that puerperal insanity is a disease of excitement without power.

The combined influence of irritation and exhaustion is deemed the most probable cause of puerperal insanity by Dr. Marshall Hall; and we are indebted to that very accurate observer for insisting so forcibly on the rare character of real puerperal phrenitis, and on the non-inflammatory character of puerperal mania, except in rare cases; but I have not found intestinal irritation generally present in these cases.

I am strongly of opinion that in the greater number of cases of puerperal insanity, or in nearly all, the patients will be found to have been of a peculiar mental character before becoming pregnant, and even to have inherited a peculiar mental constitution. Certainly, I can scarcely recollect an instance in which the patient's parents were not highly nervous, or some of their relatives insane, or so eccentric as to be on the borders of insanity. In a proportion of our cases at the asylum, there had been more than one attack of insanity from the same cause.

Among the moral causes, anxiety, the fear of abandonment, and the pressure of poverty, may readily be supposed to be most conspicuous. Some of these causes operate more strongly when the mother is not married; and there is a brief delirium, very important in a forensic point of view, which sometimes occurs in young mothers, and especially in the unmarried, in which they try to destroy the child. Grief for the death of the child has been a cause in some instances; and fright, when in the puerperal state, has induced the malady in other patients. Some of our poor patients at Hanwell, affected with insanity after confinement, have come to the asylum apparently half starved; and, after their recovery, their discharge has been necessarily delayed on account of the appalling wretchedness to be faced by the poor convalescent the moment she left the asylum. This was the case with M. B—, a patient in the female infirmary in 1839. She was the wife of a poor tailor, and came to us when she had been insane some months, almost a skeleton. For some months afterward she continued in a very lively state of mania, danced, sung, and tore clothes and bedding to rags. Then the calmness of recovery began, but the sight of her poorly-clad and half-starved husband who came to see her, and to offer to take her to his house of toil and privation, produced a melancholy impression upon her; and even when this gave way to the natural wish to be at home, homely and destitute as it was, with her husband and her little children, we feared for a time to make the experiment; but at length she went out, and continued well.

It would seem as if, in the sensitive condition of the brain and nervous system after delivery, any strong impression might bring on insanity. Thus, epochs of national excitement, which exercise an influence on all forms of insanity, have been found to make the occurrence of it in the puerperal state more frequent. Esquirol records, that in the years 1814 and 1815,—years including the invasion of France, the abdication of Napoleon, his return from Elba, and final defeat,—the cases of this malady were more frequent than usual in France. In such periods, numerous depressing causes are brought into action at once, and some exciting ones. Public functionaries, and officers in the army and navy, with their families, as well as contractors and speculators of all kinds, are subjected to sudden and violent alternations of hope and fear, exultation, and mortification and despair.

If the moral shock is applied early, M. Esquirol remarks that the lochia generally become suppressed, and the milk is either not secreted, or becomes suppressed, or is diminished in quantity, or deteriorated, and that the insane state succeeds to these symptoms. I have found it difficult to verify the order of these early symptoms in our cases in the asylum, and I have thought the order different in the majority of the cases I have seen in private practice.

In a case lately admitted, that of S. B—, in ward No. 5,

the patient was attacked with scarlet fever eight weeks after confinement, and became insane.

Cases of puerperal insanity appear to afford a better prospect of recovery than any other. The duration of the disease is very uncertain; but, except in a small proportion of cases, it does not become permanent. This, at least, seems to be the general character of it in this country, and Dr. Gooch expresses the same opinion. The subjects of it will remain insane from one to six or eight months, and even for one or two years, and yet recover; but the chances of recovery diminish, as in other cases of insanity, in proportion to the length, of time that the complaint has lasted. Looking at our chronic cases of this kind also, nine in number, I find that five of these patients were upwards of thirty years of age when first attacked. The subjects of our recoveries have almost all been under thirty. Of course, some puerperal cases are brought to the asylum when already in a chronic state; but I believe the following statement to be nearly, if not quite, correct as regards the cases admitted since the commencement of 1840:—Patients with puerperal insanity admitted, 31—of whom 17 recovered, 4 died, 1 was removed, and 9 remain in an incurable state.

In private practice, the recoveries have seemed to me to be in greater proportion; and nearly every case of that kind which I have attended has been that of a patient from twenty years of age to twenty-six. In all the cases the recovery has been particularly gradual, sometimes taking place to a certain extent, and the intellect appearing to remain enfeebled for some time. Re-establishment of the uterine functions has commonly, if not uniformly, preceded the recovery, and an amended state of the uterine secretions, and the patient has regained strength and flesh. Those who were emaciated to a great degree, have become so stout as not to look like the same patients; but the restoration of the uterine functions, and other signs of improved health, may long precede perfect recovery.

It is remarked by Dr. Copland,—each article in whose valuable Dictionary contains as much information as if it had exclusively occupied his attention,—that the causes of puerperal insanity exercise a considerable influence on its curability, and that a much larger proportion of incurable and fatal cases occurs among the unmarried mothers than in the married. He also states, that about four patients in five recover, and that about one patient in eight dies, the deaths generally taking place within a month, or even within a fortnight, from the commencement of the attack.

Although puerperal insanity appears to be less manageable in France than in England, M. Esquirol says that more than one-half of the cases recover. A large proportion of recoveries occur in the first six months: of fifty-three recoveries mentioned by him, thirty-eight took place within six months. The livelier cases, as in mania arising from other causes, recover the best. It is very rarely a fatal disease, affording, as the same distinguished physician has also observed, a strong contrast to the frequent fatality of simple abdominal affections in the puerperal state.

No practical observation deserves to be more kept in remembrance than that the cases in which there is much fever, with a rapid pulse, are those in which there is the most danger—an observation supported by the great authority of Dr. William Hunter, and of Dr. Gooch. It is also of much practical importance to remember that puerperal insanity was considered incurable, and was, in fact, extremely fatal, under the management of the older physicians, who bled and reduced the patients excessively.

In the treatment of puerperal insanity, venesection seems, indeed, to be rarely necessary, or even admissible. When imprudently resorted to, it actually induces cerebral irritation. These cases are quite distinct from true phrenitis, in which life may depend on venesection; but phrenitis is not of frequent occurrence, and the severe pain, the great heat of skin, and greater activity of the symptoms, generally give warning of its presence. The diagnosis of acute phrenitis from hysterical affections, involving the head, is certainly sometimes perplexing, and perhaps, generally, difficult; but phrenitis is not the most probable event in the puerperal state, and mere cerebral irritation may be assumed, unless there is very strong evidence of a more active state of disease.

The application of leeches to the head is occasionally very useful, and in cases accompanied by pain in the uterine or ovarian regions, leeches applied to the abdomen are of the greatest service, the pain and also the mental irritation being relieved or removed after they have been once or twice resorted to.

Laxative medicines are generally required, and there are

cases in which they alone suffice, improving the secretions, and seeming to remove some obstacle to recovery.

In almost every case, except where the malady is connected with uterine hæmorrhage, the frequent use of the warm hip-bath is serviceable; and in many cases, the tepid shower-bath, or even the cold shower-bath, moderately applied, gives considerable relief. During its application, the lower extremities of the patient should always be placed in warm water. Cold applications to the head, a wet cap, or an ice cap, may sometimes be usefully resorted to, when heat of scalp, pain, or other symptoms seem to require it. Blisters are not very often necessary, particularly in the early stages of the malady.

If the disease has originated in exhaustion, an opiate, or even wine and other stimulants, may be required. In such cases, thirty drops of Battley's sedative liquor of opium given at first, and smaller doses afterwards, have been remedial. You will find this point of practice illustrated by the seventh case inserted in Dr. Gooch's valuable essay, already referred to. Occasional anodynes are certainly serviceable; as the extract of hyoscyamus, in combination with camphor, a few grains of each being given for a dose. The tincture of henbane, or the tincture of hop, given in some bitter infusion, with the addition of a little camphor mixture, seems a useful medicine in allaying restlessness and discomfort.

From what I have said of the half-starved condition of some of the subjects of this malady, in the poorer classes, you will be prepared to find that good food sometimes constitutes a very important article in the treatment; and I believe there are few cases of puerperal insanity in which good food is inadmissible. The previous habits of living of the patient must be considered; for delirium and fever may be occasioned by a sudden and extreme lowering of the diet. If there is manifest disturbance of the functions of the uterus, or a depraved state of the uterine secretions, the removal of this condition must be attempted by alterative and tonic medicines, aided by the hip-bath, and injections of a solution of alum, or of the nitrate of silver. Change of air is generally useful in such cases, and particularly a removal to the coast. The cerebral irritation, however, may still very probably survive for a time the uterine irritation which seemed to occasion it.

So much hope of cure existing in puerperal cases of insanity, our first and principal attention will naturally be directed to all possible means of effecting it. But from the very commencement of the malady we must not omit any of the attentions or cautions requisite in cases of acute mania, and spoken of formerly. All the accidents incidental to such a state must be kept in remembrance, or something may suddenly happen to disconcert, or for ever frustrate, the most skillfully devised medical treatment. After a time, these cases, in an asylum, become exactly like other cases of chronic insanity, and their general management is regulated less by an expectation of hastening the recovery than by a consideration of the importance of removing every influence by which recovery can be opposed.

In S. K—, in female ward No. 1, you see an example of a puerperal case of insanity in a chronic form. One week you find the patient tranquil, and the next week violent; but her strength gradually declines, and her paroxysms become less noisy, and in the intervals she seems to be becoming less sensible. She has been here three years, and is now thirty-eight years of age. On admission she had been but a few weeks ill, and was nursing an infant four months old; her own expressions on admission were, "insufficiency of food was the principal cause of that distress of mind which forms my complaint." She said also, that her milk began to fly away on a Sunday, when she was told to repent of her sins; and that then she was bled. She was thin and weak when admitted, and slept ill; and the pulse was 96, and feeble. Tonics and mild aperients were administered, and the warm bath. In two days one of her paroxysms came on, in which she ran about, sang loudly, and threw herself into theatrical attitudes, and her pulse rose to 120. Leeches were applied to the head, sedatives given, aperients and the warm bath resorted to, with occasional seclusion; wine was found to be always inadmissible, but good food and porter seemed at one time to benefit her. In her quiet state the pulse became 94, and she was occupied in needle-work. The ergot of rye was at one time given, as an emmenagogue, and it was thought with benefit; the uterine functions have long been regular, but recovery does not seem likely to take place. In M. B—, in ward No. 9, we have a very similar case in a woman now thirty-eight years of age, and insane five years: she became insane soon after the birth of her fourth child, and had been two years ill when admitted. E. G—, in ward No. 3, has been six years insane, and has

passed into a state of perfect dementia; she became insane when nursing a child six months old, the exciting cause being the loss of two of her other children by small-pox in one day. She had been, it was said, only two months ill when admitted, but was even then imbecile, and passing into her present hopeless state.

Few cases can be supposed to occasion more distress in a family than the unexpected appearance of insanity in a young woman, just when she, her husband, her relatives, and her friends, are full of natural joy on account of her having safely become a mother. A more than ordinary weight of anxiety is consequently thrown upon the practitioner, who is earnestly besought to answer interrogatories for which his ordinary practical experience has scarcely prepared him. He is questioned in whispers at the door of the bed-room, intercepted on the stairs, and cross-examined by an anxious assembly in the drawing-room, and has to satisfy many minds, all at once, concerning the probable duration and event of an attack, which has, in all probability, come upon him quite as unexpectedly as upon them. Sometimes the eccentricity of the patient may have led him to apprehend such a possibility; but generally it presents itself exactly when he is hoping that the anxious part of the case is at an end, and he has to meet new difficulties, against which he finds little aid in a house now thrown into confusion, and with monthly nurses seeming, in these new circumstances, without resources, and full of alarm. It is well if these perplexities do not drive him to hasty and injudicious proceedings.

If the symptoms which have occasioned this alarm in a private family do not readily yield to treatment, the delicate question of the removal of the patient from home is soon forced on the attention; for the trouble and inconvenience occasioned by such a case are extreme, and the danger is not trifling. The circumstances of the case, of which the subject is a young married woman, who will, in all probability, recover in a few months, and become the mother of a large family, perhaps without any return of the malady, make it desirable to prevent its being said that she was sent to a lunatic asylum, and to avoid the possibility of such a recollection acting, in future confinements, as a predisposing cause of future attacks. In all cases, therefore, the removal should be delayed as long as practicable. After some time, even when removal from home has not been rendered indispensable by the violence of the patient, it may become desirable as a mode of effecting a change of the circumstances surrounding her; and if the patient's fortune permits it, a journey, or removal to the coast, or any complete change of residence and scene, not productive of too much excitement, is the best measure that can be had recourse to. Such changes, and the impressions they make, are only advantageous when the malady has continued some time, and acute symptoms are at an end; all strong impressions are positively hurtful in an early stage.

Extreme difficulty is experienced, in general, in obtaining trustworthy attendants for insane patients in private habitations, and in providing against various dangers that are easily and systematically guarded against in an asylum. In many cases of long continuance, therefore, as well as in recent and violent cases, an asylum becomes really necessary, and for patients in moderate circumstances, and for the poor, an asylum alone offers a place of safety, comfort, and probable amendment, even from the beginning.

Although the utmost regard is due to the considerations which make remaining at home desirable, this must be blended with various precautions against accidents, which no false delicacy should prevent your insisting upon. The windows of the patient's bedroom should either be so secured as to open only five or six inches, either at the upper or lower part, or there should be wire blinds on the inside or outside of the window. The fire-place in winter should be secured by a wire or brass guard completely inclosing it, the opening of which should be fastened by a small spring-lock, all other locks being liable to be neglected by the attendants. Garters, strings, bell-ropes, articles of dress likely to be converted into instruments of self-destruction, as well as knives, scissors, medicines containing laudanum, should be carefully removed. In some cases it may even be necessary to have the room padded. But the great rule of all is, never to let the patient be left unwatched by night or by day. Attendants will sometimes watch carefully all night, and go down in the morning to fetch hot water, or for the patient's breakfast, and in this very short absence the patient may hang herself. Five minutes' negligence may thus occasion years of self-reproach. Everything should be brought to the room, or taken away by some one not in immediate charge of the patient. All this caution and circumspection may sometimes make the patient a little

dissatisfied; but generally she has a secret sense of the necessity for it, and will even acknowledge that she requires to be taken care of.

These precautions, more or less necessary in every case, and especially necessary when any suicidal intention is cherished, must be continued until convalescence is fairly established. Appearances of amendment, and of the abandonment of the suicidal intentions, are delusive, and the first opportunity of committing suicide is seized upon. Or the impulse to self-destruction returns in sudden paroxysms; or some alarming impression suddenly arises, as of fire, robbers, assassins in her room, and the patient will spring out of bed and throw herself over the staircase, or out of an open window.

In puerperal insanity I have generally observed a more than usual degree of sensitiveness in the patients as to the treatment adopted, particularly as regards removal from home; and for a long time after recovery they recur to it. There are no cases in which the character of the asylum to which they are removed, if they must be removed, is of more consequence. To be quite deprived of confidence, humiliates them; to be separated from their husband and children, afflicts them; they are horrified at the sight of mad people; and if they are unkindly received and put into restraints, their grief and indignation are extreme. I am speaking now of the feelings, and, I regret to say, of the fate, of women of a certain rank and fortune. The more happy pauper-patient feels less acutely, and is treated in county asylums with more kindness and consideration, and left more at liberty. It is in private asylums, almost exclusively, that the patient of more cultivated sensibilities, just removed from an indulgent or luxurious home, is treated with coldness and indifference, and, if suicidal, put into restraint at once. "They left me alone, without consolation, to my bitter reflections," said an accomplished lady to me, in describing her treatment, long after her restoration to society. "I thought I had committed crimes, and that this was my punishment; I wept bitterly all night, but my hands were fastened, and I could not even wipe away my tears. Excepting for a few minutes, I had no one to speak to in the day-time, but servants; I was put into a sitting-room with other patients; we were often left alone; one of them beat me, and I thought this also was a part of my punishment, and made no resistance." Let me entreat those who hear these lectures never to consign a patient to a private asylum without the strictest inquiry into the arrangement of the house; for all this cruelty is unnecessary, and it actually retards or prevents the cure.

Nor, when you have sent a case of puerperal insanity to an asylum, ought you entirely to lose sight of it. It ought, in such cases especially, to be considered, from time to time, whether the complete exclusion of the friends of the patient, of her child, or even of her husband, from her presence, be really salutary. I believe this exclusion is often too strictly enforced, and continued too long. The wishes of the patient on these points, when very urgent, may generally be complied with without risk, and sometimes with remarkable advantage. I have seen our poor patients at the asylum wonderfully revived by being permitted to see the child; and a return to the natural feelings of a mother is an omen of good not to be despised. For this reason, any occupation connected with the dress or amusement of the children is to be encouraged. In patients of a class above these, I have known instances in which the formal restrictions of old-fashioned private lunatic houses have produced most painful effects; and a departure from them has been followed by unexpected improvement in the patients' state of mind. These observations apply more or less to every form of insanity, but particularly, as it seems to me, to puerperal cases: the patients are gratified by everything that shows returning confidence in them; and the prospect of being allowed to see their friends, and of being soon again able to manage their own houses, is highly agreeable to them, and may be held out as a remedial auxiliary of considerable efficacy in inducing self-restraint and complete recovery.

There is much reason to fear that in every class of life these cases are often without the advantages required for alleviation and cure. I confess that I am often quite at a loss to comprehend for what reason, or on what principle, restraints have been used in some of the puerperal as well as other cases which are afterward brought to this asylum. Recollect, for example, the case seen by you this morning in female ward No. 4, that of H. L—. You see how gentle and delicate a person she is: and I declare to you that as she is now in that respect, so was she on admission a month ago; but she was then much agitated and timid to excess, and now she is composed and full of confidence in those about her. This

patient is only twenty-three years of age, is the wife of a carpenter, and was confined three months ago. At the very time of her delivery, a fire broke out in a neighbouring house; she was extremely alarmed, and became delirious. She was soon taken to an asylum, where a strait-waistcoat was put on; her hands were fastened by handcuffs, and she was also fastened to the bed. The right hand of this young woman is indelibly marked with the tight handcuff. She was only relieved from this torture when she was brought to us, nearly two months afterward. When admitted, the state of her senses was natural: she talked rationally, but was afraid of being again fastened or ill-treated: she expressed a great wish to see her husband and her friends, of whom she spoke very affectionately; and when assured that she soon should do so, and that she would not be handcuffed, or "jacketted," or tied to the bedstead, she seemed scarcely to believe us. This patient was sickly-looking; her head was very hot; the tongue clean and rather red: in the functions of the stomach and bowels nothing particular was observed; the pulse was 100 when she was lying down; the uterine functions were suppressed. Great pains were taken to tranquillize this young person; and restraint being never thought of here, her physical state received its due share of attention: leeches were applied to her head, and afterward, cold applications were continued for some time; some febrifuge medicines were given, and gentle aperients. Within ten days of admission, I find that I wrote "convalescent" in the brief history kept of this case: she was occupied in the fancy work-room, had lost all her fears, and had seen her husband. Three weeks more have passed, and she is so perfectly well, that she will leave the asylum in a few days. (This patient came to see us five months afterward, as our discharged patients frequently do; and she had remained free from every symptom of malady, the mark of the handcuff being the only vestige of what had passed.) My belief is, that there never was the smallest necessity for the use of any kind of personal restraint in this case; and that it was either applied in the heedless spirit which has led, in other cases, to the putting on of rivetted handcuffs, (of course never intended to be taken off until death,) or, that it is used for all the insane patients in the asylum from which she came, to save the trouble of looking after them.

In female ward No. 15, you saw M. B—, also a convalescent patient: she is a fruit-seller, twenty-seven years of age, and single, but was confined two months before admission, and became insane about six weeks afterward, when nursing. On admission, her manner was wild and confused, and she talked rapidly and incoherently. She appeared to have been very indifferently nourished, and was pale and sickly-looking; the pulse was 120, and feeble; the uterine functions were suppressed. She could scarcely be kept still, complained bitterly and loudly of having been ill-treated, and would not occupy herself in any way. Warm bathing, sedatives, and good food, with the other comforts of the asylum, soon produced their usual effect upon this patient, and in a few weeks she quitted the refractory ward in which she was first placed. Her gradual recovery followed: she is now generally at needlework, and will soon be discharged, having been only three months with us. She often speaks of the rough treatment which she experienced before admission, including an almost constant use of restraint.

Four years ago, a young unmarried woman, C. B—, was brought to the asylum, having become insane six weeks before admission, and soon after delivery. She seemed to be at once stupid and ferocious; her back and the lower extremities were excoriated and inflamed by lying upon wet straw; her habits had become uncleanly, and she often turned suddenly and fiercely on the attendants. She was placed in ward No. 8, and every possible care was taken of her. In a few days I fancied I perceived some signs of returning intelligence in this poor girl's countenance, and that she began to be sensible of the careful attention shown to her. The progress of the case confirmed these impressions. Never being put in restraint, her back soon healed, and her attention to cleanliness was recovered. By slow degrees her maniacal excitement subsided, and she began to converse. Many interesting circumstances marked her gradual restoration. Five months after admission, there was not a more neatly-dressed person than this patient at one of our Christmas parties. She had become tranquil and docile, and was extremely mild and modest in her demeanour; she had also been visited by her friends, in whose care we had the happiness to place her two months afterward, in a perfectly sound state of mind, and with a prospect of being comfortably settled. I do really believe that this poor girl would have been utterly lost long

before if she had not been liberated from restraints, and instead of going home well, would have added one more to the melancholy number of dirty and demented creatures found in asylums, and some of whom, at least, might probably, in some early stage of their malady, have recovered, as she did.

A year after the discharge of this patient, another victim of restraints, also affected with puerperal insanity, was brought to the asylum, as if to illustrate the evils of improper treatment, and her case excited much attention during the clinical course of that year. The patient, M. F.—, was a married woman, and she had become insane when nursing an infant, a year and a half before admission. The long duration of her malady was an unfavourable circumstance, but her miserable bodily condition was still more unpromising. I have seldom seen so wretched an object brought to the asylum; she was emaciated to the last degree; she could not walk, or even stand up; her wrists were wounded with the iron handcuffs she had worn; her ancles were ulcerated by the leg-locks; and her toes were in a state of mortification. She had been fastened down in bed, and had worn a strait-waistcoat, and I have not the least doubt that she had been half-starved. It required many weeks of care to improve her appearance, and to redeem her from wildness and misery; but although often excited, she was always perfectly harmless. At first we had little hope of her life, and scarcely any of her recovery; but she survived, and got well. Eight months after admission she was to be seen in the matron's kitchen: this was in Mrs. Bowden's time, whom I have already mentioned to you as indefatigable in her attention to all the terrible cases from which most people shrink; and the patient, emaciated and feeble no longer, had become indeed almost ridiculously stout, very lively, very busy, and approaching to perfect sanity. She retained a distinct recollection of her treatment before and after admission, and well remembered how painful were the handcuffs. She left us deficient of two of her toes, and also marked for life with the restraints she had worn before we saw her; but without the care given to her in this asylum, without good food and wine, without fresh air and liberty, she would long before have been in her grave. I said that this patient had been a year and a half insane. I fear, under the present system designed for those deemed incurable, she would have been pronounced so, and would have become so.

One more puerperal case I must mention to you, because, in its course, it comprehended every difficulty, and its termination was most felicitous. This was a recent case; but she had had a previous attack two years and a half before admission, in the same circumstances. H. C.— was twenty-eight years of age, and married. On admission, she was nursing an infant three months old; the milk was scanty, but not suppressed. Two years and a half before she had been found wandering about in Essex, and then pronounced to be labouring under milk fever. It appeared that she was unhappily married, and had become, since her marriage, subject to fits of nervous depression. The description of this patient on admission was, that she was tall, pale, sickly-looking, occasionally flushed; that she was excited, noisy, mischievously active, often dancing and singing, often shouting and striking, noisy and restless in the night. Her head was hot, the tongue was clean, the pulse feeble, the functions of the stomach and bowels not disturbed, the periodic functions of the uterus suspended. In this, as in most or all of the cases of puerperal insanity which I have seen, the temperature of the skin was scarcely, if at all, increased; the tongue was clean, and there was not the assemblage of symptoms to which we give the name of fever. I have already mentioned, that the presence of fever, with a rapid pulse, is a circumstance of highly unfavourable omen.

A month before the admission of this patient, we had discontinued the use of restraints at Hanwell, and we never had a case more difficult to contend with at a time when the attentions required, in lieu of restraint, could scarcely be enforced. I believe it was long expected that her case would bring about the downfall of our non-restraint system; but Providence ordered it otherwise, and averted some dangers, which I am convinced were now and then permitted to embarrass the matron and myself in our long contest for a victory, which we had both, at length, the gratification of witnessing. For eight long months this patient was almost constantly excited, by night and by day; talking incessantly; often swearing; untiringly active, running about the wards or the airing-court, and riding on the rocking-horses like one possessed. She used to fasten a quantity of coir to her hair, which gave her a kind of unearthly appearance; and she would stamp until one might almost have fancied that our solid stone floors would give way. Leeches were applied to

her head, and under the breasts, and to the pubes. The tartarized antimony, and sometimes the digitalis, were given until she was depressed, but not relieved: the antimony acted violently on the bowels; the digitalis lowered the pulse, and distressed, without relieving, the patient. Blisters were applied to the back of the neck, sometimes with benefit. Warm baths were frequently taken, and at one time the shower-bath was administered daily. The camphor mixture, with the acetated liquor of ammonia, and the spirit of nitric ether, was given without advantage; the tincture of henbane, and sometimes the acetate of morphia in full doses, with uncertain results. The head continued to be generally hot, and sometimes her appearance became changed and haggard. About two months after admission, the abdomen became so much enlarged that she was thought to be pregnant—a symptom which I have noticed in three other puerperal cases, in one of which, in private practice, the accoucheur was actually engaged. Nursing had been very imprudently prolonged in three of these cases. In all, the enlargement gradually subsided, and soon afterward the catamenia re-appeared, and this appearance was in two of the four cases followed by recovery. Occasional tranquillity, of short duration, had now begun to be observed in H. C.—'s case, and five months after admission the uterine functions were restored. She was still, for the most part, in a very excited state, often mistaking persons, and becoming very violent. She unfortunately began to mistake Mrs. Bowden (then Miss Powell) for some one of whom she was jealous, and she made some rather desperate attacks upon her. But at times she became for a few moments sane, threw her head on the shoulder of any of us who happened to be near her, called herself "poor H.—" and shed tears: she also often spoke of her child. But still she was generally noisy night and day, still destructive, still prone to throw things at those offending her. She had become, if possible, more active, and was also stronger; her head was still frequently hot, but not so continually or so excessively; her feet and hands were often cold, and the pulse seldom below 100. She was still restless at night, and her voice, from long and excessive exertion, had become hoarse and sepulchral. Until June, 1840, when she had been eight months under our care at Hanwell, she continued subject to extraordinary fits of excitement, and I might take up the space of a lecture by recounting all the strange things that were done, and all the difficulties that were to be met. Then, but by slow degrees, she became more tranquil, and at that time the matron found that the patient had become impressed with the idea, that if employed in her service she should recover, as other patients had done. The opportunity was afforded to her, and some days afterward, when waiting on the matron, she suddenly threw her arms round her neck, and asked her if she could ever forgive the attacks she had made upon her. She then told the matron, that after being a few days in her kitchen, it seemed as if a thick veil was all at once removed from her, and she felt well. Such sudden recoveries are very rare, but do sometimes occur. I have told you how great the satisfaction is of seeing a patient, lately insane, restored to all the life of the mind; and yet I have no power of describing to you the emotion with which, about the time just mentioned, I saw this patient, lately, and so long, wild and forlorn, sitting under one of the trees near the entrance to the asylum, reading, in the welcome shade of a lovely day in June, neatly dressed, and with every appearance of being perfectly sane. In a month afterward she was discharged; but she wished to continue in the service of the matron, and eventually accompanied her to Van Dieman's Land.

How desirable it must be, in a malady of temporary, perhaps of short duration, occurring in young women in the circumstances already spoken of, to prevent the acquisition of any confirmed maniacal habits, or the reception of any impressions that may subsequently leave emotions of sorrow or resentment in the mind, or a sense of humiliation, I need scarcely observe. The numerous instances of neglect, or of a want of kindness, politeness, or delicacy, incidental to an ill-managed asylum, are scarcely conceivable; and without careful attention, the patients will copy even that which they do not admire, becoming forgetful of the language and manners proper to their station: and all the future life of an amiable woman may be embittered by her recollections of this temporary degradation, and the recollection of the careless or coarse treatment to which she was subjected during her affliction. In every house in which the use of restraints is sanctioned, no matter in what circumstances, the attendants will fancy that they have a charter to domineer over the patients, to govern them by force rather than by persuasion, and to impose mortifications, and even restraints, whenever they please. In

public asylums such abuses can now scarcely exist; but in private asylums, and in the treatment of single patients, they are too common; and I know that both ladies and gentlemen afflicted with various degrees of mental infirmity suffer great aggravations of their malady from the insolence of attendants, who know that the patient's alleged violence will always be considered a justification of the use of violent means of control. In all cases, the practices arising out of such principles are productive of much unnecessary vexation and suffering; but in a case of puerperal insanity it should be our especial care that the patient should never have to recal a time when, to avoid a troublesome attendance, her sufferings were aggravated by all the offensive disregard that is surely and inevitably the accompaniment of bodily restraint; and when she was deprived, in her helpless and confused state, in her madness and her misery, of that careful and temperate superintendence which is always foregone in proportion as restraints are resorted to.

SOME ACCOUNT OF THE MODIFICATIONS OF THE "BANDAGE AMIDONNE"

OF
PROFESSOR SEUTIN; WITH OBSERVATIONS, ETC.

By J. CROWCH CHRISTOPHERS, Esq., M.R.C.S., London.

ANY modification or combination in the application of a principle, tending to extend its utility, to increase its value, or to ensure its success, naturally claims to share in its merit, and is almost unavoidably associated with its history and description; and any account of its use, wherein this is not contemplated, must, to that extent, be considered as incomplete. Under this impression, I beg to be allowed to fill a blank in the paper published in *THE LANCET* of the 28th of February, entitled, "A Few Observations on the Use of Professor Seutin's Starch Bandage in the Treatment of Fractures;" and to show that I have some claim to the privilege, I transcribe the following from Professor Seutin's work, "*Du bandage Amidonné*," published at Bruxelles in 1840:—

"Towards the year 1837, it (the bandage amidonné) was not only employed throughout Belgium, but it was known and duly appreciated in Paris, and through a great part of France. From that period it engaged general attention, not in controverting its utility, but in perfecting its application, starting with the great general principles its author had already propounded. In this manner certain parties devised several sufficiently important modifications, amongst which it is right to mention those of MM. Velpeau, Mayor, Laugier, Lafargue de St. Emilion, King, Christophers, and Van Meerbeeck."

M. Velpeau was the first to propose a modification of M. Seutin's method, which appeared under the title of "*Note sur un nouveau perfectionnement de l'appareil inamovible*," from which it appears that M. Velpeau had for some months substituted dextrine for starch, which he used as follows:—Take a quantity of dextrine and put it in a vessel, and begin to mix it by adding a small quantity of water very gradually: when it is well mixed, add to it a glassful of brandy, simple or camphorated. One or more unrolled bandages are put into this mixture, and are then applied. The advantages M. Velpeau attaches to the use of dextrine are the following: 1st, that it hardens very slowly, and admits of being altered or adjusted during twenty-four or forty-eight hours after its application, in the same way as a cylinder of soft wax; 2nd, the advantage it has over starch is due to the circumstance, that the starch has to be boiled, and that it is almost indispensable to use it warm; that it must be smeared over the bandage either with the hand or a brush: further, it is difficult to starch the bandage efficiently after it is applied, as certain portions of the bandage must then be left unstarched. Dr. Figeolet combats each of these positions, and concludes by observing that dextrine is not so readily procured as starch, that it is not so cheap, that it forms a mastic which is not more resisting, though it is harsher, and therefore more likely to punish the skin. The method of M. Mayor cannot strictly be termed a modification of the method of M. Seutin, although the principle, and the result obtained, are somewhat analogous, inasmuch as the patient is able to use the limb in a comparatively short time.

The modification of M. Laugier is very ingenious; it consists in using strips of paper, smeared over with starch, in the place of a bandage, which, when applied, form a kind of pasteboard mould, consisting of one piece. The paper is cut into strips, according to the length and circumference of the limb, varying from an inch and a half to two inches in breadth, and from sixteen to twenty-two inches in length; and a number of the longer strips are also used starched together in a longi-

tudinal direction, to add to the strength of the apparatus, forming, as it were, so many long splints, in imitation of the pasteboard ones used by M. Seutin. The advantages of this modification are the following:—the small cost of the material, the ease with which it can be at all times procured; the solid envelope it forms, composed of a single piece, moulded exactly to the limb, accommodating itself precisely to every irregularity on its surface, combining solidity and tightness with moderate thickness, and allowing the patient to move in bed to employ himself, and speedily to walk. The objections to it are, that it does not exercise sufficient resistance; that it is easily torn in the neighbourhood of the articulations; that the patient is not able to walk so soon as with the starch apparatus, probably because it is not sufficiently solid; that if it be lighter, it acquires this quality at the expense of strength; that it is more costly than starch, as it requires frequent removing, and a paper specially made; that it is difficult to apply, and does not always exercise the amount of compression required; and that it wants elasticity.

The modification of M. Lafargue has for its object the immediate solidification of the apparatus of M. Seutin, for which purpose he employed a mastic, composed of starch and plaster, aided in its action by pieces of wire. To give an idea of his method, I will cite a case of fracture of both bones of the leg in which it was employed; the wire was not used.

The patient being seated on a bed, a bandage, soaked in lotion, was applied from the toes to the instep, with compresses to the leg; a layer of bandage was applied around the leg, and smeared over with a thin coat of the mastic, over which another layer of bandage was placed, and again a layer of plaster. Graduated compresses were applied on each side of the tendo-Achillis, and two splints of pasteboard, previously soaked in water, and smeared with the mastic, were placed on each side of the leg; they were held in position by two layers of bandage spread with the composition: lastly, the whole apparatus was smeared over with it. Two hours after application, the mastic was not dry, though it had set, and was therefore inflexible. The same bandage remained till the cure was effected; all went on well, and the patient recovered without deformity. M. Lafargue saw that the pasteboard interfered with the process of drying, and substituted fine threads of wire, which he placed between the layers of bandage. By this method a fracture is instantly and permanently maintained in position, the apparatus being as firm the moment after it is applied as at any subsequent period, the wires being too slight to exercise any painful influence on the skin, and the patient is able to walk with crutches from the moment the apparatus is perfected. The objections urged against this method are,—First: the plaster and starch alone do not become firm immediately, though they become so more rapidly than when starch is used alone. Secondly: this effect is only obtained when the wire is used. Thirdly: the wire is not always easy to apply, and may either inefficiently confine the parts, or may exercise painful pressure. Fourthly: the plaster and starch make a very disagreeable compound, crumble and strew the bed, and give rise to dust. Fifthly: an assistant is required to mix the mastic as it is used; the moment it is left it is spoiled. Sixthly: this bandage is more expensive than the starch bandage, and the material not so readily met with. Seventhly: it is not so elastic as the starch bandage, whence difficulties arise after setting it. Eighthly: it presents a harsher surface to the skin.

The modification of M. Van Meerbeeck has for its object the rapid desiccation of the starch bandage, and is as follows:—After the fracture is reduced, a bandage is applied over the limb, then two moistened pasteboard splints, without starch, having the form of those devised by M. Seutin, and over them another bandage. The apparatus is then left to become dry, which takes place in a few hours. By this method a dry pasteboard mould is obtained, which may be strengthened by an addition of the same material, or by bandages smeared with starch, and a permanent and solid bandage is thus quickly obtained. It is thought that the above modification will prove useful in hospital and in civil practice.

The two last modifiers of the starch bandage are MM. King and Christophers: their method was published in the *Medical Gazette*, in February, 1839. In that paper, the authors, after deducing, from the consideration of the circumstances attending the formation of the callus, the superiority of the apparatus of M. Seutin in the treatment of fractures, state that it has one inconvenience, owing to its inability spontaneously to contract or to dilate, according to the condition and variation of volume in the parts it encloses.

M. Seutin here describes how this most desirable effect is obtained, and as I think this is more lucidly accomplished in

the paper referred to, I have transcribed its description from that source.

The talented Dr. King, my late lamented friend and master, thus speaks, in a lecture which he delivered at the Blenheim-street Dispensary, in the year 1838. "If we inquire how far the apparatus usually employed for treating fractures answer the indications required, we shall find them, in many respects, defective. The splints, which constitute the chief part of such apparatus, and on which we rely to keep the limb steady and motionless, cannot be made to press equally, and when the limb is surrounded by them, they are usually fastened, so that if any variation occur in its volume, the box they form is in nowise susceptible of enlarging or diminishing accordingly. Whatever padding is employed to fill up the hollows between the splint and the limb, the pressure can never be uniform, and it has the inconvenience of keeping the parts in a state of heat. Pasteboard splints can be made to fit more exactly; but even these cannot be made to wrap round the limb with great nicety. Impressed with these defects, Seutin conceived that a bandage, rolled round the limb with perfect exactness, might be converted into one entire hollow splint, case, or mould, sufficiently strong to prevent motion. He effected this object by applying successive layers of bandage, with a thick coating of paste to hold them together, between each layer, and when the paste is dry, the limb is thus encased in a box or mould, which exactly fits it. It is impossible to deny that this apparatus accords with the principles we have deduced, and fulfils the indications much better than those usually employed; it presses equally on every part, and possesses sufficient resistance to supply, for a time, the place of a bone; it is, however, open to the objection, that it does not expand and contract as the limb may swell or diminish. In some cases I believe it has been necessary to remove it, and the proposal to cut it down in several places, so as to convert it into several splints, first led to the modification we have just now introduced.

"This proposal was made by a medical gentleman whom I was attending for a fracture of the forearm. Very shortly after this, I was called to treat a fracture of the humerus. The limb was in a state of tumefaction, which made me fear the absolute confinement of it in Seutin's apparatus; and I employed straight separate splints, such as the French use. When the callus had become sufficiently strong to admit of some little motion, as the patient complained of the weight of the apparatus, and the cramped position of his arm, I applied the apparatus of Seutin; but as the limb was still tender, and swelled a good deal towards evening, I considered it would be advantageous to slit the apparatus open, along the inside of the arm, so that it might yield, and return upon itself according to the variation in the volume of the limb. It answered the purpose tolerably well, but was not sufficiently elastic to follow the limb in its changes of volume.

"In talking the matter over with Mr. Christophers, who was attending the case with me, it occurred to him, that if it could be made so, it would be a considerable improvement; and the means he suggested, which are as simple as ingenious, I immediately adopted.

"He proposed applying around the apparatus, slit open, a certain number of elastic straps made of Indian-rubber, with buckles, which admit of their being drawn to the requisite tightness.

"They are rather more than an inch wide, and rather longer than is necessary to encompass the limb. Four of these were applied, and converted the apparatus into a case sufficiently elastic to follow the changes in the volume of the limb, and yet of sufficient strength to afford the requisite support. It appears to me that Seutin's apparatus thus modified fulfils, as nearly as possible, and much better than any other, all the indications required; and it must be evident that it will be even a greater boon to the patient affected with a compound fracture than to one whose fracture is simple.

"In case the limb undergo a considerable diminution of volume, it will only be necessary to remove a longitudinal strip of the apparatus instead of opening it by a longitudinal incision; and the strip should of course be removed, or the slit made along that side of the limb on which the nerves and vessels exist, and which can least bear pressure.

"We deem it not improbable that the apparatus thus modified will be found useful in the treatment of many diseases where it is essential to keep the parts motionless, without exercising an unyielding resistance or pressure in the least degree unequal. Mr. Christophers proposes to employ it for that troublesome disease, a varicose state of the veins.

"I cannot help thinking, that, if made light, and applied with care, it will answer the purpose admirably. The results

of our experience of its employment in cases of fracture will appear in the following cases." Here follows the recital of three cases of fracture, treated by this modified apparatus.

Case the first was a fractured humerus, which did remarkably well.

Case the second was a fracture of the femur in a child eleven months old. In this case, the benefit of this apparatus was most marked, for in four or five days from the date of the injury, the child was playing on the floor with its brothers and sisters, without that care which the case appeared to demand.

Case the third was a fracture of the fibula, rather below its inferior third. The apparatus was applied immediately after the accident, ten hours after which the bandage was slit up, and the elastic bands applied. The day following, the limb had swollen, as was evinced by the margins of the apparatus being a little apart, but the patient was free from pain, and appeared comfortable; he kept his bed during four days, and was quite easy. On the fifth day he was able to move from his bed with crutches, the leg being kept in a scapulo-tibial sling: since this time he has been able to take more and more exercise, the swelling has subsided, and the lips of the bandage are in contact. He was perfectly cured. With the narrative of these cases Dr. King concludes his paper.

To this modification, neither Professor Seutin nor Dr. Pigeolet raise an objection, (at least I have failed to find such in their work) though till lately a very serious one existed, which was due to the fact that common Indian-rubber is so affected by temperature, and the animal secretion, that in the one case its elasticity is too much increased, in the other its texture is destroyed. To obviate these inconveniences, I now employ a material that is not affected by temperature, by animal secretion, nor by grease, and the elasticity and resistance of which can be regulated up to the most delicate point. An amount of pressure varying from pounds to ounces, by a simple arrangement, is equally easily obtained. The material I speak of is called "Vulcanized Indian-rubber," a patent preparation of Indian-rubber combined with sulphur. Either boiling water or grease may be poured over it, without in any way interfering with its properties, nor does it become hard by exposure to cold: this preparation has permitted me to make a further modification in the apparatus. I now propose to slit the plastic bandage in two, three, or more places, as the case may seem to demand, and instead of applying the Indian-rubber bands, (which, however, answered admirably,) I enclose the whole apparatus, thus slit into two or many strips, in a case or sleeve of the Vulcanized Indian-rubber, of a thickness equal to produce the amount of pressure or resistance I wish to maintain. The Indian-rubber case is so constructed, that it may be fitted to the size of any limb by means of a lace, which is arranged to correspond with that portion of the limb along which the principal nerves and vessels pass, so that in cases where pressure cannot be tolerated over their course by decreasing the strength of the lace, which is also formed of Vulcanized Indian-rubber, a diminution of pressure is effected through the whole length of the same. The object attained by this modification is, that the pressure produced and the expansion permitted will be equal throughout every part of the apparatus; whereas, when the bands are used, the resistance is greater, and, therefore, the expansion is less, over the identical spots occupied by them than over any other part. It is true I have not seen any inconvenience arise from this circumstance, but the great advantage the Vulcanized Indian-rubber sleeve holds over them, and other methods, in addition to the power it possesses of accommodating itself to the changes of volume in the limb, consists in allowing the section of the bandage into one or many parts the moment it is applied in its wet state, thereby putting aside all risk of injury by pressure, should the limb swell before the bandage dries, a process that occupies some hours, its elasticity being sufficient to keep the slit portions of the bandage in intimate contact with the limb during that period. The extension, however, must be kept up till the bandage is dry and hard, a point I have always seen overlooked in applying Seutin's bandage in this country. Where the sleeve I have described is used, this may be accomplished by a long lath splint acting on the principle of Desault's long splint, and retained in the necessary position by a bandage till this takes place.

In cases where the sleeve cannot be procured, the bands answer well, and with a piece of Vulcanized Indian-rubber any person, in a few moments, can make them. The comfort and advantages to be derived from this apparatus must, I am convinced, be felt, or at least seen, to be duly appreciated.

Some space in the paper of Mr. Markwick, in *The LANCET* of the 28th February, is devoted to the often mooted and

always controverted point, at what period should the "bandage amidonné" be applied?

The modifications I have proposed, and practised, solve this question, or rather, render it a question no longer, inasmuch as the apparatus is so constructed that it will follow any augmentation or diminution of the parts it encompasses; therefore, should swelling arise, or, having arisen, disappear, the apparatus will accommodate itself to both cases, and that, too, without any decrease of support in either. Should the bandage be applied to a limb enormously swollen, and should the swelling suddenly subside, it will be necessary to remove a strip from the whole length of the same, equal in breadth to the diminution of the limb, in order that it may not lay loose in the apparatus, and that correct coaptation may be maintained.

This apparatus would, I think, be invaluable in cases of varicose veins, scrofulous joints, and in that kind of sore legs now treated by strapping, as it is easy to remove, and to re-apply it uninjured, and the only difficulty would be to protect it from the discharge.

In conclusion, I must observe that, in addition to the great saving of time and trouble to the surgeon, and the independence, ease, and comfort it affords the patient, combined with the happy results hitherto attending its use, this apparatus fulfils the divers indications in the treatment of fractures better than any other yet proposed, as well by the facility with which it is applied, as in the small cost of the materials composing it—circumstances that render it worthy the attention of public benevolent institutions, where the alleviation of human suffering is a paramount consideration, and where economy in time is as essential as economy in expenditure.

Upper Montagu-st., Montagu-sq., March, 1845.

CONTRIBUTIONS

TO

THE PRACTICE OF MIDWIFERY.

By J. HALL DAVIS, M.D.,

PHYSICIAN TO THE ROYAL MATERNITY CHARITY; LECTURER ON MIDWIFERY AND THE DISEASES OF WOMEN AND CHILDREN.

PROTRACTED LABOURS COMPLETED BY CRANIOTOMY; WITH ILLUSTRATIVE CASES, AND REMARKS.

A first labour, patient's age forty-two; liquor amnii discharged in three hours from commencement of labour; orifice of uterus obliterated in eight hours from the rupture of the membranes; the pains having continued thirty-one hours from the escape of the "waters," gradually increasing in strength and frequency, then ceased, but not suddenly; head had been impacted in the brim of the pelvis during twelve hours, when delivery was accomplished by the crotchets; rigidity of the perineum and contraction of the os externum were such as to require the use of the osteotomist; importance of the bandage during, and for a time after, instrumental delivery; atony of the bladder for eight days after, that organ having been distended during the labour.

DECEMBER 18th, 1845, Four P.M.—I was requested by a surgeon in Camden-town to visit a patient, aged forty-two, upon whom he was then in attendance. She was of a stout habit, firm fibre; her previous health had been good. She was in labour of her first child; true pains had first set in at three A.M. on the previous day, (Wednesday;) the membranes broke in three hours after, (six A.M.) At two P.M. of the same day, the orifice of the uterus had become fully obliterated, so that no longer could any portion of the lips of the uterus be felt. The pains entirely left at one P.M. (Thursday,) three hours before my visit, but not suddenly, having latterly gradually lessened in force and frequency.

I found the expression of countenance good; the face congested from the effects of previous efforts; skin moist and hot; pulse 100 and soft; no heat of vagina; a puffy protrusion of scalp; the head impacted, the bones felt slightly overlapping; the sagittal suture coursing from the region of the left acetabulum backwards; obliquely, in the direction of the right sacro-iliac synchondrosis, to which the large fontanelle was directed. The parietal protuberance of the right side most dependent and anterior. I was informed that the bladder had responded regularly. Agreeably to my universal practice, however,—which I was, indeed, the less disposed to forego in this case, on finding the tumour of a distended bladder above the pubes,—I passed a male elastic catheter, and then having drawn off a pint of urine, (from which proceeding the patient expressed much relief,) and ascertained that the rectum was empty, I undertook the delivery by the crotchets.

From a consideration of the duration of pressure which the parts had already sustained, I was indisposed to add any risks, which might fairly be expected to result from their application, to make a trial of the forceps in the first instance; moreover, the impaction of the head, the rigid condition of the perineum, and great contractedness of the os externum, further forbade their employment. The centre of the presentation was perforated by Smellie's scissors, modified, as I use them, the brain freely evacuated, and a purchase then made by the guarded crotchets upon that part of the head opposite the sacro-iliac junction; the edges of bone were carefully sheathed by scalp. Traction was now made at intervals, no pains being present to assist, and the head was thus gradually brought into bearing upon the perineum. The head, diminished as it was by the removal of its contents, could not be brought through the contracted os externum, even now, without exposing the perineum to imminent risk of laceration; that structure was tensely put upon the stretch at each effort of traction. To shorten matters, and to avoid all chance of a rupture ensuing, a few sections were removed from the cranium by the osteotomist, when the delivery was safely completed, of a male child of large size.

A broad bandage, previously loosely applied round the abdomen, was gradually tightened, as the successive parts of the child were extruded. Within an hour after the birth of the child, the placenta not being thrown off, and some hæmorrhage occurring, the hand was passed into the uterus. The placenta was found to be retained by an hour-glass contraction of the uterus, and was only partially detached. It was removed carefully and entire in about ten minutes, the uterus was left permanently contracted, and the hæmorrhage ceased. The bandage was readjusted with a compress, and the patient was ordered not to be removed from her present position, which we carefully arranged before we left, for four or five hours.

Friday, One P.M.—The patient had had some refreshing snatches of sleep during the night; slight tenderness of the abdomen; lochial discharge scanty; pulse 110, not full, nor hard; face flushed; has had occasional chills; has passed no urine; it was drawn off by the catheter. The foregoing state of things, taken in connexion with the patient's habit of body, led to the recommendation of the abstraction of blood, as a precaution against inflammation, which might fairly be anticipated from the pressure which the parts had sustained. Solution of acetate of ammonia and camphor mixture, containing in each dose one-sixth of a grain of tartar emetic and ten minims of ipecacuanha wine, were ordered every four hours; and at night, calomel four grains, Dover's powder ten grains; to be followed by a black draught in the morning. I was afterwards informed by the medical attendant, that his patient had fainted upon the operation of bleeding, rather from the sight of the blood and the fright which the thoughts of being bled had occasioned her, than from the quantity obtained; that, nevertheless, it had not become necessary to repeat the measure; the circulation had afterwards remained at its natural standard; there had been no recurrence of heat nor of tenderness. The tartar emetic had nauseated; the lochia had become free.

Dec. 24th. I found the patient without pain; tongue slightly coated with a white fur; pulse soft, 85; urine drawn off daily. The progress of the patient from this date continued satisfactory. Beyond the occasional exhibition of an aperient, and the daily introduction of the catheter up to the morning of the ninth day, when the bladder responded without difficulty, nothing further happened to require attention. On the 16th of January, my friend favoured me with a call, and reported that his patient was rapidly recovering her strength, and had been able to leave her room in pursuit of most of her ordinary duties for the last week.

Remarks.—The disproportionate size of the child was the occasion of the difficulty in the foregoing case. The age of the patient for a first parturition was unfavourable, and further furnished an obstacle under delivery by the crotchets in the form of a rigid perineum, with contraction of the external orifice of the vagina, and to an extent so unusual as to require, even after the great reduction of the bulk of the head by a removal of the cerebral substance, the application of the osteotomist, that the delivery might be effected with perfect safety to the maternal tissues.

The previous trial of the forceps, which we sometimes can venture upon, was here not justified; had they been applied, inflammation and sloughing of the vagina, which were fortunately prevented, would in all probability have been the sequel.

The replies which were made to my inquiries after the state of the bladder, contrasted with what was found, shows the importance, before having recourse to instruments, of the rule, which should never be neglected, of introducing the catheter. As I have elsewhere stated, a pliant and long catheter—the male elastic catheter—is the instrument always to be preferred when the head is impacted; the longer instrument is required, since the neck of the bladder is drawn up and elongated, and its sides are brought together by the pressure of the head, thus adding a considerable length of canal to that of the urethra, for the catheter to traverse before the urine is reached.

The bandage which was applied loosely around the abdomen, and tightened gradually as the parts of the child in succession were brought into the world, I deem a precautionary measure of no mean importance, more especially in these cases of obstructed labour, where the resistance to the expulsive efforts of the uterus, and to the accessory powers of parturition, has been great in amount, and of many hours' duration. In the first place, it restores in some degree that pressure which the vascular trunks of the abdomen and the organs within the chest have been sustaining, and the loss of which, on the birth of the child, has been known to be followed by syncope and collapse, and that quite independently of hæmorrhage. Indeed, the sudden escape of a very large quantity of liquor amnii has appeared to be sufficient for the production of fatal syncope; and we know, moreover, the effect to be apprehended of the removal of the fluid in dropsy, if due support is not supplied by the roller, in place of that by the fluid which has been discharged. In the second place, the bandage, so applied, is important, by insuring a more uniform and efficient contraction of the uterus after delivery, for the prevention of hæmorrhage. In consequence of the pressure exerted by the impacted head on the tissues lining the pelvis, the bladder did not resume its contractile power until the ninth day, and we need not have been astonished, had the recovery of its tone been deferred to a later period.

The intended effect sought by the bleeding on the day after delivery was secured at a very moderate loss,—I believe four or five ounces at most,—so that we must infer that the syncope arose from the emotion of fear, and not from depletion: the fainting, however, thus produced, seemed, in this case, not the less beneficial; the fever and the pain, whether inflammatory or not, never recurred. In all probability the nausea induced by the tartar emetic contributed, in some degree, in obviating the necessity for any subsequent repetition of the bleeding. I think I have before, in former communications, alluded to the value of this remedy as an antiphlogistic during labour and the puerperal state.

A first labour, patient's age, twenty-two; liquor amnii escaped after thirty-six hours of labour pains, repeated at variable intervals, and in varying strength; orifice of the uterus then fully dilated; head presented; left parietal protuberance most dependent and anterior; head arrived at pelvic outlet in twelve hours from the "waters" escaping, and twelve hours prior to delivery; bladder distended above the pubes; relieved after delivery,—why not before, explained; delivery by the perforator and guarded crotchets; no active treatment pursued or required after delivery; bladder responded on the sixth day; no injury of structure sustained; recovery in the usual period.

December 23rd, nine P.M., I was, at the instance of her medical attendant, sent for to a healthy young person, a native of Berkshire, and who had not very long arrived in London for the first time, aged twenty-two, in labour of her first child. I accompanied the anxious husband immediately, who informed me that his wife had been in labour for many hours. The report on my arrival was, that the pains of labour had commenced on the previous Sunday, between three and four A.M., from which period to the time of my visit the pains had recurred at varying intervals, and in varying strength; that the liquor amnii had come away spontaneously at six P.M. of the day before, (Monday,) the mouth of the womb having then undergone complete dilatation; that the head was then very gradually propelled into the pelvic cavity, and had reached the outlet of the pelvis at nine this morning, (Tuesday.) I found the parts not heated; the skin moist, hot; but the pulse quiet and soft; no headach complained of; a considerable protrusion of scalp, and very firm impaction of the head: the sagittal suture coursed obliquely backwards, and to the left sacro-iliac junction, the small fontanelle could with difficulty be reached behind the right ischio-pubic ramus. The pains I found frequent and strong, and my friend informed me that they had been so during the entire day, but that there had been no abnormal pain accessional to the proper par-

turient pains. The patient had not been able to pass water for several hours, which circumstance added to the impaction of the head (in the outlet) for about ten hours, the birth not taking place, notwithstanding a long continuance of vigorous uterine action, led to my being called in to the case. The bladder, by the hand applied to the hypogastrium, was felt considerably distended. My friend had endeavoured by the ordinary female silver catheter to relieve his patient. Employing different varieties of the instrument, not omitting the male elastic catheter, which had never yet failed me, I was equally unsuccessful. The catheter passed in a certain distance, about one inch, but owing to the pressure of the head on the tract of the urethra, it was there stopped. An expedient in difficult cases, which I have never found fail—viz., a bearing pressure made upon the head with the fingers properly disposed to apply it, in a direction upwards and backwards, did not enable me to pass the catheter onward along the canal. The impaction of the head precluding any other mode of delivery than that by the crotchets, and the head being already at the outlet, I was nevertheless able to relieve the patient with but little delay. The head was lessened, a free evacuation of the contents of the cranium secured; the bones fully collapsed, and the delivery was easily accomplished; the catheter was then introduced with facility, and the bladder emptied of two pints of urine of high colour. Had the head, after lessening in the way I have explained, not come readily, or had there been the least delay or difficulty in delivering the trunk of the child, I should have passed the catheter, which then would have become perfectly practicable, after discharging the contents of the skull. A band previously thrown loosely round the abdomen was now tightened, and firm pressure was made upon the fundus of the uterus, but the placenta not being yet thrown off, and no hæmorrhage occurring, the patient was allowed to rest quiet for an hour. That time having elapsed, my friend undertook the removal of the placenta, which operation he accomplished very dexterously, under circumstances of considerable difficulty, there being extensive adhesion of the mass to the uterus, and hour-glass contraction of the latter. The womb contracted well afterwards. The patient was left in a comfortable state; she was a little disposed to be talkative through her excess of joy at her delivery. Quietness and silence were enjoined as the best for her, and no opiate was given.

At our visit the next day, our patient was reported to have had good sleep; there was no pain; the lochial discharge was ample and healthy; the bowels had acted, from castor-oil exhibited during the labour. Pulse soft, 100; skin moist; tongue slightly furred; no headach; no tenderness of the abdomen; urine retained. The catheter was introduced; a saline diaphoretic, containing tartarized antimony, already commenced, to be continued.

No symptom requiring any active treatment occurred. The tartar emetic given at intervals of six hours kept the bowels gently open during the first three or four days. After that, that medicine being discontinued, as having fulfilled its intention, they were moved by the compound colocynch pill combined with calomel, which did not require repetition. The passing of the catheter was necessary until the sixth day.

Remarks.—This patient's age was favourable for a first parturition. The condition of her health was also in her favour. The difficulty was confined to the bony outlet of the genital passage, the perinæum was soft and lax, and offered no obstacle. The head had been at the outlet, and actually impacted, during ten hours. It was surprising, under the circumstances, that no heat of parts, nor fever, had been set up. The free performance of the function of perspiration probably afforded to the patient the necessary safeguard against such a result, and against any ulterior consequences.

This instance of failure in the introduction of the catheter under labour, is the only one which has occurred to me in my experience in difficult labours, extending over a period of fourteen years. I see, in the last report of the Parochial Lying-in Charity connected with St. Giles's Infirmary, that the physician-accoucheur, Dr. Reid, met with a similar impossibility of relieving the bladder prior to delivery. In the circumstances, however, of the two cases, there was this difference;—in the parochial case, (see the report, *Med. Gazette*,) the head was simply arrested; there was room for the application of the forceps, and by them was the delivery accomplished. In the instance which I have above detailed in my own practice, the head had been impacted in the outlet of the pelvis during several hours; the head with its integument so accurately fitting the space behind the pubis, and that at the apex of the pubic arch, that there was not even room left for the passage of the smallest catheter.

The atony of the bladder after delivery was sufficiently accounted for by the previous pressure and distention sustained by it. The sound rustic health of the patient probably led to an earlier restoration of the tone of the organ than might, under other circumstances, have been expected.

Russell-place, Fitzroy-square, Feb. 1846.

ESSAYS ON GENERAL PATHOLOGY.

By J. BOWER HARRISON, Esq., M.R.C.S.L., &c.,

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No. XVIII.

OF CUMULATIVE DISEASE.

BESIDES the combinations of disease which we have already noticed, there are others of a more complicated kind. In these cases, many derangements contribute to produce a common malady; no lesion may be strikingly prominent, and the disorder is rather important as a whole, than considered in regard to its constituent parts. Complicated diseases are, for the most part, occasioned by the gradual accession or accumulation of morbid states. Many conditions of disease leave sequelæ of a permanent nature, so that every subsequent invasion of disorder is added to a constitution already impaired, until, if we may use the expression, the body is saturated with disease, or death terminates the career. In complicated maladies, too, it commonly happens that the molecular constitution of the body is altered, owing to the general disorder of its various functions; thus a common basis is, as it were, afforded for the different morbid states, and the whole is known as a "breaking up," or "failing of the constitution." Such complication of derangement lowers the vital powers, so that every little supervening malady becomes of the utmost consequence. An attack of erysipelas or bronchitis, for example, may prove highly dangerous, not from the severity of the complaint, but in consequence of the previous condition of the system. By the terms cumulative disease, then, which I have prefixed to this essay, I would signify the presence of a number of morbid conditions, which have induced or succeeded each other during the course of life. From this definition, then, it will be evident that the best instances of cumulative disease are to be found in old age, though the earlier periods of life, unfortunately, often afford melancholy examples of it. When a man has arrived at an advanced age, or endured great hardships and privations in the course of life, he must have suffered from many complaints. Now the recovery from these different complaints is seldom perfect, and therefore many organs may be deranged; and no classification of disease will furnish a name which can properly express the condition in which he is left by them. The hospital physician is quite familiar with instances of these complex affections, for the majority, but by no means all of them, are found amongst the poor. The sufferer does not always—indeed, I may say seldom—make much complaint: having long been accustomed to morbid impressions, he ceases to have an accurate remembrance of healthy sensations, and, in some instances, the sensibility of the body is considerably impaired. How frequently the physician, in the inspection of the dead, discovers a lesion of which the patient had never complained! How often he finds the remains of disease which had never been suspected! How many minor changes, upon which little stress is laid in the enumeration of pathological appearances, are, in reality, important links in the chain of disease! How often the sum of many inconsiderable changes sinks the powers of life, or gives rise to some more formidable lesion! In common conversation we hear a variety of phrases used, to express—vaguely indeed, but still to express—the existence of cumulative disorders. We hear of people of shattered constitutions, and people whose health is said to be broken up, who are "quite done," as the phrase is; and these states are deserving of careful analysis, and are, no doubt, more regular, and capable of description, than has hitherto been imagined. In most of these cases, the changes produced by the advances of age form a part of the cumulative malady; but yet it is not simply age, but age in combination with disease and depraved molecular alterations, which forms the state we wish to portray. A great proportion of such cases is connected with disease of the chest—more than two-thirds of them are probably associated with chronic bronchitis.

There is one form of this complaint which often goes by the

name of asthma; at least, the epithet asthmatic is commonly applied to it. The term "asthma" is often applied to cases of chronic bronchitis; but the form of disease to which I allude is, in reality, a complex one, of which bronchitis is only a part. The symptoms by which it is characterized are so common to us, that they are scarcely thought to be deserving of description. The complexion is pale, and the lips bluish; the skin hangs in little bags under the eyelids, with a kind of anasarca appearance. There is often a wheezing, and always a degree of distress in the breathing, especially upon taking exercise. The legs are generally more or less oedematous; the pulse is small and thready, and the muscular tissue is flabby, and incapable of long-continued exertion. Great debility is complained of; it is, perhaps, the only complaint made, except it be the cough and difficulty of breathing. The appetite is, however, impaired, the sleep disturbed, and every function badly carried on. The lungs are generally found, after death, to be oedematous; the structure of the heart flabby; the muscular tissue pale and watery. But there is not often any very important structural lesion, and the whole must be taken as a whole, to give us a proper insight of the disease. In the out-patient practice of the Manchester Infirmary, there are many people in this condition, who come from month to month, and even from year to year; they take their diuretic mixture or pill, and assert that their existence is almost dependent on it. Some day they are missed from the accustomed throng; a fresh accession of disease has supervened, and death soon closes the scene. Exposed from day to day to the inclemencies of the weather and the hardships of poverty, it is impossible not to commiserate their fate. There would be no objection to the epithet asthmatic, if it were not also employed in a different signification. Whatever term is made use of, it should be fairly understood to comprehend a complex disorder. Let it only be known that the blood is impoverished, the circulation embarrassed, the functions of the brain disordered, the secretions impaired,—in a word, that the whole system is more or less out of condition, and it matters little by what name it is designated.

It must be allowed that there is some degree of reluctance in the profession to the investigation of such cases. They are conceived to be devoid of interest, and it may be imagined that little credit can arise from an inquiry into their nature. It is quite true that in most instances the relief can only be very partial; but I consider the subject full of interest in a pathological view, and that it would well repay minute and patient observation. No doubt many of the complicated maladies are more regular than is supposed, and capable of being reduced to definite descriptions. It would be well, when a person presents himself to us after repeated illnesses, to note carefully the various changes which the system has experienced, and analyze the combination which is present. In this way the workhouse and the gaol would furnish a rich field of inquiry, not because of rare accidents and curious diseases, but inasmuch as they are the receptacles of the aged and the poor, the destitute and the miserable, and the guilty, not the less to be commiserated because they are such. It is because in these places not a few terminate a life of toil and anxiety, after struggling with a succession of diseases, and, perhaps, paying the penalties of crimes to which they have almost been driven by hardships, or tempted by the urgency of their wants. It would be well if more attention were given to the diseases engendered by such circumstances, and a more strict analysis rendered of their shattered constitutions and complicated maladies. There can be no wonder that diseases are of a compound nature, where vice and profligacy are combined with destitution, and life is rendered irksome by incessant labours for a precarious subsistence. But we need not look to such instances alone; diseases are seldom simple, and where they are so, it is rather the exception than the rule.

Many illustrations of cumulative disease might be found in connexion with what is called the plethoric habit, using the term in its more frequent application. Let us suppose the subject to be a man of corpulent figure, with a short thick neck; that he is living on a generous diet, and partaking largely of malt liquor. In time the mucous membranes become disordered, pimples appear on the face. Bronchitis arises from a loaded or congested state of the pulmonary vessels. The blood is not now sufficiently decarbonized. The face has a purplish cast; the lips are blue, and the intellect becomes, as it is termed, muddled. The venous system generally is gorged, the portal circulation impeded, the mesenteric vessels are congested, and hæmorrhoids ensue. The action of the heart is deranged by the embarrassment of the circulation, and the brain oppressed by the impeded transmission of the blood. Singing

in the ears, or deafness, often attends this affection. It is fortunate if a diarrhoea or hæmorrhoidal discharge relieve, from time to time, this condition of the system. The patient may continue to follow his ordinary occupation, with more or less difficulty, it is true, but still without considering himself dangerously, or, indeed, seriously ill. He may or may not have consulted his medical adviser; but the malady having gradually crept on, he is scarcely able to compare his present state with his former feelings, and simply says that his breath is shorter than formerly, or that he is sooner exhausted, and not so strong. Thus he continues from year to year, living, as it were, on the borders of apoplexy. Now this state is not simply one of plethora, nor is it attributable merely to a bronchial affection, nor to a congested liver, or impeded circulation in the heart. The whole is to be taken into account as a whole, and, as such, is chiefly deserving our attention. At length, the patient indulges in a slight excess, and dies of apoplexy. But there are a thousand cases of apoplexy which are sequent to a different train, and therefore the term only describes the mode of death common to many diseases of a different nature. It is important, however, to consider the procession of morbid actions which has gone before. We may speak nosologically of apoplexy, but we want something more in the treatment of disease,—we want an investigation and description of those combinations which issue on that effect; and as those combinations are, no doubt, tolerably regular in a great number of cases, they are deserving of an attentive consideration. Such complex maladies, however, are often thought unworthy of attention both by the patient and his medical adviser—by the former, because of his ignorance, and the latter, because of his indifference.

Many examples of these general failings of the constitution, or complex maladies, are connected with that form of complaint called Bright's disease of the kidney. "It was mentioned," says Dr. Christison, "in speaking of the pathology of the disease, that it seems to engender an infirmity of constitution, which renders the body prone to diseases generally. This is shown by the frequency with which the kidneys are found more or less affected after death in a great variety of other disorders, although their condition may not have attracted notice during life, and although none of the more strictly secondary affections showed themselves. In particular, it would appear that granular degeneration of the kidneys, at a moderately advanced period of its progress, renders the body peculiarly open to the invasion of some epidemic disease."

Some cases, characterized by a deficient evolution of the catamenial functions, are more properly to be regarded as general or complex diseases than mere instances of depraved or deficient menstruation. An imperfect nutrition of the ovaries is only one part of a derangement, which is co-extensive with every part of the constitution. The patient is generally of a pale leucophlegmatic appearance, with a great preponderance of the cellular tissue. This gives a certain degree of fulness to the figure, whilst the muscular structure is proportionally at fault. The pulse is very rapid and feeble, and there is a bellows murmur audible over the region of the heart. The slightest exertion is attended with dyspnoea. The appetite is defective or depraved. Œdema of the legs, and anasarca of the face, after a time, make their appearance. The uterus and mammae are scarcely developed. Dropsy, at length, assumes a very serious aspect, and the patient sinks under this enfeebling combination.

Poverty, with all the various evils consequent on it, gives rise to many forms of disease, which have yet to be described. Deficient food, the want of fresh air, and light, and exercise, and, above all, an anxious mind, often bring the patient to the verge of the grave; but yet without any nosological disease. The hollow eye and cheek, and the faded form, tell of days of grief and hope deferred, which have written their history in lines of disease which can never be erased. Thus are the words of the poet realized, that some perish

"of wither'd and of broken hearts;
For this last is a malady which slays
More than are number'd in the list of fate,
Taking all shapes, and bearing many names."—BYRON (*Manfred*.)

In the female, the consequences of hardship and poverty are still more terrible. I have not unfrequently seen a poor delicate female, with an infant at her breast, which seemed growing into childhood only to bring its mother to an early grave. With the failure of the physical powers, the mind becomes a prey to lassitude, the sexual functions lose their influence, and all the characteristics of beautiful and healthy womanhood are gone; young hope is destroyed, and the rude

hand of misery presses heavily on its victim. In this state, the body is little capable of resisting the influence of external agents; inflammations or congestions arise, and obstruct the circulation, already imperfectly carried on. A general dropical effusion may carry off the sufferer, or she may yet live to experience the results of a more chronic train of disease.

But it may be said, that in describing these combinations of morbid conditions, I am only going over ground which is common to all diseases,—that all complaints, at least those which advance to a fatal termination, become complex in their course. If it be so said, I heartily concur in the opinion, and it is to this end that I have wished to bring the reader. I would desire, however, to set apart, as cumulative diseases, those which are not characterized by any prominent lesion, lest the disease, in passing without a name, should pass also without attention. I have often been surprised to find how little the medical man could elicit from patients suffering from complex maladies. It must be, that the appreciation of buoyant health is gone, and that they consider the presence of actual pain as the only test of disease. When the mind has lost its energy and its elasticity,—when the blood is watery,—when the muscles are pale and flabby,—when the vitality is low, and the molecules too slowly renewed, and the tissues of some organ probably replaced by tubercular depositions,—we may have no urgent symptom, not even a just estimation or consciousness of derangement; but have we no disease? We may have no name suitable for the combination; but shall it, therefore, escape our attention? It is true, it may not spread like an epidemic among the rich, but it is every day to be found in the cellar and the garret, and in the houses of the miserable and the guilty.

It would add greatly, then, to the correct understanding of disease, if the train of disorders which precede each final lesion were as much objects of attention as the lesion itself. Great advantage would accrue from a careful examination of the manner in which complex disorders are gradually built up. But, after all, it is not possible, in every instance, to unravel the web of disease, because our necropsical examinations cannot instruct us as to all that has passed; they merely show us, as it were, the foot-prints where the invisible spoiler has been at work. By the examination of the dead, we find the effects of morbid actions; but we cannot always scrutinize the actions themselves, nor say how their combined operation influenced the animal economy,—we cannot always say how the lesions originated, nor how far they were connected. It is certain, however, that we do not do justice to many trains of disease by a mere dissertation on dropsy or apoplexy, because the result is not more important than the commencement, and the dropsy or apoplexy do not constitute the disease, but its termination.

Very many instances of complicated affections are named according to the symptom or condition of disease which appears most pronounced or important, although such morbid condition is only a very small part of the malady. Some of the most deplorable instances of "sudden deaths" among the poor are cases of cumulative disease; and the complicated nature of the maladies in which they have originated have only been incidentally, and perhaps partially described. A poor wretch is found dead on a winter's night, and a brief inquiry is made as to the nature of his disease. It may be said he has perished from cold—possibly it may be allowed, but this is seldom, that he died from hunger; most probably some organic mischief may be discovered, and the thing is set at rest. Signs may be found that he has been drinking spirituous liquors, and the case is cited as a warning to the profligate and intemperate. Shall we shut our hearts against the sufferings of our common nature, and thank God that we are more holy than others; or shall we not rather endeavour to copy the example of one of our great masters, the celebrated Boerhaave, who united to his high attainments the most unbounded charity, and the greatest modesty in his self-estimation.*

In many of these instances there has been an accumulation of morbid states; long confinement to a scanty and impoverished diet has probably given to the sufferer a molecular depravity of constitution, and an anxious mind may have materially contributed to this effect. External cold may have produced a congestion of internal organs, and chronic disease in the lungs, connected with an imperfectly arterialized state of the blood, may have rendered him an easy prey to such derangement.

* It is related by Johnson, that when Boerhaave was informed that a criminal was condemned to die, he used to say, "Who can tell whether this man is not better than I? Or if I am better, it is not to be ascribed to myself, but to the goodness of God."

* Christison, on the Granular Degeneration of the Kidneys, p. 100.

As many of the complex disorders are brought on, so they are also disguised, at least as far as the sufferings of the patient are concerned, by the habitual use of intoxicating drinks. The graphic pen of Dr. Latham has well described this effect, and we all feel the truth of the portrait he has drawn, and recognise it as familiar in the practice of our hospitals. "In disease," says he,—"disease which it has itself produced,—the stimulus of spirits gives them feelings and excitement which are still unnatural, and disguise or supersede the sensations which they then ought to have. People are frequently brought into the hospital just ready to perish of complicated visceral disease, yet declaring that they have never suffered ache or pain in their lives until a few weeks ago. Their liver, spleen, kidney, heart, and bloodvessels, are all disorganized—they are breathing, perhaps, with one lung—and the cellular structure, and some cavities of the body, are distended with fluid. Here is a disease which must have been the growth of years; yet true it is, as they say, that they have felt neither ache nor pain until within a few weeks. Spirits, spirits more and more recklessly taken, have sustained, and excited, and cheated them with false strength and false feeling, till fluid has gushed out everywhere, and vital organs have been suddenly oppressed, and down they have sank at once, and irremediably."

These remarks may, then, be considered as sufficient to call attention to those complex forms of disease which it is impossible to comprehend under the common phraseology of our books. Let me entreat the reader to give a patient attention to all such cases. It is not rare, but frequent and common diseases which have the most powerful claim on our consideration, and the investigation of which, if it do not adorn our museums with extraordinary specimens, will adorn our minds with just conceptions and useful truths.

Broughton, near Manchester, Oct. 1845.

ON THE UTILITY OF A KNOWLEDGE OF THE TEMPERAMENTS IN CONNEXION WITH THE DIAGNOSIS AND TREATMENT OF DISEASE.

By F. ROBINSON, Esq., Surgeon, Hammersmith.

THAT different temperaments appear in a certain degree to influence the performance of various actions differing in their nature, is a fact that seems to have been tolerably well established by acute observers of human nature. It is only, however, at a comparatively late period, that the connexion existing between the various expressions of the countenance and the temper has been at all definitely pointed out, and the fact, that the former are in a greater or less degree symbolical of the latter established beyond doubt. Phrenologists are evidently aware of the utility of this circumstance, in giving additional strength to their doctrines, and generally call it to their aid in forming an opinion of the cranial development of an individual. But the importance of a knowledge of the temperaments, their various characteristics and influences in medicine, appeared to meet with little of the attention it deserved, and to have passed almost wholly unnoticed by writers till the time of Lavater. Even that writer, in his *Essay on Physiognomy*, only mentions superficially, and in somewhat vague terms, the benefit that might be derived from a study of this branch in connexion with disease.

I shall endeavour to point out briefly some of the principal advantages accruing from its study, which appear to me worthy of attention, as tending to elucidate the intricacies of disease; but before doing so, may be permitted to state that I do not lay claim to originality in some of the following remarks, which have been, and probably are being, daily observed by physicians in extensive practice, my object being to call some notice to what, from the little mention made of it by writers of the present day, appears to be considered an unimportant, if not decidedly useless study. That the fathers of the profession, when it was yet in its infancy, deemed it worthy of the closest attention at a time when their knowledge of disease was very limited, (comparatively,) their means of alleviating it few and simple, and of those few, many depending, not improbably, for their success upon their influence on the patient's own imagination, is extremely likely, and is, in fact, partly confirmed in their own writings. I would observe, then,

1. That certain remedies possess different degrees of effect in their action on individuals of different temperaments. This may frequently be noticed by physicians in large prac-

tice, as a medicine which will act almost as a specific in controlling the progress of disease in an individual of one temperament, will be found inert, if not positively injurious, in a like disease and same stage in another. This might, in an individual case, be attributed to that inexplicable condition termed idiosyncrasy; but whoever has opportunities of trying one remedy for a fixed period on persons of all temperaments, (their complaints, of course, being of the same nature and duration,) and then carefully analyzes the results, will, in all probability, be convinced to the contrary. Undoubtedly, he would meet with occasional instances where a remedy possessing considerable power in these cases—in the majority of them—fails in an individual one, without any apparent cause to account for it; and if, in conjunction with this, a minimum dose of the medicine produces the effect of a maximum, or entirely different symptoms, *this* would appear to me to merit the appellation of idiosyncrasy, (as far as our knowledge of the term permits us to employ it,) provided, of course, that nothing abnormal is detected in the individual that could at all affect the action of the remedy.

It must be confessed, also, that there are numerous diseases, incident to individuals of all temperaments, in which no distinction can be drawn in the action of medicines, as they may one or all fail or succeed without our being able to explain "why." Are we not in the habit of trying one, and, in the event of failure, commencing with another, approved remedy for a disease, without stopping to consider, the cause of that remedy failing? It being thus proved that a remedy possesses a greater degree of efficacy in a disease occurring in a person of one temperament than another, how are we to account for this circumstance? Provided no abnormal condition exists, it appears to me that, as far as our present knowledge extends, we can only attribute this peculiarity to one cause, and that, necessarily, an obscure one—viz., that the organization of the nervous system modifies, in some (as yet hidden) manner, the action of the remedy, or its absorption. That this *modus operandi* exists in the healthy human frame, when subjected to the action of one class of stimuli—viz., alcoholic—is proved, I think, beyond doubt.

Dr. Macnish, in his "*Anatomy of Drunkenness*," has shown the very opposite effects produced by intoxicating liquors on individuals of different organism, as well as the various degrees of rapidity in producing its action on individuals equally unaccustomed to the stimulus. Judging from these facts, it does not appear improbable that the action of some medicines, as, for instance, diffusible stimuli, is materially influenced by the temperaments in health, and also disease. Let us suppose that an individual takes a quantity of some narcotic poison,—opium, for example, whose action is primarily to stimulate,—and suffers it to remain for a period that, in many persons, would prove fatal. Nevertheless, the proper remedial measures being adopted, he recovers, in some instances, and this is invariably attributed by the patient's friends and medical attendant to the individual's constitution, previous good health, &c.; or some other cause known to affect the action of the poison, as the amount of food in the viscus, without considering the possibility of one person's frame being more susceptible of the action of the poison than another's. It is not, as far as I am aware, in opposition to any known physiological principles, to suppose that opium would be capable of producing quicker and more deadly effects on a person of thin, spare habit, (though of sound health,) and highly nervous, bilious temperament, than a large robust individual of lymphatic sanguineous temperament. A case of accidental poisoning that occurred to me to treat lately, strengthened this opinion.

2. That certain classes of diseases are particularly liable to originate in persons of certain temperaments.

This is a circumstance that cannot well escape the observation of an attentive practitioner, and in large hospitals especially. I may briefly mention, as examples, the occurrence of acute rheumatism, and, consequently, often of pericarditis, in individuals in whose temperaments the sanguine predominates. Anasarca and ascites, dependent on renal disease, in persons of lymphatic, or lymphatic sanguineous temperaments, and ascites, dependent on hepatic disease, in those in which the bilious predominates. A careful comparison of cases convinced me of the truth of this theory in a general point of view; and my observations not being confined to individuals of the same trade and habits, but all the numerous classes of artisans met with in a large manufacturing and commercial district, they cannot be said to be derived from, or rendered applicable to, one class of mechanics only. A greater tendency also appeared to me to exist, to the generation of organic disease, perhaps especially that of the liver, in

* Latham's Lectures on Clinical Medicine, part i. p. 152.

individuals of highly bilious nervous temperament; and this hypothesis would appear to be partly confirmed by the observation of a recent writer, who mentions the comparative frequency of carcinoma of the uterus (in a number of cases treated by him) in females of highly bilious temperament.

With regard to the utility of a knowledge of the temperaments in surgical diseases and accidents, the principal benefit that I conceive to be derived is, in many instances, to render the diagnosis and prognosis more clear and certain, and thus afford material assistance to him in some cases.

It has been my endeavour, in the foregoing remarks, to treat as concisely as possible some of the leading points connected with a subject that admits of very extensive research, even if due not capable of affording material assistance to the physician in the diagnosis and treatment of disease, at least one that might tend to elucidate some of those as yet hidden phenomena which we meet with in practice; and my object, in giving publication to these brief and imperfect remarks is, through the medium of *THE LANCET*,—if possible, to draw attention to the subject. It is now near a year since most of the foregoing notes were made, at a time when enjoying considerable opportunities for so doing, and my subsequent experience has tended to confirm the opinions I entertained then.

Hammer Smith, Dec. 1846.

ON THE EFFECTS OF ANTIMONIAL PREPARATIONS ON THE HUMAN FRAME.

By BUTLER LANE, Esq., Surgeon, Ewell.

AMONG the medicinal remedies for disease, antimony claims an important rank. It is resorted to, alone or in combination, in the minor forms of functional derangement, as well as in the more intense morbid states incident to the human economy. There is, in fact, a general practical acknowledgment of the efficacy of antimony; yet, although its virtues have been much discussed since the days of the author of the "*Curus Antimonii Triumphales*," and especially insisted on by Italian and French medical writers, it appears, nevertheless, that its consideration and appreciation deserve further investigation. It is with this feeling that I am induced to offer a few observations on the subject, in the hope that I may be able more clearly to indicate the theory of antimonial action, and thereby facilitate its remedial appliance in disease.

The preparations of antimony which appear to possess the chief activity are the potassio-tartrate and the oxide, and to these alone I shall advert on the present occasion, confining my remarks to the influence of antimony on the human subject, as animals appear much less amenable thereto.

There are three general categories to which we may refer the proximate action of antimonials. In the first place, there is the local influence which accrues on the direct appliance of the medicinal substance to any structure of the body, more especially the skin and the gastro-intestinal mucous membrane. Secondly: we have the effect produced by the medicament, when, having been absorbed, it has become commingled with the blood, on which fluid and the containing tubes it may exert an action mechanical, chemical, or vital, individually or combined. Thirdly: we find a special nervous impression, or that which takes place immediately on the nervous structure of a part, or mediately in any subsequent point of development; and a still higher degree of nerve influence is manifested when, being introduced into the circulation, the substance is brought into more immediate contact with the nervous tissue, especially that of the great centres of the system, the sources of its energy. As respects the nerve action, it is also requisite to take into consideration a subsequent or secondary phase thereof, or rather, a result therefrom—viz., the reaction or behaviour of the nervous system in contravention to the foreign impression, and not in mere obedience to the impulse given. This result is generally referred to the direct influence of the medicine itself, though, I believe, most erroneously. I consider the due distinction between the direct medicinal impression and the reaction of the system of the utmost consequence, as their effects differ widely, although equally important, and the just appreciation of their relationship is absolutely requisite for an accurate therapeutic application.

The local external application of antimony occasions a very decided irritant action. It cannot, however, be considered as a caustic, for no apparent direct chemical change is produced in the structure with which the substance comes in contact. On the application of tartar emetic to the skin, purulent

formation is induced, apparently, by the excitement and irritation of the capillary tissues. As a revulsive and derivative, it certainly possesses powerful influence in pulmonary diseases, in affections of the liver, and other deep-seated visceral complaints, acting, I believe, not merely as a counter-irritant, but also exerting a decided constitutional influence, to which I shall presently again advert. I may here remark, that the adaptation of the especial mode of counter-irritation to the peculiar existent morbid state is undoubtedly of more consequence than is ordinarily supposed, and the inducement of vascularity, effusion of serum, or purulent formation, will respectively best answer some especial purpose.

Tartarized antimony may be used externally in the forms of lotion, liniment, ointment, and plaster. The lotion is made by dissolving one drachm of the potassio-tartrate of antimony in two ounces of boiling water, and the embrocation, by adding an equal proportion of soap liniment to a saturated antimonial solution. The ointment may be prepared according to the Pharmacopoeial formula, but I prefer it, with the addition of finely levigated white sugar, in the proportion of one part in eight, which causes it to act more readily. The plaster is best formed by incorporating from a scruple to a drachm of tartarized antimony, with a sufficient quantity of compound pitch and adhesive plasters in equal proportion; and from the excessive irritation often caused, it is desirable that the plaster should not exceed a moderate size; but rather be repeated, if requisite. Where it is wished to establish powerful counter-irritation, this latter form is decidedly preferable; the constant and close appliance to the skin causes the effect to extend more deeply, and the constitutional influence to be gradually and certainly developed. In different individuals, the irritant action is induced more or less readily, apparently according to the texture of the skin; but I think there can be no doubt that where internal morbid action is going on, the superjacent surface is more obnoxious to the stimulating antimonial influence. This I believe to be the case with all counter-irritation, but more especially with tartarized antimony. Such a doctrine may not be very orthodox, but I cannot perceive the supposition to be unreasonable, when we know that internal disease may be accompanied by external pain and tenderness, proving thereby the concomitant existence of an increased degree of excitability in the adjacent external surface.

Local irritation also results from the application of tartar emetic and other antimonials to the gastro-intestinal mucous membrane: a pustular effect, however, is rarely produced; for even in fatal cases of antimonial poisoning, it is seldom that autopsic observation has disclosed any morbid appearance beyond more or less vascularity. The increased secretion of the mucous membrane and gastric follicles consequent on the irritation produced, seems in itself to shield the sub-mucous structures from the injury to which the sub-cutaneous tissue is liable. I have, in three cases, seen a profuse pustular eruption in the cutaneous surface result from the internal administration of tartar emetic; in two of the cases the eruption supervened on that of rubella, where the complication of pneumonia had occasioned the medicine to be resorted to in moderate doses. Whether, in such cases, the antimony acts on the blood, or, on the other hand, produces its effect on the skin by sympathy of continuity, I cannot decide. The causation of vomiting, however, I do not consider as essentially connected with the irritant influence of antimony, though such may certainly be the case where large quantities have been administered, when, like any other irritating substance, it will induce muco-gastritis in a greater or less degree, and, consequently, vomiting, to allay which is often a matter of the greatest difficulty.

I now have to speak of the general or constitutional influence of antimony. It is well ascertained that it is liable to be absorbed into the circulation, (probably, merely by venous endosmose,) and that it is subsequently to be detected in the various structures of the body, especially the liver; but whether it exert any active influence on the composition of the blood is yet undecided, though the statements of Majendie would induce us to suppose that its effects thereon, physical or chemical, are not very obvious. Majendie makes it appear, however, that tartar emetic, when brought in contact with the blood, has the power of dissolving the globules; but experiments, when performed on that fluid, removed out of the sphere of vitality, are of very uncertain value. It may be asserted, that it is owing to a chemical change produced in the composition of the blood, that the subsequent nerve influence is attributable; but of this there is at present no proof, and it is only with obvious results that we have to deal. By rather a superficial argument, Majendie arrived at the

conclusion, that as tartar emetic injected into the veins produced an appearance of pulmonary consolidation, and pneumonia would also produce a species of consolidation, ergo, tartar emetic could not be a desirable remedy for pneumonia, never stopping to inquire whether the two consolidating processes were identical in character, and without ever taking into consideration the diametrically opposed constitutional phenomena precedent to the respective morbid states induced by the administration of antimony, and the influence of pneumonia.

It is the fashion of the present day to endeavour to set forth minute chemical influence on the blood and other fluids, in order to explain medicinal agency. Such, however, is not my aim in these observations; for without in any way wishing to depreciate the value of chemistry as a science, I cannot but deem that, in the very minute and abstract chemical research which now occupies the minds of medical philosophers to so great an extent, the chief object which should be kept in mind—viz., the practical utility of such researches, is often lost sight of. A certain degree of rational empiricism is of the utmost real service in medicine; and when in practical observation we find certain general principles made apparent, and proved advantageously by experience, on them we should base our inquiry, and not, in the ardent pursuit of abstract analytical investigation, be too anxious to destroy the ancient structure of our art with the view of erecting a new and more elaborate fabric.

According to the theory of Pappenheim and other German and French authors, we might expect that tartarized antimony would be converted into a pepsinate in the stomach; but this does not appear to be the case, according to Orfila's experiments, in which tartar emetic was excreted unchanged in the urine. Whether or not the antimonial oxides are converted into albuminates, according to the views of the same authorities, has not been ascertained. It would, however, seem probable, that the rationale in question is only applicable to such metallic substances as may be taken up by the absorbents, and not where they enter the circulation merely by venous transudation.

Let us now endeavour to trace the further course of antimonial action, and we shall, I believe, find it acting as a most powerful sedative on the great nervous centre, the brain, whence its influence extends to the heart, subsequently to the extreme capillary tissues, and furthermore to the muscular structures in general, probably through the medium of the nerves. In illustration, I may allude to the cases of four persons who were under the care of Lohmeier in 1839. They had been employed in an antimonial manufactory, and were all similarly affected. They suffered with pain in the head, back, and sides, difficulty of respiration and expectoration, constant diaphoresis, and great prostration of strength; also with diarrhoea, anorexia, and pustular eruption: there was much pain in the genitals, and total impotency. This last circumstance is curious, inasmuch as it is recorded that antimony was much used in monasteries, on account of the celibate virtues, with the view to ward off the temptations of the flesh and the devil; and it is said to be owing to the too energetic employment of the potent drug by Basil Valentine, that the mineral obtained its name; for so many of the holy monks resigned the ghost rather than their carnal appetites, that the remedy soon assumed the designation of "anti-monachus," subsequently converted into "antimonium."

What do we find the effects produced by a full dose of the potassio-tartrate of antimony? Its influence quickly depresses the vital powers; the heart's action is lowered, and the pulse reduced in frequency and strength; the force of the capillary circulation is abated in yet greater proportion, the cutaneous surface becoming pallid, and imparting a sense of chilliness; the secreting tissues are relaxed, and pour forth their various fluids, saliva, gastric juice, bile, &c., to the secretion of which the primary irritative influence has given an impulse; the contractile energies of the muscles, voluntary and involuntary, become prostrated, and none more evidently so than those connected with the process of respiration, which is performed slowly and laboriously; a sense of faintness and anxiety is experienced: and these phenomena, combined, constitute the stage of depression. Now, as a general rule, mineral substances are far more foreign and ungenial to the human constitution than those derived from the vegetable kingdom. We cannot, therefore, be surprised that the static powers of the organism being thus disturbed, an effort should be made to recover its equilibrium; and thus it is that reaction ensues, and reaction which is naturally demonstrated in two of the most important organs of the economy. Thus, therefore, we apparently have excitement in the great nervous

centres; the heart's action becomes quicker and stronger, and spasmodic contractions of the diaphragm and abdominal muscles ensuing consentaneously, vomiting is occasioned. The well-known experiments of Majendie and others establish, beyond doubt, that the stomach is generally passive in the act of vomiting, and that even when the cause is within or transmitted to that viscus, a reflected and complicated sympathy directs the exertion. In cases of cerebral concussion, vomiting depends immediately on the process of reaction; even so, under the influence of antimony, the chain of phenomena is very similar.

The most permanent sedative effect, however, is apparent in the respiratory organs, and on the heart's action, which is rendered more obvious when, avoiding the extreme administration of antimony, we give only moderate doses, against which the constitutional powers, receiving no sudden shock, are not so prone to react; and, indeed, if the remedy be given judiciously, a decidedly sedative impression may be maintained, without any excitement being made manifest. In chronic affections of the lungs, despite the peculiar conclusions arrived at by Majendie, to which I have already alluded, I must highly estimate the internal use of antimony; also its external appliance, not merely as a counter-irritant, but as exerting a marked sedative influence over the excited and irritable respiratory condition, alike implicating the external muscles, the contractile bronchial tissue, and the pulmonary cellular structure; so that while the inspiratory and the expiratory movements are retarded, the spasmodic state of the bronchial tubes is allayed, and active or passive congestion in the lining membrane of the air-cells is abated. To this I mainly attribute the successful issue that I have seen in some phthisical cases. That antimony, externally applied, will exert a constitutional influence, I entertain no doubt, from the peculiar symptoms which are apparent when it has been used for any length of time; nor, indeed, could I expect it to be otherwise, looking at the nervous influence which I believe to be exerted on the one hand, while, on the other, we may surely suppose that that which can transude into the vascular structure of the intestinal mucous membrane may undergo a similar transition into the circulation through the medium of the skin, which is decidedly pervious, though in a less degree.

A persisting and sufficient administration of antimony is, I consider, highly conducive to the abatement of a sthenic condition, by the sedative influence exerted over the abnormal capillary action, which influence, indeed, if carried to too great an extent, would serve to paralyze the capillary circulation, and more especially that of the glandular structures, where a greater amount of innervation may be supposed requisite than in a simple secreting surface. This is evinced particularly in the kidneys, for in Orfila's experiments, already referred to, in which poisonous doses of tartarized antimony were introduced into the system of animals by the skin and by the stomach, the arrest of the renal secretion invariably took place, and where it could be restored the antimony was freely excreted in the urine. We may fairly suppose that impeded secretion was not confined to the kidneys, and indeed it is proved that antimony has no special affinity for those organs, inasmuch as analysis has proved its co-existence in the liver. The state of the urine, however, affords us a valuable indication for the treatment of antimonial poisoning, and, what is of still greater importance, it furnishes us with a certain token of the complete constitutional influence of the medicine; for I believe that it will frequently be found the case that though the renal secretion may increase somewhat when first antimony is administered, it will subsequently become diminished, even to suppression, as the system becomes saturated with the remedy; this more commonly occurs when none of the obvious effects of vomiting, purging, or diaphoresis, are experienced. A remarkable instance of this occurred to me lately, in the person of a young child suffering with severe pneumonia; the action of the medicine was obvious only on the respiration, the pulse, and the kidneys.

Objections may be raised to the assumption of two different primary modes of action for antimony—viz., a local irritant one, and another of general sedative character; but I cannot see how such an objection is at all tenable, when it is undeniable that a double influence is possessed by many others of our most potent medicines, and that not merely according to the part of the nervous system with which the substance is brought in contact, inasmuch as one uniform appliance will often simultaneously produce separate and distinct results. Such is the case with aconite, belladonna, and even opium, and surely it cannot be wondered that one individual remedy should have a varied relationship to the different parts of the nervous organism.

I have endeavoured, in the foregoing remarks, to demonstrate a special influence of antimony on the nervous system, and I will now briefly recapitulate a few points of argument to support this view of the matter.

1. The rapid action of the medicine, whether in a soluble or insoluble form, in producing its sedative effect, will not well admit of the supposition that a physical change is occasioned in the entire circulating mass; and again, however quickly the imbibition of antimony into the vascular system may take place, we cannot believe the constitution of the blood to be physically or chemically altered, or it would require a longer time to reassume its normal state, and consequently the sedative antimonial impression would not be so readily induced as is usually the case.

2. The little difference which appears to exist between the results of the administration of large doses and that of small doses of tartarized antimony, also appears to advocate the idea of nervine action. In the first place, the local irritation of the greater bulk may, to some extent, be supposed to counteract, and perhaps advantageously, that which would otherwise be a violent sedative impression. I may also remark that, in reference to the effects of large doses of antimony, the tolerance of disease is to be borne in mind. We know to what an extent the administration of opium and other anodynes may be carried in tetanus, neuralgia, and even in diarrhoea. We also know how freely mercury may be given in many inflammatory diseases, but this tolerance of a medicine is not in itself a proof of its efficacy.

3. We know that vomiting may occur when tartar emetic has been applied externally, or introduced into a vein. Now the influence of antimony in causing sickness, without being directly applied to the stomach, certainly indicates a special nervous impression as the medium of action. I have in several instances seen the inoculation of a saturated solution of tartarized antimony occasion general depression and nausea with susceptible individuals, and the action of an unappreciable quantity of the substance cannot be supposed to affect the mass of the blood directly.

I do not, however, mean to assert that a medicinal effect may not be produced by the contact of antimony with the blood—part even of that influence which I have assigned as nervine may be connected therewith. It may tend to dissolve or alter the blood globules, in accordance with Majendie's views, it may oppose the disposition to fibrinous formation, and, in these respects, serve to antagonize inflammatory diseases. Thus it may counteract sthenic pneumonia, although, were it made use of to deteriorate healthy blood, it might render it incapable of circulating through the pulmonary tissue, and constitute a disease in some respects analogous to that of which it is an acknowledged remedial agent. The direct influence of antimony on the blood, however, yet remains for investigation, and constitutes a subject worthy of chemical and microscopical inquiry.

The potassio-tartrate is the commonest form in which antimony is exhibited, and though it is in some respects undoubtedly the most powerful preparation, probably from its solubility, yet owing to the sudden and violent influence it exerts, it is often not available, and sometimes even highly objectionable; James's powder was therefore substituted, and has long enjoyed an extensive reputation; its active principle has been considered a sesquioxide, and many vain efforts have been made to assimilate thereto the Pharmacopoeial "pulv. antim. co." In common with others, I fully believe myself that the virtue of the so-called sesquioxide of antimony is due merely to the protoxide, the admixture of which with the peroxide occasions the fictitious character in question. I find that Mr. Tyson, of Ashbourne, Derbyshire, in No. 9 of the *Pharmaceutical Transactions*, p. 449, has furnished a formula for the preparation of the protoxide: of the efficacy thereof I have no experience, but I have long been in the habit of using an antimonial powder furnished by Mr. Trix, chemist, of Exeter: he assures me that the active principle consists in a protoxide. This preparation I have found of the highest utility, and, in fact, of invariable efficacy in appropriate cases. Of a considerable number of cases in which Mr. Trix's preparation was administered, I may mention, that in more than seventy per cent. diaphoresis was occasioned; vomiting occurred in twenty-five per cent., and purging in the proportion of near twenty per cent. In these cases the medicine was given in full doses in the first instance, and not generally repeated to any great extent, which will probably account for the frequent occurrence of the two latter therapeutic effects. Looking at the protoxide of antimony in a chemical point of view, the medicinal influence appears in some extent due to

its powerful affinity for oxygen, on which account, for the sake of preserving the medicinal efficacy, and for the batement of its potency, the combination with inert phosphate of lime is highly desirable. From the preparation above mentioned, I have derived far more certain results than even from that which is deemed the true James's powder. As contrasted with tartar emetic, I have experienced in many respects a far more permanent effect from the preparation of the protoxide, and, at the same time, a more gradual action; purgation was comparatively more common, and diaphoresis was more readily maintained, at the same time that less subsequent debility was occasioned.

Ewell, March, 1846.

SURGICAL CASES IN PRIVATE PRACTICE.

By JOHN S. BUNCE, M.D., M.R.C.S. Eng., Woodford-green.

Fracture of skull; coma; convulsions; hemiplegia; trephining.—Recovery.

CASE 1.—On the 27th January, 1844, I was hastily summoned to T. R—, aged twelve, a boy of nervous temperament, and found him labouring under the following symptoms:—Profuse arterial hæmorrhage from lacerated wound of scalp, having been accidentally shot: there was considerable collapse, and some sickness. After taking up the small arterial vessels, which had bled very freely, and giving some stimulants, we (a medical friend having arrived) proceeded to examine the wound, and found the skull fractured to the extent of two and a half inches, forming two-thirds of a circle in the posterior border of the parietal bone. There was no depression of the outer table of the skull. Put on a poultice, and enjoined perfect quiet, with antiphlogistic regimen.—Six p.m.: Pulse 122, and full; quite sensible, but inclined to doze. Applied leeches to temples, and gave antimonial mixture, with sinapisms to the feet, and calomel and jalap powder.

28th.—Had passed a restless night; pulse 112; pupil contracts, but is slightly dilated; bowels costive; he appeared slightly comatose.—Eight p.m.: Worse; pulse 120; complete coma, with convulsive action of limbs. Applied leeches twice in the day; used enemata; ordered small continued doses of calomel, with counter-irritation.

29th.—Bad night; pulse 120; quite insensible; is strongly convulsed; screams violently, and has completely lost the use of one side, the hemiplegia being on the opposite side to the wound, which feels hot and looks unhealthy. Remedies continued.

30th.—All the symptoms aggravated; intense and incessant screaming; complete hemiplegia; urine and fæces passed involuntarily; is violently convulsed on making any attempts to swallow. The treatment consisted in small doses of calomel, and leeching two or three times in the twenty-four hours, as the pulse warranted.

31st.—No better; all the symptoms indicating the existence of pressure, we determined on taking the opinion of Mr. Luke as to the propriety of trephining over the seat of fracture.

Feb. 1st.—Applied the trephine, and removed what appeared to be a small spicula of bone; found no extravasation of blood; dura mater had not been wounded, and looked quite healthy. Applied water-dressing, and left off medicines. Symptoms remained the same all day.—Eight p.m.: Applied leeches to scalp, as there was increased heat, with great throbbing of temporal arteries.

2nd.—Much the same; convulsions as violent as ever; complete hemiplegia. Applied cold to head, and salines internally.

4th.—Better; very irritable, but the fits are much less frequent; can swallow comfortably; pulse 100 and weak. There is slight motion in the affected side, and he is aware when the foot is tickled.

From this time the symptoms gradually ameliorated—sensation and motion very slowly returned, his intellect and memory remaining for a long time dull and confused; the wound granulated freely, and after several portions of the bone had exfoliated, and had been removed, it healed over, and the boy has remained well to the present time.

Wound of abdomen; protrusion of intestines; operation.—Recovery.

CASE 2.—On the 24th January, 1846, I was sent for to M. H—, aged five, a very thin, unhealthy-looking boy, who was reported to be dying. Found him with a lacerated wound of the abdominal parietes, about two inches from the umbilicus, caused by falling upon a pair of shears, with which

he had been playing. The intestines protruded to the extent of ten inches; they were painful when touched, and he was very restless, although the accident had only occurred about an hour. After some ineffectual attempts to return the intestine, I left to procure a probe-pointed bistoury to enlarge the opening. On seeing him again, a most formidable spectacle presented itself—at least half a yard of the bowel had protruded from the wound, which was an inch and a half long—coughing and vomiting having supervened, the quantity of intestine was increasing every minute. I lost no time in enlarging the wound through the muscles; this proving ineffectual, the incision was continued through the peritonæum, and the intestine was returned by gradually kneading it through the opening. The external wound was then closed by the Glover's suture, and a compress and bandage applied. Prescribed calomel, one grain; pulverized opium, quarter of a grain, every four hours. Ordered low diet, to be rigidly observed; in fact, gave him nothing but barley water for three days: leeches were applied once, but the bowels were kept perfectly quiet until the third day, when castor oil was administered, as I am quite convinced that nothing is more likely to produce inflammation than stimulating the mucous membrane of the intestines early, after severe wounds. The medicine had the happiest effect, making the mouth tender in three days, and keeping off inflammation.

He recovered in twelve days without a bad symptom, a slight ventral hernia being left, which by pressure has now been quite removed.

Woodford-green, March, 1846.

EXTIRPATION OF THE UTERUS SUCCESSFULLY PERFORMED.

By T. L. GREGSON, Esq., Surgeon, Newcastle-on-Tyne.

Mrs. A.—had been delivered of her second child, by a surgeon, in a village, two years ago. As she complained of much pain and uneasiness, on the third day her medical attendant ordered her to get out of bed, and to walk smartly across the floor. She improved slowly, and complained much. About a year ago, she came here, and was some months under the care of a surgeon. About six months ago, I was called to attend her. I found her extremely emaciated and exsanguine, having for above a year been exhausted by most profuse hæmorrhage at every monthly period. On examination, I found a pear-shaped body filling the vagina, the os tincæ embracing it firmly, and apparently adhering at one side. I gradually introduced my fingers, endeavouring to grasp it, and push it through the os tincæ. This procedure caused extreme pain and some hæmorrhage, without its yielding in the least: it was of a purplish-red colour. Feeling satisfied that it was an almost complete inversion, or, I might say, eversion, of the uterus, I endeavoured, by chalybeates, &c., ergot, and astringents, to improve the system; but every monthly period produced extreme exhaustion, and death seemed inevitable. As a last chance, and with the consent of herself and friends, I resolved to extirpate the uterus. I went, accompanied by my friend, Mr. Frost, a most able accoucheur, and who agreed with me, as she was so exhausted and exsanguine, that the attempt was justifiable. I laid hold of the tumour, and drew it as far down as possible; in so doing, the os tincæ entirely disappeared, leaving no doubt of the nature of the case. A very strong silk cord was then passed around it, and carried high up by the double canula, the cord being also passed through the eye of a strong curved steel staff.

I found this a very valuable means, as I could carry the ligature around the part with the greatest facility. The knot was then tied with great firmness, leaving the staff included in the ligature and opposite the knot: this instrument was secured to the inside of the thigh with a tape. By turning the handle once or twice round, the ligature could be tightened to any degree. This was done from day to day, and caused rapid sloughing of the part. It separated entirely on the ninth day. From the commencement of the operation to its coming away, reaction was very moderate. She required no treatment beyond an occasional anodyne, castor oil, and the catheter used twice. She gained strength rapidly. She was made to keep the recumbent posture twenty days. It is now three months since the operation. She goes about the house, and has walked out a little, feeling easy and comfortable.

Such cases being generally considered hopeless, I have detailed particulars, perhaps minutely. I believe the great point to be kept in view when the ligature is used, is to tie it with great firmness at once.

On examining the part, I find that the body and neck of the uterus are entirely removed. There has been no disturbance at the monthly periods, nor symptoms of the system feeling the want of the organ removed.

Newcastle-on-Tyne, Feb. 1846.

REVIEWS.

Confessions of an Homœopathist. Dublin: S. B. Oldham. 1846. 12mo, pp. 399.

THE "Confessions of an Homœopathist" are stated by the author to embody the secret history of one of the most successful disciples of Hahnemann, as detailed by him on his death-bed in a spirit of repentance for a life of fraud and deceit. After hesitating some years whether he should place these Confessions before the public, or consign them to oblivion, the author says that he has adopted the former course, from the conviction that they may contribute to enlighten non-medical persons as to the real merits of homœopathy. In order that the autobiographic narrative of the dying homœopathist may be acceptable to unprofessional persons, to whom it is more especially addressed, the author has ably interwoven along with it a narrative, which gives to his volume all the interest of a work of fiction.

Such a production scarcely comes under our province: we cannot, however, refrain from noticing it, as it appears calculated not only to do good in the circle for which it is intended, but also to be read with interest by medical practitioners themselves.

The hero is a German student, born in the lower class of society, who, during a University career, through deceit and cunning, contrives to obtain the goodwill of his professors, and to secure by their assistance the means of living. He subsequently studies medicine, and takes to homœopathy, not from conviction, but with the self-avowed design of making it a means of extortion. His plans being well matured, he comes to England, and here meets with the usual success of quacks. After making a fortune at the expense of our national credulity, he returns to his native country to enjoy his ill-gotten wealth, but soon after dies from the results of an accident.

The principal character is well drawn, but so utterly despicable from the very onset, that the reader can only feel contempt for him and his deeds. The arts and manœuvres of quacks to deceive the public are very cleverly and amusingly told, more especially those which homœopaths must resort to in order to carry on their monstrous frauds or insane delusions.

The "Confessions of an Homœopathist" give a very good idea of the tenets and conduct of one class of the homœopaths, the fraudulent practitioners—of those who merely put on homœopathy as a cloak for levying a sanguineous black-mail on the folly and credulity of their fellow creatures. Although this class is perhaps the most numerous, we are willing to believe that there are some among the professional homœopaths of the present day who are sincere. Such men, however, we look upon as labouring under a medical monomania. The tenets of homœopathy are so wildly extravagant, so preposterously incongruous, that it is impossible to believe that any really sane professional man could adopt them. Never, certainly, have ideas flitted through the brain of an inhabitant of Bedlam or Hanwell, more egregiously absurd or contradictory than those which Hahnemann has given to his followers and admirers. It is really an insult to reason even to discuss them. By the bye, we have recently heard that the mantle of the high priest Hahnemann, who died a few years ago in obscurity in Paris, has not been suffered to fall to the ground. His wife, Madame Hahnemann, a Frenchwoman, has wrapped herself in it, and has succeeded to his practice.

In conclusion, we think this little work may do good: at all events it may be made to save many of our readers much unpro-

fiable conversation with non-professional persons, who, having been tainted with the delusion, apply for advice and information. This book, although on a dry and abstruse subject, is exceedingly readable, and will tempt the curiosity of many who would be alarmed by a more serious work.

The Practice of Surgery. By JAMES MILLER, F.R.S.E., Professor of Surgery in the University of Edinburgh, &c. Edinburgh: A. and C. Black. 1846. pp. 688.

THE present volume on the Practice of Surgery is intended to be regarded as a companion to the "Principles of Surgery" lately published by the same author, with a view to supply a complete text-book of the entire subject. Mr. Miller is already known in his profession as an able writer and a well-informed surgeon, and the book before us is calculated to maintain his reputation. We recommend it to those who want a sound guide, or wish to refresh their recollections.

The characteristics which specially distinguish the work are, its plain good sense, or the selection of the important from the unimportant announcements in surgery; the sound indications of the judgment to be exercised in the treatment of surgical diseases; each of them being particularly conspicuous in his method of viewing the important lesions attending injuries of the head. Speaking of the treatment of concussion, he observes,—"In the first stage, that of depression, if we act at all, it will be with the view of favouring, at least, the commencement of reaction. An opposite procedure were plainly at variance with common sense; but, unfortunately, it is found to be not equally at variance with common practice." Mr. Miller's remarks on the use and abuse of the trephine, more especially with reference to the removal of extravasated blood, are very judicious, as also are his observations on the treatment of depressed fracture and punctured fracture.

Another subject in which Mr. Miller appears peculiarly at home, is the surgical affections of the windpipe and larynx. Respecting the availability of bronchotomy, he observes—

"Bronchotomy, then, is available in the following cases:—

1. In the case of foreign bodies lodged in the air-passages. Extrusion, independently of this operation, is, and ought to be, the exception to the general rule. 2. In suspended animation, when we cannot otherwise effect, with certainty, artificial inflation of the lungs. 3. In spasm of the glottis. The continued asphyxia, from external injury, may perhaps depend on this cause, perhaps on a precisely opposite condition; in either case, the operation is imperatively demanded to save life. There is the same necessity, in the spasmodic occlusion of the glottis, which attends poisoning by carbonic acid. In laryngismus stridulus we withhold the operation if possible, and trust to general treatment; yet we are aware that urgent circumstances may arise, to demand the tracheal wound, at least with the hope of palliation, and perhaps with the effect of affording time for the effectual working of other remedies. 4. In oedema glottidis, chronic and acute, there is no safety but by operation, so soon as the symptoms have become at all urgent. And in the acute cases, there is the best hope of a speedy discontinuance of the tube, closure of the artificial aperture, and complete restoration of normal respiration. 5. In laryngitis fibrinosa, the operation is as warrantable as in urgent oedema, when the disease is limited to the larynx. But in the great majority of cases of true croup, in which the whole windpipe, with its ramifications, are involved, operation is surely to be regarded as a rare exception to the general rule of non-interference: in the early stage, it is inexpedient, while mechanical obstruction to respiration is not yet threatened; in the more advanced period, it is ineffectual, failing to fulfil the objects of its performance. 6. In purulent laryngitis, there is the same necessity for operation, and the same good prospects as to its results as in acute oedema. 7. In chronic laryngitis, with thickening, supervention of oedema, through inflammatory accession, may render the operation indispensable to the preservation of life. 8. In simple ulceration, the same event may occur as that just mentioned; or, independently of the occurrence of such an accidental crisis, the operation may be deemed expedient to assist the action of other remedial means, and by effecting early cicatrization, to save structure and function. 9. In ulceration, with disease of the cartilage, operation is likely to be required to save life

from immediate danger by threatened asphyxia; but with little or no prospects of discontinuance of the tube's use. 10. In phthisis laryngea, it may be similarly demanded for a temporary object, scarcely with a hope of contributing to a cure, but rather as a means of protraction and palliation. 11. In pressure on the windpipe, caused by the formation of tumour or abscess, or by impaction of food in oesophagus or pharynx, operation may be necessary, if the obstruction to respiration cannot be otherwise relieved—namely, by removal of the cause; by evacuation of the matter, extirpation or diminution of the tumour, or extrusion of the impacted substance. 12. In cut throat, tracheotomy is not unfrequently demanded, imperiously, to save life from impending asphyxia; and it may be expedient, at an early period of the case, to avert such hazard, and to favour, as well as permit, immediate and entire closure of the wound. 13. In glossitis or tonsillitis, and in extreme cases of pharyngitis, it is required, when swelling is so great, rapid, and uncontrollable as otherwise to render fatal asphyxia all but inevitable. 14. In carotid aneurism, of large size, when, by circumstances, we are precluded from speedy recourse to deligation of the artery, life may be suddenly brought into peril by supervention of the diffuse form of the circumscribed, and consequent compression of the windpipe. Bronchotomy, then, is essential, and the tube will require to be worn until, by deligation of the artery, we have effected such diminution in the bulk of the tumour as altogether to free the respiratory canal. Thoracic aneurisms, be it remembered, by compressing the air passages, may stimulate the results of inflammatory disease in the larynx; and, in such cases, no good can possibly be expected to result from bronchotomy."—pp. 270—272.

The opinion of the author with reference to gastrotomy will be perused with interest, in connexion with the prevailing fashion of removing ovarian tumours.

"Of the merits of such procedure, the opinion of the profession is much divided. At present, we are happy to be able to have it in our power to say, that the preponderance of weight, if not of numbers, is rather hostile to such operations. There are cases, however, which may certainly render a duly conducted attempt quite warrantable; when the tumour is non-malignant, single, moveable, and connected with a narrow peduncle, as may be ascertained by careful manipulation, when the patient is apparently free from other disease; when the effects of this tumour are such as to threaten death by exhaustion at no distant period, unless relief be obtained; when the ordinary discussive treatment, after due persistence, has failed to give relief; and when the patient, having been made fully aware of the risk of the operation, is resolved and wishful to undergo the operation. Modern experience has certainly demonstrated, that free incision of the abdomen, with exposure and manipulation of the peritonæum is a less hazardous procedure than was generally supposed. But the following objections to the ovarian operation must always remain; deligation of the tumous attachment is essential. The ligature and what it contains must, by long-continued presence, and acting as foreign bodies, maintain hazardous inflammatory action, which at any time may become excessive and untoward; and even in prosperous circumstances the amount of plastic exudation around the ligature must tend to danger, by acting constructively on the abdominal contents—even the puckering of the deep cicatrix may induce intestinal obstruction."—pp. 359, 360.

Other passages deserving of notice, but which we are unable to find space to print, relate to the nature and treatment of strangulated hernia, the retention of urine, and the stricture of the urethra. With respect to the true position of lithotripsy among the operations of surgery, Mr. Miller draws a very sensible estimate. He considers it "applicable to certain cases of stone; for these much less hazardous than lithotomy, and, therefore, to be preferred, always, however, liable to the objections of long time, comparatively, consumed in treatment, risk by repetition of the operation, and the danger of exciting or aggravating renal disease."

The following quotation offers a good specimen of the style of the author, and conveys a sound lesson, and with this we conclude.

"Popliteal aneurism is probably the most common of all external aneurisms; and hitherto the Hunterian application of ligature to the superficial femoral has been the only approved mode of treatment. Latterly, however, the applica-

tion of pressure instead of the ligature has been proposed. And experience is, almost daily, giving direct and undoubted testimony to the efficacy of the practice. There are some patients, doubtless, who may prove intolerant of pressure; and there may be others who prefer the apparent certainty of the knife and ligature to the apparent uncertainty and delay of the compression. But the vast majority of cases are assuredly capable of cure by pressure properly applied, without risk, with but little pain or inconvenience, and without any wearisome amount of privation or confinement. The skin which is to bear the pressure of the instrument is protected by a layer of thick soap-plaster; and that again may be covered by leather. And more than one compression is used; or, at least, pressure is made at different parts, at different times; so that the burden of it may not all be thrown on one point, but by being subdivided among several points, may be rendered much more tolerable. Using several instruments along the course of the vessel in the thigh, they may be slackened and tightened alternately; or the same instrument may be shifted in its site, with a like effect. It is never to be forgotten, that all severity of pressure is unnecessary; that it is not essential that it should be such as to arrest the arterial flow at the compressed point; that, on the contrary, consolidation of the aneurism is more likely to take place when a slow and gentle and feeding circulation remains. And it is also important to remember, that should this mode of treatment fail, it by no means interferes with the subsequent performance of the ordinary operation, but, on the contrary, renders its success all the more probable. But this is very plainly a contracted view of the subject, and as well might such practitioners prefer amputation of the hand to amputation of a finger, for a simple affection of the latter only. A surgeon of the olden time, who had succeeded in curing several successive cases of popliteal aneurism by amputation of the thigh, might very naturally entertain a distrust and dislike of the proposal to treat the same disease by ligature of the femoral; but the naturalness of such an aversion to the minor and modern practice would not render it one whit the more reasonable or praiseworthy. And an impartial observer would not consider any one justified in subjecting the patient to serious risk of life, hæmorrhage, suppuration, and gangrene; while he has it in his power to effect cure by a minor means, wholly devoid of risk, and the failure of which will not militate against a subsequent recourse to the major procedure, if necessary. Why should a mode of treatment which causes no risk always be passed by? or why should an operation always be had recourse to, which may, and not unfrequently does, result in direct loss of life? And the question comes in much force if it be admitted—and as by and by it probably must be, if not already—that the two methods are at least equally successful for the cure of aneurism.”—p. 611.

MEDICAL SOCIETY OF LONDON.

MARCH 2, 1846.—DR. THEOPHILUS THOMPSON, PRESIDENT.

INFLAMMATION OF THE BRAIN IN A CHILD.

MR. DENDY related a case of pure idiopathic cerebritis in a child eighteen weeks old, the only symptoms indicating the presence of the disease being convulsion and excitement, and contracted pupils. Two leeches were applied to the head, and sinapisms to the feet, which somewhat relieved the symptoms, but the convulsions returned, and the child died. The vessels of the brain were found turgid with blood; the medullary matter was studded with red points; there was a small portion of lymph between the membranes, which were all congested. There was no internal hydrocephalus; the ventricles were nearly shut up. There was no appearance of scrofulous disease.

In the discussion which ensued on this case, various gentlemen took part. It had reference chiefly to the indications presented for depletion, or for abstaining from it, and to the essential characters and causes of inflammation.

STRICTURE OF THE RECTUM—CONSTIPATION FOR THIRTY DAYS.

MR. PILCHER exhibited a preparation, illustrative of a case which he had attended with Dr. Aldis at the Surrey Dispensary. The patient was a woman, forty-six years of age, who had enjoyed tolerably good health until four or five weeks since, when she was seized with vomiting and slight purging, followed by constipation, and a distended and tympanitic abdomen. All the food she took was retained, but the medicines administered returned. The abdomen was very large, and the convolutions of the intestines and their peris-

talitic motion could be distinctly seen through the external parietes. The remedies consisted of purgatives of all kinds, including the administration of croton oil by the stomach and rectum. The uterus, on examination, was found normal; the rectum appeared to be folded on itself, but the finger detected what appeared to be faecal matter: this proved, however, not to be the case. Repeated injections were administered only to return. The patient died at the expiration of thirty days from the commencement of the constipation. She was not much sunken until about two hours before death. On opening the abdomen and turning aside the coverings, faecal matter was observed to have escaped into the cavity of the peritonæum; the matter had passed through minute pin-like holes in the colon. The colon was much enlarged, and the sigmoid flexure ulcerated, but not to the admission of the escape of faeces, as an apple-pip was impacted in the ulcerated opening. This was probably the pip of an apple eaten twenty-four days before. The rectum was much distended, and a stricture existed about its middle, which effectually blocked up the passage. It was interesting in this case, that the woman continued healthy until the time mentioned. She had been the subject of habitual costiveness; was it probable that the pressure exerted by the distended colon was the exciting cause of the deposit in the rectum, and the after ulceration? The absence of vomiting was a peculiar feature in the case. The small intestines were not distended by faeces but with gas. The faeces were natural in character.

MR. HILTON remarked that vomiting was a symptom of distention of the small intestines with faecal matter, but not of the large.

‘DR. ALDIS agreed in the opinion just expressed by Mr. Hilton: he added to the history of the case, the fact that the tongue was healthy and clean; there was little constitutional disturbance, but there was pain, as flatulence suddenly increased or decreased the peristaltic action. With respect to the treatment, the injection of air was thought might be of service, but it was tried and failed. Liquid injections all returned. Ptyalism had been produced by calomel and opium without benefit.

MARCH 16.—MR. DENDY, PRESIDENT.

On taking the chair, the new president gave an address. He spoke of the classic associations connected with the spot in which the Society met—a spot consecrated by the names of Lettsom and of Jenner, and of other great men, who had been connected with the foundation or the early career of the Society. He stated the fact, that Lettsom had himself paid for the first Fothergillian medal, and gave to the Society the house in which they were then assembled. He urged on the members the necessity of bringing papers before the Society, and spoke of the value of giving the discussions a purely practical character. He alluded to the publication of a new series of “Transactions,” the first volume of which was on the table of the Society.

Thanks having been voted to the various office-bearers, MR. STORKS read a

CASE OF POPLITEAL ANEURISM SUCCESSFULLY TREATED BY PRESSURE.

The patient, John R—, aged thirty-two, a tailor, an unhealthy man, was admitted at Blenheim-street Dispensary, Sept. 7th, 1845, with popliteal aneurism of the left leg. The treatment, by compression with Signoroni's tourniquet, was commenced Sept. 12th. The pulsation ceased on the twentieth day, but returned on the twenty-second day, accompanied by great swelling, tenderness, and increase in size of the tumour. Some leeches were applied; the tenderness subsided, but the swelling, pulsation, and bruits, remained. During the last forty-four days of the treatment, direct pressure by a pad and bandage was made on the aneurism, under which treatment the pulsation and bruit had ceased on the 12th of December, 1845, the treatment having occupied ninety-one days. MR. STORKS adverted to the statistics collected by Mr. B. Philips, which proved the dangerous results to be expected from the Hunterian operation, and stated, that of sixteen cases subjected to the treatment by compression, contained in a table accompanying the paper, only two had been unsuccessful, as far as the life of the patient was concerned; and in fifteen of the cases the disease had been cured. Mr. Storks remarked, that, in the two unsuccessful cases, one (that of Mr. Cusack) could hardly be considered unsuccessful, as far as the question of this plan of treatment was concerned, the patient dying from disease of the heart forty-eight hours after pulsation had ceased in the aneurism. In the second case, Mr. Storks attributed the want of success to the great irritability of the patient, and to the fact of the pressure

being used too forcibly at first. It was a matter of importance to ascertain what changes were produced in the artery at the point of compression, and whether such changes were calculated to embarrass the operator or affect the success of the operation. He alluded to three cases in which an opportunity was afforded of examining the artery during life or after death, and nothing but slight condensation of the sheath was found to have taken place. After some observations on the leading points in the above case, and some statistical deductions from the table accompanying the paper, Mr. Storks concludes by urging the necessity of pressure being fairly tried before the Hunterian operation is resorted to.

In answer to questions, Mr. Storks stated that only one instrument was used; the patient shifted it himself. There was no evidence of any disease in the system, but the patient had an irritable heart. The knee-joint was not enlarged, but the artery was in much the same condition as though the Hunterian operation had been performed; the tumour was solid and pulseless.

Mr. HANCOCK doubted if the case were cured. The swelling in the ham, and twitches in the leg, which still existed, made him doubt the entire success of the operation. He showed by statistics that the operation for popliteal aneurism was less dangerous and fatal than represented in books. He related some successful cases which had occurred in his own practice.

Mr. CRISP said, that the fallacy existing respecting the statistics of operations for aneurism, consisted in Mr. Phillips having confined his accounts to aneurism of the larger vessels. In popliteal aneurism the failure by operation would be found to be nearer one in fifteen cases than one in three. In many cases he believed that pressure would do away with the necessity for the ligature. In Dublin, such was the feeling in favour of pressure, that no surgeon would tie the femoral artery until compression had failed. He believed that when compression was properly applied, it would be generally successful. The comparative freedom from danger of the two proceedings—that of ligature and pressure, was decidedly in favour of the latter, and if pressure did fail, it only rendered the case more favourable for the employment of the ligature.

Mr. STORKS said that his case was as completely cured as it could have been by ligature. He defended the treatment by compression, and showed that, when properly applied, it had been always successful.

Mr. HANCOCK recollected a case successfully treated by the late Mr. Lynn, fifteen years ago, by compression. He abstracted blood occasionally.

Mr. HIRD said that the treatment by pressure was very old, though now it was somewhat modified. He regarded the ligature of the femoral artery, even by the improved operation of Scarpa, as a hazardous proceeding. Were all cases of popliteal aneurism equally favourable for compression? In the case of Mr. Storks, the man was not healthy; if healthy, would it have rendered the treatment less efficacious? He bore witness to the accuracy of Mr. Crisp's statement regarding ligature of the femoral artery by the surgeons of Dublin. The appearance in this case, and in others treated by compression, was such as obtained after ligature. He should be of opinion that the aneurism was less liable to return after compression than after ligature.

ON THE LATE AWARD OF THE MEDAL IN PHYSIOLOGY AT THE ROYAL SOCIETY.

By GEORGE REDFORD, Esq., Surgeon, London.

THERE are circumstances connected with the late award of the royal medal in physiology by the Royal Society, which demand the attention of your readers, inasmuch as they concern the truth or not of a most interesting and important question in physiological anatomy, and, at the same time, tend to impugn the regularity, if not to throw a doubt upon that high and impartial integrity which should characterize the proceedings, of so influential and enlightened a body as the Council of the Royal Society, entrusted with the award of these honours. Most of us know, that in 1841 a paper was presented by Dr. R. Lee, "On the Nervous Ganglia of the Uterus;" it was founded upon researches and dissections of no ordinary labour, pursued with great skill and scientific acumen through several years. Repeated dissections of the uterus, in all stages of gestation, had exhibited constantly a similar arrangement of nerves supplying the organ. At first it was cautiously suggested, by some who saw the work in progress, that what appeared to be nerves might be cellular

tissue, or elastic tissue, or even filaments of muscular tissue formed into shreds by the process of minute dissection; but as the preparations were rendered more complete, it became more evident that these nervous flexures and ganglia were connected with the great sympathetic and the sacral nerves. Moreover, they were seen to accompany the arteries very generally in couplets, one on each side of the vessel, and they had the peculiar pearly lustre of nerve, and, as we have said, the peculiar enlargements called ganglia. Many able observers and practical anatomists saw these dissections, examined them minutely, both with and without the microscope, and the general opinion came to was, that they were really nerves, and formed a most complete system. Dr. Lee's paper excited much attention, both here and abroad, and it was printed, accompanied by most beautiful engravings, by order of the Royal Society. However, there were not wanting some members of the committee of physiology who were sceptical upon the subject of these nerves, and, as is too often the case even amongst scientific men, were loath to ascribe that full honour and merit to Dr. Lee which his discovery so well deserves: of this number were Mr. Kiernan, and Mr. Owen, a gentleman unconnected with the Royal Society. At length, Mr. Beck, having seen Dr. Lee's preparations, thought he could improve upon them; and he accordingly commenced by dissecting the first uterus at the full period which fell into his hands. After surmounting some difficulties caused by not using the proper liquid for covering the preparation, and by subsequently using spirits of wine,* as Dr. Lee had done, this gentleman, at the end of about two years, completed his dissection of the nerves of the uterus, and presents a paper to the Royal Society in 1845, setting forth the result of his extensive dissections, which was, that he could find no such things as Dr. Lee had dissected; true, he found some few minute twigs of nerve, but nothing more, and consequently the whole series of dissections, including more than one at the full period, nine at the corresponding periods of gestation, and several from the lower animals, were only beautifully executed fabrications of cellular and elastic tissue. This discovery, founded upon one dissection, liable to all the errors and injuries of a first attempt, was at once rewarded with the medal in physiology, the paper not even being read before the Society, nor having gone through the tedious process of being first printed, and thus subjected to the calm judgment of the general body.

These are the main facts, briefly stated, so far as they concern the merit of the respective papers; the business of the awarding is another matter.

That a learned and impartial body of men, having once examined fully into the subject of Dr. Lee's first paper, scrutinized his numerous preparations, and, after proper investigation, ordered it to be printed and illustrated in the most perfect manner, should, at the end of a very short time, and upon the strength of a paper from a gentleman unknown to the scientific world, founded upon one solitary dissection, and not subjected to a like ordeal of criticism, deliberately stultify their former proceedings, and stamp their delegated examiners with stupidity, by awarding to this paper the highest honour, and refusing, at the same time, to print a supplemental paper by Dr. Lee, is, indeed, most surprising; it is so unusual, that it cannot pass as a matter of course, and will be inquired into.

The Council of the Royal Society is clearly ambitious of being the last Old Sarum of the scientific world; its constituents must ask no troublesome questions, otherwise I would inquire, why the whole matter, allowing it to be in doubt, was not referred to a committee, who should have examined all Dr. Lee's and *all* Mr. Beck's dissections? As the matter now rests, the world who put faith in the Council of the Royal Society are thoroughly bamboozled. First we are told there are nerves in the uterus; then we are led to believe this is a mistake, and that there are none. If the Council of the Royal Society cannot decide the matter, let some of our medical societies do it; the preparations made by Dr. Lee are, as he has long ago published, open to any one's inspection, and doubtless that by Mr. Beck may also be seen.

In conclusion, allow me to say, that having known both Dr. Lee and Mr. Beck for some years, I have had repeated opportunities of seeing the dissections of both, and had I not seen enough in them to convince me of the existence of this set of nerves, I for one should never think of allowing one first dissection to overturn twenty.

Golden-square, March, 1846.

* I am told that Mr. Beck has latterly used a solution of arseniate of soda in his dissecting; it is desirable that we should know whether this was the case or no, from that gentleman himself.

THE LANCET.

LONDON, SATURDAY, MARCH 28, 1846.

QUACKERY and the various grades of empiricism could never, we are persuaded, have attained their present rampant height, but for the tacit sufferance or support afforded by members of the profession. It is common to hear it maintained that quackery has its foundation in the credulity and ignorant love of the marvellous and extravagant, inherent in the mass of the community. It, however, behoves medical men to inquire most rigidly into the extent to which the profession itself ministers to these mean and vulgar feelings, so unworthy to be the antagonists of regular medicine.

We propose, on the present occasion, to direct the attention of our readers to the kind of orthodoxy sustained by the Court medical staff, from which the aristocracy and the higher classes of society chiefly imbibe their ideas respecting the value and dignity of legitimate medicine.

Trespassing a little upon etiquette, let us first take Sir BENJAMIN BRODIE, her Majesty's senior sergeant-surgeon. In an article in the *Quarterly Review*, on brandy and salt, homœopathy, &c., generally understood to be from the pen of Sir BENJAMIN, the doctrine of free trade in physic was speciously maintained—free trade in physic meaning, the *liberty* which would give uneducated persons the right to administer dangerous medicines, to assume the titles of physician or surgeon falsely, and thus deceive the public,—and the *justice* which would require, notwithstanding, that medical men should be highly educated, to be eligible for public appointments. Free trade, indeed! It means nothing of the kind. Free trade in medicine would really mean that no man should be obliged to qualify, but that each should educate himself as he pleased, without any test or standard whatever. This would be free trade, but then there would be no such thing as a medical profession. It is anything but freedom to force a body of men to invest a large capital in education, and then to give them no higher level than belongs to the uneducated pretender, whom the public has no efficient means of unmasking, and no efficient means of punishing, because, where one person is killed directly by the administration of a quack medicine, fifty are killed remotely, or the deadly results are visited upon their children.

The same pseudo free-trade doctrines also form the staple of a pamphlet on medical reform, written by Sir B. BRODIE. To the *Quarterly* criticism, and to this pamphlet, those who examine into causes and effects will have no difficulty in referring the paternity of Sir JAMES GRAHAM's first medical bill, and more particularly his first medical speech, in which cheaters and charlatans in medicine were recognised as a double pleasure, that "blesseth him that gives and him that takes."

So much for the orthodoxy of her Majesty's senior "sergeant-surgeon."

Let us next take the head of the court-staff, Sir JAMES CLARK, physician in ordinary to her Majesty the Queen. Sir JAMES has written some well-meaning letters on the subject of medical reform, for which he has received the thanks of the profession. There is, however, one incident in which the cloven foot shows itself glaringly even in the case of this gentleman.

We fear that he is, in some measure, accountable for Mr. HERBERT MAYO's apostasy from the profession; in the work of the latter, on the use and misuse of the cold-water cure, he says, "following the advice of Sir JAMES CLARK, to which I had before owed much, and by which I had been principally guided in my treatment the last year, *I came to Germany to try the cold-water cure.*" It is not a very grateful sight to see the chief court physician openly patronising hydropathy, and recommending a professional brother to go and gamble for his health at the cold-water bagnios of Germany. If the same state of mind should continue, we may have her Majesty herself or Prince Albert transferred to the disciples of PRIESSNITZ. Doubtless, those few words have taken many in the same path with Mr. MAYO.

So much for the orthodoxy of her Majesty's physician "in ordinary."

With respect to another Court physician, attendant on the Queen and the Queen Dowager—Dr. CHAMBERS, we may refer to our remarks of last week. In his Address to the fellows of the Medico-Chirurgical Society, he appears as the warm eulogist of a man who thought it no wrong to practise medicine, though himself a medical sceptic. It would appear that to have discharged what are called the *duties* of the presidential chair with "good sense, urbanity, and talent," was a sufficient compensation for the "little faith in physic" by which the physician referred to was characterized, according to Dr. CHAMBERS. There is nothing like a regret, in the course of the Address, that such a thing should be. Yet Dr. CHAMBERS indulges in a powerful and a very proper sarcasm, when speaking of Sir MATTHEW TIERNEY, that the baronetcy should be "considered by the rulers of this great country (which owes so much to the successful cultivation of the arts and sciences) as quite sufficient to satisfy the ambitious aspirations of men of the most distinguished professional or scientific eminence." Is leniency or indifference to such scepticism as that he had previously described, the way, we would ask, to raise the profession to higher honours and rewards than is at present vouchsafed to it? We humbly think not.

So much for the orthodoxy of another of her Majesty's physicians "in ordinary."

Dr. BRIGHT, "physician extraordinary," we recently had upon the tapis, and we attempted to make evident "the heavy blow and great discouragement" to the profession, involved in the unlimited use of names such as his by the quacks of the day. Dr. BRIGHT seems willing that the thing should continue. He will not accord the profession the grace of interfering or explaining, and so the *Professor* goes on blasphemously comparing, by implication, the miracles in the Temple with the miracles of Temple-Bar! In our last, we assumed that there was no connexion between HOLLOWAY and "the chief physician at Guy's," but we suppose Dr. BRIGHT wishes to drive his professional brethren to assume that there is some sympathy between them. Dr. BRIGHT is, as we mentioned last week, "physician extraordinary to the Queen."

To Dr. LATHAM, another "physician extraordinary," we have a few words to say. There is a very general and growing—we may, indeed, say, an almost universal—feeling in favour of the belief that the advance of scientific medicine will very much depend upon the advance of physiology—a belief that when we have learnt perfectly all the healthy functions of the body, our knowledge of these functions in a state of disease

and of the means of cure will be proportionately increased. Dr. LATHAM would dash this well-founded hope to the ground. In his recent work he says,—

“It is not all physiology that can be made useful towards the knowledge and treatment of disease, but only those parts of physiology which are undeniably true, and not only true, but easily and at once seen to be so.”

To say that only true physiology can be useful, is a very obvious truism; but to say that, that physiology only can be useful which is “easily, and at once seen to be so,” is a scientific treason of the grossest kind. Pray was there ever any discovery of importance that was “at once seen to be true”? Was it the case with HARVEY, or JENNER, or BELL? Had not the stethoscope, even, its enemies; and is the physiology of the sounds of the heart either clear and easy, or useless? Such remarks, from such men, are like panderings to ignorance and self-sufficiency.

So much for the orthodoxy of two of her Majesty's physicians “extraordinary.”

Dr. FORBES is another attendant on royalty, against whom we have somewhat to urge. In a recent article in the *British and Foreign Review*, entitled, “Homœopathy, Allopathy, and Young Physic,” said by the *Medical Gazette* to be the work of Dr. FORBES, some extraordinary laches are perceptible. Homœopathy certainly was never in such respectable feather before in this or any other country, and legitimate medicine never had a more nauseous pill prescribed for it. The entire tendency of the article is to humble it to the dust, and if not to exalt homœopathy, at least to say all the exaggerated praise that can be said of such a meretricious mass of folly. The quotations we give, however they may be hemmed in by reservations, and weakened by explanations, furnish damning proofs that the writer, whoever he may be, ought, in the self-same mood, to remain no longer in the ranks of the followers of, and believers in, orthodox physic. Not that any of these believe it to be near certainty and perfection, but many, very many,—a faithful majority,—would shrink from the sentiments and deductions of this writer. Take the following fulsome laudation of the founder of homœopathy:—

“Hahnemann was undoubtedly a man of genius and a scholar, a man of indefatigable industry, of undaunted energy. In the history of medicine his name will appear in the same list with those of the greatest systematists and theorists; unsurpassed by few in the originality and ingenuity of his views; superior to most in having substantiated and carried out his doctrines into actual and most extensive practice; nor will the overthrow of his system, as a system, deprive him of his fame, so long as Paracelsus and Stahl, and Silvius, and Boerhaave, and Brown, and the other hundred heroes of theoretical renown, are remembered by their successors in the schools of medicine.”

So far from echoing this, we should have given HAHNEMANN his choice of being knave, fool, or madman, and would say the same to his followers. It is pretty well known, that some of those at present in the largest practice in London laugh at the system they subsist by. The knaves lead, the fools follow!!

The writer in question has tried homœopathy; the quotation below contains his experience in the matter.

“Many years ago, when in charge of a large body of men in the public service, we had occasion to treat an epidemic diarrhoea, of considerable violence but not dangerous. Finding one patient recover as fast under one as another of several methods of treatment adopted, we thought there would be no unpardonable lèse-majesté either to our royal master of London, or our divine master of Delos, in carrying

our trials one step further. Accordingly, we put half of our remaining patients on a course of orthodox physic, and half on homœopathic doses of flour (farin. 30) in the shape of bread pills; and it puzzled us sadly to say which was the most successful treatment. *Query:* As there certainly was a decillionth of flour in each of our doses, and as this had undergone not a few ‘triturations, and scrapings, and shakings’ in the barn, in the mill, on the crane, in the warehouse, in the joltings of a long land-journey, and in the infinitesimal vibrations of a ship on a long sea-voyage, (we were then within the Tropics) in the bakery, in the surgery, in the mortar (unglazed) on the slab, in the pill-box, in the patient's hand, (with two arm shakings), in his mouth, in his throat, in his œsophagus—who shall deny us the merit of having wrought our cures homœopathically?”

We by no means join in the jocularly, forced as it is. This is given as an example to show that patients get well as readily under one system as another. But does it prove the case? By no means. On the contrary, it seems very good and sufficient proof against the efficiency of the practice first employed. Doubtless there are persons in whose hands one system would be as good as another, but such anecdotes tell rather against individuals than against systems.

If the following were generally true, the medical profession ought to be scouted from society as a vile association of men for the purpose of obtaining money under false pretences. Medicine is indeed a solemn humbug, if this be anything more than a particular instance. We do not believe it to be so, yet the author evidently paints it as general, according to his experience.

“Who among us, in fact, of any considerable experience, and who has thought somewhat, as well as prescribed, but is ready to admit, that in a large proportion of the cases he treats, whether his practice in individual instances be directed by precept and example, by theory, by observation, by experience, by habit, by accident, or by whatsoever principle of action, he has no positive proof, or rather, no proof whatever, often, indeed, very little probability, that the remedies administered by him exert any beneficial influence over the disease? We often may hope, and frequently believe, and sometimes feel confident, that we do good, even in this class of cases; but the honest philosophical thinker, the experienced scientific observer, will hesitate, even in the best cases, ere he commit himself by the positive assertion that the good has been done by him. When physicians of this stamp have met in consultation in any doubtful case, and when they have chanced to be startled out of their conventionalities by the bold doubt, or bolder query, of some frank brother of the craft, has not the confession, like the confidence, been mutual?”

““And when his comrades thought each doctor knew,
‘Twas but his own, suppressed till now, he found.””

It is both cruel and criminal to attempt to sap the faith of the profession and the public in such a manner. The following is an instance of medical jesuitry taken from a former number of the same Review, evidently by the same hand, of which Dr. LATHAM is the subject:—

“Has Dr. Latham,” it is asked, “ever seen patients affected with severe acute rheumatism sent forth from the hospital in a state of (to their feelings) complete restoration, which patients had nevertheless undergone no treatment but that signified by abstinence, the free use of diluents, and the occasional administration of a gentle laxative. Probably he has not. We have. And we confess that such sights have shaken our faith.”

What a faith must that be which can be shaken because a disease may be cured or escaped from in more ways than one!

We give the conclusions at which the writer of the article on homœopathy, allopathy, and young physic, arrives:

“1. That in a large proportion of cases treated by allopathic physicians, the disease is cured by nature, not by them.

“2. That in a lesser, but still not a small proportion, the disease is cured by nature, in spite of them; in other words, their interference opposing instead of assisting the cure.

"3. That consequently, in a considerable proportion of diseases, it would fare as well, or better, with patients in the actual condition of the medical art as generally practised, if all remedies, at least all active remedies, especially drugs, were abandoned.

"We repeat our readiness to admit these inferences as just, and to abide by the consequences of their adoption. *We believe they are true.*"

We mentioned before that Cambridge House was divided between homœopathy and legitimate medicine. It must be a curious sight to see the orthodox physician march in afoot at one gate, while his homœopathic brother leaves in his carriage by the other. But taking the principles of this article to judge by, there is no such mighty difference between them. They might put their canes together peacefully, perhaps with some such mutual confidence as that described in the quotation above. There is but one remove between this and the position of our court doctor's friend at the Belgian Court, where the quack and the legitimist snugly hold office together.

We have thus taken the round of the Court, and a very unpleasant spectacle it offers to the orthodox medical eye.

"Something is rotten in the state of Denmark."

So much for the orthodoxy of the "physician to Prince Albert and the royal household."

But it is not only in the higher department of court medicine that the treasonous spirit is apparent. The names of the minor office-bearers are likewise mixed up with empiricism. Thus the name of her Majesty's surgeon-dentist, to whose abilities we have borne testimony, shines at SANGER'S, BARCLAY'S, HANNAY'S, and the other patent medicine-houses, in connexion with "NASMYTH'S tooth-powder." Even the royal chiropodist is known at the same places, by "DURLACHER'S chilblain lotion," and the medical galvanist to the court, M. LA BEAUME has produced a patent "Perspirator," or something of the kind. We do not mean that they connive at the appending such things to their names, but the fact that their names are so used, is as we have stated.

Now, calmly considering all these things, great and small, high and low, can the profession wonder that the aristocracy should support every system of quackery that rises to the surface? Can we wonder that they have little faith or trust in legitimate medicine? The mesmerisers claim PRINCE ALBERT, the homœopaths and hydropaths swarm at the houses of CAMBRIDGE, BEAUFORT, LICHFIELD, SUTHERLAND, WILTON, GROSVENOR, WESTMINSTER, ANGLESEA, and many others of the highest nobility. Quackery and the representatives of legitimate medicine have seemingly shaken hands. The consequences are deplorable throughout every grade of the profession. But let the profession give its unmistakable opinion on such conduct, and it will neither be continued nor repeated. The present will give place to a better spirit, or to better men. The true labour of "YOUNG PHYSIC" is, to introduce an orthodox spirit in the place of the prevalent lapsarianism of the day.

SOME weeks ago, we insisted on the imperative necessity which existed that the Council of the College of Surgeons should repudiate the offensive vulgarity of their Hunterian Orator for the year. Very properly, the Council have acted upon our suggestion, and have repudiated it by their deliberate vote of censure. On the same occasion, arguing from the past to the future, we foretold that the offender

himself would be willing enough to retract and apologize to "the geese" before whom he was so very valiant. In the preface to the Oration, there is, of course, "regret" and "apology." Every one who knew the man expected it. There are two sorts of cowards, one, the braggadocio, who vapours and vaunts behind his enemy's back; the other, the bully, who plants a blow and then runs from the consequences, sneaks off with an apology, or an asseveration that he could mean no harm, however great the insult and injury he may have inflicted. The latter we more thoroughly despise and condemn than the former, as belonging, in truth, to a meaner genus. He may apologize till he is hoarse, the profession will have none of it. It knows how to resent an insult like that which has been deliberately and premeditatedly offered. We may remark, that no one who simply reads the lecture now published can have an adequate idea of what it really was as delivered.* No dumb type can give adequate utterance to the bad feelings and passions that manner and tone and gesture easily convey.

Some may wish for the words of the apology. Here they are. "I now offer my sincere apology to any gentleman whom I may have thus unintentionally offended." He justifies himself by saying that he has been allowed to utter the same calumnies before without reprehension, which nobody will believe; and that the Apothecaries Company, in their "statement" and "address" have said worse of the Colleges of Physicians and Surgeons. The *tu quoque* style of argument is the lowest that can be adopted, and he does not rise beyond its level. The Hunterian Commemoration was not an occasion for calling names with the Apothecaries' Society.

HOSPITAL REPORTS.

NEWCASTLE-UPON-TYNE INFIRMARY.

TREATMENT OF A CONTRACTED ARM, FROM THE CICATRIZATION OF A BURN.

The following case, which occurred in the practice of Mr. POTTER, surgeon to the Infirmary, is reported by Mr. CHAS. J. GIBB, house-pupil.

MARY G—, aged fourteen, Darlington, a healthy and well-developed girl; admitted June 5th, 1845, intending to have some operations performed on her left arm, which hangs a useless and almost cumbersome limb, being much stunted in growth in comparison to the other, and completely crippled by hard and inelastic webs of indurated skin and cellular tissue, the cicatrices of a severe burn, inflicted seven years ago by the firing of her clothes. The distortion was not so great on the healing of the ulcers, but became so after a time by the contracting of their cicatrices; the wrist is flexed almost to dislocation; the thumb drawn back upon the forearm in a very surprising manner; the forearm flexed to a very acute angle on the arm, and the latter bound a little to the axilla. To have a purge.

10th. The hand and thumb were freed from their abnormal adhesions to the forearm, the indurated skin was cut through and separated from the cellular cicatrices, which were in some parts completely excised, and in others effectually divided; the lips of the wounds thus made were then brought together longitudinally, and secured by sutures, adhesive plaster, and a bandage.

13th. Wounds dressed with a simple pledget of ointment; sutures removed, and a bandage so applied as to approximate the thumb to the hand, and extend the latter as much as possible on the forearm.

18th. Lips of incisions have partially adhered; an ulcer remains from the extension required for the adjustment of the

* It is universally admitted, that the report of the "Oration," exclusively published in THE LANCET of February 21, was a singularly successful specimen of stenographic ability and labour. The pamphlet now presented to the profession does not contain the insolent address that was delivered in the College of Surgeons.—ED. L.

parts, which are now in a much more natural position; pain nearly gone, and is dressed daily; palmar surface of hand and forearm placed on a straight splint, to which the wrist especially is bound tightly down by a bandage.

24th. Continues to be dressed daily, the pressure of the bandage upon the still very much flexed wrist being each time increased. To have an aromatic purge, as she has some griping.

July 8th. Ulcer has been healed three days; the wrist is becoming gradually straighter, and the thumb and forefinger can now be used in conjunction. The extensive cicatrix binding the forearm to the arm was divided in a similar manner to that at the wrist, the elbow extended as far as allowable, and the wound appropriately dressed.

16th.—Elbow can be extended to a right angle; a large wound covers the front of the joint from the separation of the edges of the incisions; she is directed to straighten her arm frequently; less pain; to continue the opiate and saline, and to be dressed with the oxide of zinc ointment.

20th.—A straight splint of pretty firm whalebone applied to the forearm and hand in the same manner as the other one.

26th.—Wrist and elbow can be extended further; ulcer beginning to cicatrize; has the wrist and forearm firmly bound down upon the elastic splint, and has a pound weight suspended from over the wrist, so that a continued extending force may be acting upon the elbow, whilst it at the same time tends in some degree to straighten the curvature of the wrist.

August 10th.—Ulcer healing, and extension of joints progressing gradually under the last treatment, the weight being increased from time to time.

30th.—Doing well; continues in good health.

September 20th.—Ulcer almost healed, and wrist and elbow can now be nearly straightened, whilst the thumb is restored to nearly its natural position.

October 9th.—Dismissed; the ulcer having been well for a few days, and the power of fully extending the arm almost completely regained.

Remarks.—This case illustrates, as well as possibly could be wished, the great amendment that those deformities which unfortunately are yet so frequently met with, are susceptible of, by the active and well directed use of manipulative measures.

IMPROVEMENTS IN LUNATIC ASYLUMS.

In the *American Journal of Insanity* for October, 1845, there are one or two suggestions which might be adopted with great advantage in the asylums in England. At the present time, there is a proposal for the erection of a new metropolitan asylum, and it is right that any suggestion conducing to augment facilities in the management of the establishment should be well considered, and, if practicable, adopted.

One of the most annoying duties (the unpleasant effects of which, in the present arrangement of asylums, is most difficult to correct) is the removal of foul linen, bedding, &c., from the wards. At present, this is generally accomplished by conveying them along the wards, corridors, &c., at an early hour of the morning, to the great discomfort of the entire establishment, and the effects of which proceeding often do not disappear for some hours. At the asylum of Pennsylvania there is a room on the basement floor containing a funnel, into which a branch opens from each ward; down these the soiled articles are thrown, and at once conveyed away to the detached washing establishment, thereby preventing, in a very great degree, unpleasant effluvia in the wards. In asylums where there are very large numbers of patients, these sanitary precautions should be most particularly attended to, especially as, in them, the subject of complaint is one of no trifling kind.

Another plan, as practised in the establishment above referred to, is one of high importance, since it adds much to the tranquillity, and therefore to the improvement, of the inmates. In all large establishments, it is usual to make a continual and frequent examination of the wards &c. through the night: these constant visits cannot be made without a certain noise, sufficient often to arouse the restless patient to sleeplessness, and be the occasion of a riotous night. To avoid these unpleasant circumstances as much as possible, the corridors of the Pennsylvanian asylum are carpeted, adding not only to their comfortable appearance, but contributing, in a great measure, to the quiet of the house. To this purpose, coir matting—a fabric not long introduced, and of an economical character—could be most advantageously applied. At Han-

well, this object is obtained by the use of list slippers, but these are not worn during the day, nor by the patients.

At page 151 of the journal, when referring to the Maryland hospital for the insane, the following statement is made, which militates, in some degree, against the present views of the metropolitan commissioners.

“Since it has been devoted to the insane, 553 patients have been admitted, of which number 265 have been cured: present number, 87. It should, however, be borne in mind that this lunatic hospital, contrary to the practice of most others, receives cases of mania-a-Potue, (a very curable disease;) consequently, the recoveries at such institutions cannot properly be compared with those of other lunatic hospitals. During the past year, thirteen cases of this disease were under treatment, and all the patients recovered. We are of opinion that cases of mania-a-Potue ought not to be received into asylums for the insane.” This, however, is certainly a question of some difficulty, since it may be as fairly argued that such cases are scarcely fitted for a hospital for general disease.

ETIQUETTE OF THE PROFESSION.

To the Editor of THE LANCET.

SIR,—If you think the following unprofessional conduct worthy to be placed before the readers of *THE LANCET*, its insertion will oblige your obedient servant,

Hyde, March, 1846.

SAMUEL BEECROFT, M.R.C.S., L.A.C.L.

A tradesman's child in Hyde had been attended upwards of a week by me for severe paroxysms of headach, sickness, costiveness, &c., the premonitory symptoms (as I suppose) of hydrocephalus, when the child not improving, I told the parents that it was, in my opinion, in a precarious position, and as Mr. Vaudrey, of Woodley, had been, until of late, the family medical attendant, I advised them to call him in to consult with me, so that if the case terminated fatally, they could have no regret, by not calling for another opinion. Accordingly, yesterday, February 17, Mr. Vaudrey was requested to visit the child with me, and I received a message that I was to be at the house immediately, to consult with him; and on going to the house, and after waiting half an hour, Mr. Vaudrey not having arrived, I wrote a short note, to be given to him, containing my opinion and treatment, and said that if he found it necessary, he must write a prescription for me, as my engagements prevented me waiting any longer.

On my way home I met Mr. Vaudrey, and stated to him the case, when he said that “he would be candid with me, and that he and his father never met in consultation any one but a consulting physician or surgeon, and that he could not consult with me on the case: he had no disrespect for me, but it was their invariable rule.”

I stated to him, that surely two qualified practitioners could consult together for the benefit of their patients, and also that he would not have been sent for, only at my request, the parents not having expressed a wish for another opinion; but it did not produce any other reply than the above.

Mr. Vaudrey then visited the patient without me, differed, of course, in diagnosis and treatment, saying something about the child labouring under lumbago of the head, (as the mother of the child tells me;) but, however, the event will show whether Mr. Vaudrey's lumbago, or my opinion that hydrocephalus existed, be correct. Surely, Mr. Editor, if we general practitioners cannot meet each other in consultation, the consulting physicians and surgeons may well think meanly of us.

I should not have troubled you with this communication, had not some of my medical friends thought it incumbent in me to lay the case before the profession.

THE MEMORIAL OF THE BRISTOL ASSOCIATION OF SURGEONS.

TO THOMAS WAKLEY, ESQ., M.P.

SIR,—At a full meeting of the Committee of the “Bristol Association of Surgeons,” held on Friday last, March 20th, a cordial vote of thanks was unanimously agreed to, and which I am requested to convey to you, for your great kindness and attention in presenting, in conjunction with the Hon. F. H. F. Berkeley, M.P., the Memorial of the above Association to the Right Hon. Sir James Graham, Bart.

I would respectfully call your attention to the inaccuracy of the number of signatures attached to the Memorial, as reported in the last *LANCET*, and beg to hope you will cause the

error to be corrected in your next publication. The number of signatures was one thousand and seventy-two, as stated in my communication of the 20th ultimo, which I had the honour of addressing you.—I beg to subscribe myself, Sir, your most obedient servant,

HENRY ROBERTSON, M.D., Hon. Sec.
Terrel-street, Bristol, March, 1846.

THE PHYSIOLOGY OF THE SPINAL MARROW, AND ITS DISCOVERER.

To the Editor of THE LANCET.

SIR,—It is by no means my wish to write a single word which should be offensive to your correspondent, Mr. Anderson; but it is clear that gentleman, without having adopted the well known resolution of Scholasticus, has ventured into water beyond his depth.

It appears that Mr. Anderson has not yet detected his "egregious error;" let him compare the various tables and plates, first of the cerebral, and then of the spinal systems, and observe in which of these the olfactory nerve is arranged. This ought to enlighten him.

Mr. Anderson says, that the discoverer of the true spinal marrow, with its incident and reflex nerves, and their functions, has "merited his wreath." Wreath indeed! What wreath! Has the Royal Society, who was bound to take cognizance of such a matter,—has the profession, conferred any such? Did the first award him a medal, or any other honour! On the contrary, when Sir B. Brodie, a few years since, recommended him for the royal medal, did not oblique and sinister influences divert the reward into some insignificant channel, that I can scarcely remember at this time? Have the professional critics, from Professor Alison downward, ever espoused his cause? Harvey placed his noble bark high upon the shore, and waited twenty-five years for the returning wave of public opinion to set it afloat. His physiological successor of the present day has already waited fourteen years: one might have hoped that the fleet intelligence of our age would have shortened the term of probation. It is now nearly three years since a "New Memoir" on the nervous system was published, containing five most graphic and speaking plates, depicting living nervous pathology, the first of the kind ever attempted. Now, Sir, not twenty copies of this work have been sold in all. In at least three of the medical journals of this metropolis it has been sneered at or ridiculed, and by the rest, here and elsewhere, it has, for the most part, been passed over without notice. This is in the author's own country. The finger of the next generation will point its scorn at those of the present, who have effected such injustice. It is not so in other countries; this memoir has been thought worthy of translation into both the German and Dutch languages.

I would add, that nothing can more tend to pluck the "wreath" from the brow of the meritorious labourer in science than continued and querulous disputes by those who have to fortify themselves with facts after they begin. With such, and with all ignorant meddlers in the subject, "Vindex" will continue to deal. If the discoveries in question be real, let them be admitted; if unfounded, let them be rejected; but let it be after investigation at least by those qualified to judge.

March, 1846.

VINDEX.

NEWS OF THE WEEK.

ABERDEEN DEGREES IN MEDICINE.—We have ascertained, on the best authority, that Dr. Curie, the homœopathist, whose doctorate formed the subject of a paragraph, which we lately quoted, under the above title, from THE LANCET of the 24th ultimo, is not a medical graduate of Marischal College, Aberdeen.—*Berwick Paper.*

MR. GREEN AND MR. LISTON have been elected upon the Court of Examiners of the College of Surgeons to fill the vacancies caused by the resignation of Sir B. Brodie and Mr. White.

BUCKINGHAMSHIRE GENERAL INFIRMARY, AYLESBURY.—The appointment of House-surgeon to this Institution was, on Wednesday last, the 18th instant, gained by Mr. Thomas Atchison, of University College, London.

The election was strongly contested, eleven candidates having appeared in the field; and each competitor having been duly ballotted for, the gentleman above named was returned by a large majority.

Aylesbury, March, 1846.

APOTHECARIES' HALL, LONDON.

Names of gentlemen who obtained certificates to practise as apothecaries, on Thursday, March 19th: John Marshall, Ely, Cambridgeshire; John Morris Bennett, Broseley, Shropshire.

CORRESPONDENTS.

If W. R. W. would address letters to the secretaries of the Colleges of Physicians and Surgeons, Dublin, and to the registrar of Trinity College, in that city, he would then learn whether the party in question took any medical degree, or obtained any medical diploma or licence there.

Medicus, (Dublin.)—We should have been delighted to see Dr. Corrigan a member of the commission, and agree with our correspondent in considering that his services would have been of the utmost value to the poor. The note of *Medicus* did not reach us until after the Bill had passed the House of Commons.

A Provincial Subscriber.—He is not. The Medical Witnesses' Bill was introduced into the House of Commons by Mr. Wakley. There has been no alteration of the law since that period, relative to the amount or the application of the fees.

A Subscriber would be glad to see published, an account of the ingredients which are used, and the practices which are adopted, in dyeing the hair. He states that some of them are injurious to the brain.

A Worcestershire Subscriber.—The question might properly be answered by stating, that no examination had been made to prove that a hernia existed. The censure of the court could not follow such a reply.

F.R.C.S. of E.—The Council ought, without doubt, to address the members of the College on the subject, and make an official announcement of the vote of censure. The silence of the Council, as regards the memorials addressed to them, and the application from the Committee of Associated Surgeons, is extremely reprehensible. The institution of a Faculty of Medicine, on a just basis, would soon bring the insolent members of this incomprehensible body to their senses. Within a very few weeks the opportunity will be afforded for forming a tolerably accurate conjecture as to what will be the future position of the College of Surgeons of England in its connexion with the medical affairs of this country.

Medicus Discipulus is advised not to enter the Sydenham Society. We cannot state whether that Society will issue two more volumes this year. There is no other medical society in London similar to the Sydenham. In this respect we ought to be thankful.

The date of the communication of Dr. Wilson, on the Liability of the Muscle in Disease, published in the last LANCET, at p. 332, was incorrectly stated to have been February. His communication was dated in November last.

The latter of *Mr. Burgess*, of Holborn, if it was received, has been mislaid. No entry of it is found in the "communication book."

We would advise *A Student* (University College) to apply to Professor Graham on the subject. We cannot doubt of his receiving a satisfactory explanation.

Esculapius is informed that we can only advise him to publish a description of his remedy in the medical periodicals. If it be a valuable one, he will discover his reward in the confidence and support of the public. We deprecate the use of all secret remedies, and the conduct of their authors and abettors.

Mr. Gibb's contributions will continue to be acceptable.

Vindex will see the information he requires in THE LANCET of last week.

Mr. Hoggin.—We have several communications from Dr. Routh, which shall receive insertion as early as we can find space for them. Our table is so laden with original contributions of merit, that our greatest difficulty is to find room for all in our pages.

An Old Student has not yet accomplished the age specified by the Hall and College, and until he had done so he would not be admitted to an examination at either place.

Mr. Christophers will see his paper in the present number of THE LANCET. We may address the same answer to Mr. Bunce and Mr. Gregson, whose communications were not noticed among those acknowledged in last week's LANCET, because we then expected, until nearly the hour of going to press, to have found room for their insertion.

We do not believe a word of the report mentioned by *An Old Correspondent*. But even did some reason exist for believing in its truth, the note could not be published unauthenticated.

In our number for March 14th, p. 313, read "Tu ne cede malis," for "In ne cede," &c. The error is that of our printer, not of our correspondent, and it is now so long since we studied the "Æneid," that we expect to be excused for having suffered the mistake to pass.

Communications have been received from—Dr. Routh; Mr. C. F. Hodson, (Bishop's Stortford); P. H. F. B.; Mr. Gay, (Report of cases); M.R.C.S.L., Halstead, (on a subject which shall speedily receive comment from us); Dr. Taylor, (University College Hospital); Dr. J. H. Bennet; Dr. Moore, (Gwalior, India); Mr. Hunter Lane; Dr. Barnes, (Notting Hill); Dr. Woolf, (Berlin); Dr. Thibert, (with a card); Mr. C. Mitchell; T. P.; Mr. Barnard, (Hereford); F.R.C.S.E.; Mr. Markwick, (King's College); Mr. Grove; H. B.; H. G. G., and N. J. W.

LECTURES

ON

PLETHORA AND ANÆMIA,

AND ON

SOME FUNCTIONAL DISORDERS DEPENDENT UPON THE STATE OF THE BLOOD.

DELIVERED AT THE LIVERPOOL NORTHERN HOSPITAL, SESSION 1845-46.

BY JAMES TURNBULL, M.D.

PHYSICIAN TO THE HOSPITAL.

LECTURE IV.

Symptoms from disorder of the function of respiration; cases of anæmic bronchitis; symptoms from disorder of the circulation; state of the pulse; palpitation; œdema of the cellular tissue, and serous effusions; disorder of the uterine functions. Is irregularity of the catamenia the cause or the effect of the diminution of the globules in chlorosis? Diagnosis of anæmic disorders; mode of termination, and organic lesions in fatal cases of anæmia. Does anæmia favour the development of tubercles? Causes of anæmia; excess of expenditure; deficient renewal of the blood; effect of retention of the fluid part of the blood upon the globules.

In my last lecture I pointed out the disorders of the nervous system and of the digestive organs which occur as symptoms of anæmia, and we come now to

Disorder of the function of respiration.—There is generally some shortness of breath in anæmia, which is experienced when the patient makes much exertion, as in walking fast, or going up an ascent. Andral observes, that “the respiration is difficult, as in pulmonary congestion. In this case there is dyspnoea, because there is too much blood relatively to the air which enters the bronchial tubes. In the case of anæmia, there is dyspnoea also, but from an opposite cause, because there is too much air relatively to the quantity of blood which requires to be vivified.” When we have this shortness of breath occurring without the other general symptoms of anæmia being well marked, it is sometimes rather difficult to make the diagnosis correctly, and we might mistake the case for one of incipient tubercular disease, or for some affection of the heart or large vessels. The following case will show the value of the venous murmur in enabling us in such cases to make the diagnosis with accuracy:—

A gentleman, about twenty-five years of age, of rather stout appearance, but somewhat pale, and with a nervous hypochondriacal expression of countenance, consulted me in September, 1844, on account of difficulty of breathing, and oppression at the chest. He was closely engaged in business, but resided in the country, and had consulted me in May preceeding for indigestion, cough, and shortness of breath. There was now scarcely any cough or expectoration. The appetite was good, and the digestion pretty easy, but the bowels were not very free. There was no palpitation, and no giddiness. The pulse was 80, rather weak. There were some wandering pains in the chest, but on examining it, nothing abnormal about the lungs or heart could be discovered. On placing the stethoscope, however, on the veins of the right side of the neck, a loud continuous murmur was heard, which at once proved the existence of anæmia, and the dependence of the symptoms upon the state of the blood. The compound aloetic pill was prescribed, to regulate the bowels, and the compound mixture of iron, with some carbonate of potass, was taken regularly for about six weeks, under which treatment the difficulty of breathing left him entirely, and he got quite well.

I have already shown that relaxation of the mucous membranes is apt to occur in anæmia, and that the bronchial mucous membrane is liable to chronic catarrhal attacks. The following cases will illustrate this, and show the value of the venous murmur in enabling us to distinguish anæmic bronchitis from tubercular affections of the lungs, as well as to show its importance as a therapeutic indication:—

A woman, aged 28, mother of several children, came under my care at the South Dispensary, on the 6th January, 1845, with chronic bronchitis and considerable expectoration, from which she had suffered for four months. Some expectorant medicine, with squill and compound camphor tincture, was prescribed. On the 13th, she was better of the cough, but had palpitation at the heart, giddiness, and painful digestion, with eructation of the food. On examining the veins, a loud continuous murmur was heard on the right side. Pills made with sul-

phate of iron, aloes, and extract of hyoscyamus, were ordered to be taken three times a day, and also a mixture with gentian and tincture of cardamoms. On the 20th she was much better. She was free from cough, her appetite was improved, and she was much stronger. On the 27th, she felt almost perfectly well, though the venous murmur was still present.

I was consulted, in December, 1844, as to the case of a young lady, aged seventeen, of pale, dark complexion. She had been always rather delicate, and as, during three months, she had been subject to cough, and attacks of bronchial inflammation, attended with shortness of breath, and tightness of the chest, much fear was entertained of consumption. During these attacks, she had been three times leeches below the clavicles, and, apparently, with some benefit each time. The face seemed rather puffy; though she had lost flesh, she was not thin; the respiration was not accelerated, but there was shortness of breath on going up a stair. There was no pain in any part of the chest, no expectoration, and only slight cough. There was some doubt as to whether appreciable dullness could be perceived below the right clavicle, but the respiration was clear on both sides. Posteriorly, there seemed to be a little more resonance of the voice in the right than in the left infra-spinal region, and there was some mucous râle; the pulse was 102; there was palpitation on going up a stair, and there had been at times some giddiness; a distinct continuous murmur was heard in the right internal jugular vein; the tongue was clean; there was no thirst, little appetite, and a great dislike to animal food; the bowels were always costive, but menstruation was regular; the feet were generally cold. Infusion of calumba, carbonate of ammonia, and hydrocyanic acid, were prescribed, and tonic aperient pills, with sulphate of iron, extract of hyoscyamus, and purified extract of aloes. She improved for a considerable time under this plan of treatment, and no symptoms of tubercular disease have since appeared.

Simple bronchitis occurs chiefly in the lower parts of the lungs, and it is generally at the lower part of the chest, posteriorly, that we find mucous râle and the other signs of bronchitis in the greatest intensity. In the bronchitis symptomatic of tubercular disease, we find, on the other hand, that the physical signs have their greatest intensity in the upper lobes of the lungs, and a knowledge of these facts is of much use in enabling us to distinguish simple bronchitis from that which occurs in the early stage of phthisis. This knowledge is, however, far from being always sufficient to make the matter clear; for, in phthisis, we may have the signs of bronchitis in the lower, as well as the upper parts of the lungs, while simple bronchitis may also attack both situations; and I have observed this in several cases of anæmic bronchitis, where mucous râle existed at both the upper and lower parts of the lungs, and it was scarcely possible, from the greater intensity of the signs in one situation than in the other, to decide as to the nature of the disease. In such cases, the discovery of a loud venous murmur has generally removed doubt from my mind; a distinct venous murmur being, as I pointed out in a previous lecture, a rare occurrence in phthisis.

Symptoms from disordered function of the organs of circulation.—The physical signs derived from stethoscopic examination of the heart, arteries, and veins, the state of the pulse, and the peculiarities of the circulation through the brain, having been already noticed in preceding lectures, little remains for observation in reference to most of these points under this head. The pulse is generally small and weak; but under excitement, especially in young and nervous persons, it not unfrequently has the peculiar vibrating thrill which has been already pointed out; but this often subsides while we are examining the patient. The pulse is usually more frequent than natural, ranging in general from 80 to 100. In some cases I have found it much more frequent—from 130 to 140; but it should be observed, that there are also some where the circulation partakes of the general torpor, and the pulse is below the ordinary standard, ranging from 60 to 70.

Next to vertigo, palpitation and fluttering of the heart are the most common symptoms of anæmia. The palpitation is sometimes attended with oppression and disposition to faint. It is not always felt exactly at the heart, but may seem to the patient to be in the epigastrium or towards the centre of the chest. In an extreme case of chlorosis, with great palpitation, oppression, and frequent fainting, the patient felt at times as if the heart swelled so as to occupy the epigastrium, and extend into the right side of the chest. The extreme pallor of the surface of the body, which arises from the circulation, in the capillaries, of blood containing less than the natural

proportion of red globules, has been already noticed, as well as the slight œdema which is occasionally present. In some cases of anæmia, there is simply a deficiency of the natural red colour, in others there is a yellowish icteroid colour of the complexion, or a brownish discoloured appearance, especially round the eyes and at the sides of the nose and mouth, such as have been delineated by Dr. Marshall Hall, in his work on "The Constitutional Diseases of Females." In these cases we probably have, as observed by Ansell,* retention of the yellow and blue colouring principles of the blood, from torpor of the secreting organs, and it has also been already pointed out, that Becquerel and Rodier found a slight increase of the quantity of the fatty matters of the blood in the cases of anæmia in which they analyzed this fluid. Andral met with a species of anæmia in sheep, where the proportion of albumen in the blood was diminished; and he found that this had the effect of causing dropsy. There does not, however, seem to be any diminution of this principle of the blood in the anæmia of the human species, and it is probable that the slight œdema which sometimes takes place, is due simply to the escape of the superabundant proportion of water in the blood into the cellular tissue; but though the dropsical effusions, which sometimes take place in very advanced cases of anæmia, into the serous cavities, the pleural, pericardial, peritoneal, and the ventricles of the brain, may in most instances be produced by the same cause, combined with congestion of the vessels supplying the parts, it is possible that in some of these there may be diminution of the albumen.

Symptoms from disorder of the uterine functions.—We scarcely ever find, in cases of anæmia in females, that menstruation is in every respect natural. In some, the catamenia, instead of being present every month, appear only at long intervals, every five or six weeks, or perhaps two, three, or more months. In other cases, there is regularity as to time, or nearly so, but the discharge is scanty and pale, or dark-coloured and attended with pain. There are others, again, in whom menstruation occurs too frequently, every fortnight or three weeks, or the discharge is too abundant. We not unfrequently find this state in females of rather florid complexion and delicate skin and mucous membranes, or in those more advanced in life, who have had miscarriages. We very frequently find leucorrhœa combined with all of these varieties of disorder. If we endeavour to discover how far these derangements of the uterine functions and the anæmic state of the system are merely coincident effects of debilitating causes, and how far they stand to each other in the relation of cause and effect, we meet with the same difficulty that has been experienced in regard to the relations of dyspepsia and anæmia. It was formerly, and is still, a prevalent opinion among medical men, that the chlorosis or anæmia of those females in whom there is amenorrhœa, or uterine irregularity, is the effect of the absence, or irregularity, of the catamenial secretion, and that the most effectual mode of removing the chlorosis is to establish its regularity. It happens, however, that the means which we use for this purpose are the same that we employ to remove anæmia, by directly increasing the quantity of globules; but at the same time it should be observed, that some medical men are of opinion, that means which directly stimulate the uterus have likewise some tendency to remove anæmia. The superior efficacy of the preparations of iron, which directly improve the quality of the blood, would, however, rather induce us to believe that the blood is the part primarily affected.

The priority of the two states—the deranged uterine function and the anæmic condition of the system—is another point, from examination of which we should expect to be able to form some opinion. We certainly meet with cases where the patients can distinctly trace the commencement of ill health to sudden stoppage of the catamenia, and in some of these cases there can be no doubt that the suppression is the cause of the consequent anæmia. In the state of commencing anæmia, however, a slight cause, which, in health, would have no effect, may occasion sudden suppression, which uterine disorder could in such a case be only regarded as an accessory cause of chlorosis. Dr. Williams makes the following observations as to uterine irregularity as a cause of anæmia:—"It is difficult to understand how it operates; but that in many cases it is a cause and not an effect of anæmia is plain, from the well-known fact, that no signs of anæmia have occurred until cold, over-exertion, or excitement, or some circumstance, has suddenly checked the flow of the catamenia; it has not returned, and then the patient begins to lose colour, and gradually to exhibit the anæmic state." While we admit that in some of these cases the anæmia may be the effect of the

menstrual suppression, we must not forget the occurrence of anæmia in the male sex, and its occasional appearance before puberty, as well as after the cessation of the catamenia, which circumstances would show, that it may arise from various other causes; and we must not overlook the fact, that in some cases of amenorrhœa, instead of anæmia there is true plethora, with abundance of red globules. While I would agree, then, with Dr. Williams, that anæmia may sometimes be the effect of menstrual irregularity, I am disposed to believe, that where the catamenia gradually become pale and scanty, the anæmia and the menstrual irregularity are either coincident effects, or the menstrual disorder is caused by the state of the blood; and I think, therefore, that Dr. Ashwell is more correct in regarding chlorosis as primarily dependent upon a morbid condition of the blood which secondarily affects the ovaries.

We meet with a few cases in which there are anæmic symptoms—giddiness, palpitation, &c., with the blood scarcely appreciably altered, the anæmic symptoms having just commenced. I lately saw such a case, where no arterial or venous murmur could be discovered. Becquerel and Rodier have analyzed the blood in two cases of this description, and they found the quantity of globules almost at the point which they have fixed as the average for females. In both there was venous murmur; in one, not perfectly continuous, (*bruit modulé de diable*;) and there were many of the disorders which have been described as effects of anæmia. They seem inclined to draw from these cases the inference that the alteration of the blood in chlorosis is altogether secondary, and that the symptoms are the effect of the causes which have produced the chlorosis, instead of being the effect of the diminution of the globules; and they observe that the severity of the symptoms is not proportional to the degree of alteration which the blood has undergone. I do not agree with Becquerel and Rodier in these opinions, as to the connexion between the state of the blood and the symptoms in chlorosis; for it appears to me, that, in the two cases referred to, the quantity of globules, though almost at the healthy average, must have been below the individual standard; the leading symptoms in chlorosis are also the same with those of anæmia resulting from other causes, and, as far as my observation goes, their severity is in very close relation to the degree of alteration which the blood has undergone. Dr. Marshall Hall long ago pointed out the similarity between the effects of loss of blood and the symptoms of chlorosis. He observes, "There is, indeed, a remarkable similarity between the effects of loss of blood and the state of bloodlessness which obtains in chlorosis. The general symptoms—the tendency to affections of the head resembling arachnitis, and to affections of the heart resembling organic affections of the organ—the condition of the general surface, and of the capillary and larger circulations—the proneness to œdema and serous effusions—generally are, indeed, identical in both these conditions." He also pointed out their similarity in the tendency of both in their last stages to induce effusions into the cavities of the brain, pleura, pericardium, and peritonæum, as well as in producing a state of sinking, or even sudden death. Andral had also previously shown that the various functional disorders of chlorosis—the epileptic fits, convulsions, chorea, dyspnoea, palpitations, vomitings—were to be referred to the same cause which produced them in persons who had become anæmic from want of sufficient food, light, and wholesome air. If further proof of the dependence of the symptoms in chlorosis upon the state of the blood were necessary, it might be found in the fact, that in some cases of anæmia in the male sex, the symptoms so closely resemble those of chlorosis, that the anæmia has been called chlorosis in men, though the term was originally used to denote a disease peculiar to females.

Diagnosis of anæmia.—In most cases of anæmia, where the diminution of the globules is considerable, we find several of the functional disorders now pointed out, and the diagnosis is therefore sufficiently easy. There are some cases, however, in which the whole force of the anæmic disorder seems, as it were, to concentrate itself upon one organ; or the disorder of some particular organ becomes so prominent, that those of other parts of the system are apt to escape our attention. Thus, we might mistake a case of anæmia, with pain in the head and temples, vertigo, and throbbing of the carotids, for one of determination of blood to the head, or of inflammatory congestion of the brain and membranes. The diagnosis in some of these cases is by no means easy, but it is most important, for the depletion, which is requisite in inflammatory or plethoric congestion, cannot in the anæmic form fail to be injurious, even though merely local. The following is a case of anæmic congestion, in which I had some difficulty in de-

* Ansell's Lectures on the Blood.—LANCET, Feb. 15th, 1840.

ciding whether the case was one requiring depletion or an opposite plan of treatment.

C. S—, a widow, thirty-three years of age, rather stout, with firm flesh, but pale, came under my care on the 1st of July, 1844. Five years before, she had fallen and hurt her head, and had at times been troubled with giddiness, for which she had been several times bled; and on the last occasion, three years previous, there was no heat of head, the pulse was 106, full. She was in the habit of washing, and lived much on fluids, such as tea. Her appetite was not very good; and the bowels were costive. The catamenia were regular. There was no palpitation, but some pulsation in the left iliac region. Calomel and colocynth at night, and an aperient draught in the morning, were prescribed, and also a blister to the back of the neck. On the 4th she was not better. There was still giddiness, with pain of the head. Pulse 100, and full. A pill, with sulphate of iron, aloes, and extract of hyoseyamus, was ordered to be taken three times a day; and a mixture, with infusion of calumba, tincture of digitalis, and hydrocyanic acid. Under this treatment, there was an immediate improvement: the bowels became regular, the appetite good, and the giddiness gradually went off.

In this case there was full, firm habit of body, and quick, full pulse. The patient had also been always benefited by depletion, and wished to lose blood again. On the other hand, there was a certain degree of pallor along with the full habit of body. She was not so well nourished as she had formerly been; and, in addition, there was a venous murmur, not perfectly continuous, but increased in intensity at each pulsation of the artery. It became, however, louder and continuous on removing the finger, after having for a time obstructed the current, and caused the blood to accumulate in the vein.

We experience similar difficulty in distinguishing between the palpitation which is a symptom of anæmia, and that which is caused by organic affection of the heart. The physical signs, even in anæmic affections of the heart, cannot always be easily distinguished from those of organic disease. The pain at the stomach, the eructation, and the sickness and vomiting in some anæmic disorders of the stomach, might also be mistaken for organic affection of this organ; and the pains at the lower margin of the ribs have sometimes been treated as pleuritis, or peritonitis, or inflammation of the liver, or of some of the other abdominal organs. In all of these cases, we seldom find that the disorder is exclusively confined to the head, the heart, the stomach, or the uterus, though one of these parts may be so prominently affected that the patient may be scarcely aware that there are others disordered.

Besides observing the anæmic appearance, which the patient generally presents in these cases, we shall be assisted in making the diagnosis by examining the state of each of the principal organs which have been shown to be deranged in anæmia; and it will seldom happen that we shall fail to discover, in a case of vertigo and pain in the head from anæmia, that there is some palpitation or dyspnoea also, or some weight and pain at the stomach during digestion, or, again, in a case of anæmic palpitation, that there is some disorder of the stomach, some lightness of the head, or in females, some uterine irregularity. The examination of the veins and arteries furnishes us with another diagnostic test of the presence of anæmia, which, in doubtful cases, is of great value. Where the combination of general symptoms alluded to is wanting, in anæmic affections of the head, heart, or stomach, the presence of a venous murmur becomes a physical sign of the highest importance; and it will often enable us at once to decide as to the nature of the case.

Mode of termination and organic lesions in fatal cases.—It is a matter of much interest to ascertain how far the functional disorders caused by anæmia have a tendency to pass into or induce organic affections. This is, however, a subject, the investigation of which presents much difficulty from the long period over which observation of individual patients would require to extend, and hence, probably, the small amount of definite information in regard to it which we possess. As we find in some cases the function of a single organ, the brain, the heart, or the stomach, prominently, or almost exclusively, deranged, there seems reason to believe, that where there is general anæmia, a deficiency in the supply of blood to some particular organ may exist also; and when this deficiency affects the heart, we may have induced the softening, dilatation, and atrophy of this organ, which have been supposed to have their origin in a state of anæmia and cachexia. It is probable, too, that some forms of softening of the brain may be caused in a similar manner from a state of general anæmia. Thinning of the stomach and intestines, and atrophy

of the liver and other viscera, may perhaps be induced in the same way, and I have already advanced some reasons which would render it somewhat probable that ulceration of the stomach may be connected with a state of anæmia. I may also observe, that Dr. Combe found, in a very interesting fatal case of anæmia, that the stomach and intestines were thin and transparent.

The connexion that subsists between anæmia and the development of tubercles in the lungs, or other organs of the body, is a most interesting and important subject, but one in reference to which our knowledge is at present far from precise. It has been already stated, that Andral found a diminution of the proportion of globules in the early stage of consumption, and though the observations of Becquerel and Rodier show that this does not constantly occur, there can be no doubt that the development of tubercles generally coincides with a state of anæmia more or less advanced. This is shown, not only by analysis, but also from the generally pale and debilitated appearance of persons in the early stage of tubercular consumption. Phthisis has been regarded as not an uncommon complication of chlorosis; and Dr. Ashwell says, that "the malady rarely terminates fatally, except in combination with phthisis; and the question is not unimportant, whether the phthisis be induced by chlorosis and amenorrhœa, or whether these latter affections do not owe their origin in part to the original phthisical tendency of the system." We should naturally expect to find some connexion between anæmia and the development of tubercles, from the fact of both diseases being produced by the same, or very similar causes. The much more frequent occurrence of consumption among the poorer inhabitants of large towns, who are imperfectly nourished, or whose sedentary employments require them to respire impure air, than among the country population, and the higher classes of society, and the far greater prevalence of anæmia among the former class, is perhaps the strongest argument that could be adduced to prove a connexion between the two diseases. At the same time it must be observed, that we meet with a large proportion of cases of chlorosis which show no tendency to phthisis, and that although it occasionally occurs, chlorosis does not of itself seem sufficient to cause the generation of tubercles, but merely to bring into activity a latent tendency to the disease. It does not, then, appear that there is any positive reason to think that tubercles are directly occasioned by anæmia, but as their origin generally takes place where there is a diminution of the globules, and as anæmia and phthisis are both produced by similar debilitating causes, we may regard it as extremely probable that anæmia tends to develop tubercles in constitutions already predisposed. In *THE LANCET* of August 2nd, 1845, notice is taken of an opinion entertained by M. Trousseau, that there is an antagonism between chlorosis and phthisis, so that the former prevents an individual from being attacked by the latter. Before, however, we could reason on this supposed antagonism, we should have some proof of phthisis being really less common in chlorotic than in healthy females. Some of his statements are manifestly incorrect; as, for example, that the administration of iron to young anæmic persons, born of scrofulous parents, and approaching the age of puberty, will often determine the explosion of the tubercular cachexia, and that it is not beneficial in the anæmia of phthisis. The reviewer in *THE LANCET* has very properly observed, too, that the theory of M. Trousseau is opposed by the fact that animals have been rendered tubercular by being kept in damp, dark cellars, but that when a small quantity of oxide of iron is mixed with their food to prevent anæmia, the same effect is not produced.

In extreme cases, anæmia sometimes proves directly fatal, from the diminution of the blood and of the proportion of globules being so great that the quantity becomes insufficient to sustain life; and death may take place suddenly by syncope, on assuming the erect position, or it may occur in a state of coma and delirium. In other cases, the patient is exhausted by diarrhœa, which comes on in the latter stage of the disease, or dropsical effusion takes place into the pleura, or some of the other serous cavities. Dr. Marshall Hall mentions having met with four fatal cases of chlorosis. In one, the patient sank exhausted into a state of coma and death. In the second, death occurred suddenly; the patient, after being confined to bed a few days, sat up for a quarter of an hour, and became faint, gasped, and expired. In this case there was some effusion into the ventricles of the brain, the pericardium, and left pleura. In a third case, he mentions that death followed the immediate effort and exhaustion of parturition. I have myself met with a case of fatal anæmia, where death ensued about a week after parturition, though

very little blood was lost during the labour; but there had previously been dropsy from advanced anæmia. For two days before death there were frequent sickness and vomiting, and, on post-mortem examination, a remarkable pallor and bloodlessness of all the internal organs was discovered. Dr. Hope mentions having met with two instances of fatal coma. Dr. Williams states that he witnessed three fatal cases of anæmia in young females, where headach and drowsiness passed into stupor with slight delirium, throbbing of the carotids, partial heat of the head, and coma. The most remarkable appearance found in these cases was the coagulation of the blood in the sinuses, and obstruction to its passage, already noticed.

M. Chomel, in the *Dictionnaire de Médecine*, under the article, Anémie, has given an account of a form of anæmia which attacked a number of the people working in a coal mine at Auzain. It commenced with colic, diarrhœa, and blackish-green stools, followed by the usual symptoms of anæmia, which, in several instances, proved fatal with a return of the diarrhœa. On examination of the bodies of those who died, nothing abnormal was observed, beyond the veins and arteries being almost without coloured blood, and containing only a sanguineous serum.

Dr. Combe has given, in the first volume of the "Transactions of the Edinburgh Medico-Chirurgical Society," a detailed account of the symptoms and appearances after death in a very interesting case of anæmia. In addition to the more ordinary symptoms, the bowels were rather lax, and the motions dark and foetid, as with the miners of Auzain. There was also œdema, and death took place from effusion into the chest. The morbid appearances were, a nearly bloodless state of every viscus and structure in the body, with the exception of the spleen. There was some ossification of the dura mater. The brain was soft, with very little difference of colour between the cineritious and medullary portions. The lateral sinuses were moderately filled with pale fluid blood, and there was some serous fluid in the ventricles and at the base of the brain. There were three pounds of serous fluid in the chest. The heart was pale when cut into, as if macerated. The liver was healthy in structure, but of a light-brown colour, and without any exudation of blood when cut into. The stomach and intestines were sound, but thin and transparent. The kidneys were bloodless. The arteries were universally empty, and the lower cava and the lateral sinuses were the only veins which contained any appreciable quantity of blood. Dr. Combe makes these remarks:—"The only morbid appearances detected may be considered, the effusion into the thorax and abdomen, the ossification of the dura mater, and the nearly bloodless state of every viscus and structure in the body, with the exception of the spleen. We often find the greater part of the system nearly exsanguine, and the great mass of the blood is thrown into the lateral sinuses, vena cava, liver, spleen, and muscular texture. But a state like that of our patient's, in which every organ was nearly deprived of its red blood, is one, I believe, of very rare occurrence, and of which we have few cases on record."

Causes of anæmia.—Every disease, whether acute or chronic, which is not of a local nature, but affects the system generally, may, by interfering with digestion and assimilation, have the effect of preventing the renewal of the blood, and the formation of the red globules; and, therefore, a state of anæmia, more or less marked, exists towards the termination of most diseases. When the original disease is entirely removed, the powers of the constitution, if good, quickly restore the healthy condition of the blood; but in some cases where the disease is chronic, or has been only partially removed, and becomes chronic, the consecutive state of anæmia may become as prominent an affection as the original disease, and the treatment of the anæmia may constitute the most effectual means of removing the primary disease. I may illustrate this by a case which came under my care in the Liverpool Northern Hospital. A seaman was in the hospital with subacute rheumatism alternately attacking the left wrist and knee, which were both red, and the synovial membranes very much thickened, so as to threaten organic disease of the joints. Under the use of colchicum and leeches, followed by blisters, the febrile symptoms disappeared; but the heat, swelling, and pain, recurred from time to time, subsiding partially in the one joint, and attacking the other. Iodide of potassium was given for a considerable time without much benefit, and as there was an exacerbation in the evening, quinine was tried, and was of more service, but still the disease continued. As the patient had a very pale anæmic appearance, with pearly conjunctivæ, it was thought that the preparations of iron would be of service, and I put him under the use of the iodide. This had a surprising effect, for in a short time he began to acquire

colour and flesh, and, at the same time, the swelling, heat, and redness of the joints entirely disappeared. Strapping, with camphorated mercurial ointment to the knee, was also used, to assist in removing the swelling.

It has been already shown, that it is often extremely difficult to decide whether some disorders are to be regarded as the cause or the effect of the co-existent state of anæmia; and the question has also been partially discussed by Becquerel and Rodier, whether the modifications found in the composition of the blood in the pathological state are to be regarded as the consequences of disease, or constitute the disease itself. We will first point out what have been regarded as the causes of anæmia, and then endeavour to show that it may have its origin from causes acting primarily upon the blood, and without the intervention of other disease. Most, if not all, of the causes of anæmia act in one of two ways, or in both together, either by removing from the blood a portion of some or of all the constituents of the circulating fluid, or by preventing assimilation and the elaboration of the red globules. There must, in fact, be excess of expenditure, or deficient renewal. Under the first may be arranged the anæmia from hæmorrhage and profuse menstruation, from lactation, from leucorrhœa, diarrhœa, and other mucous discharges, from albuminuria or granular nephritis, and from long-continued suppuration. Under the second may be arranged the anæmia from deficient nourishment, and that arising from the exclusion of the body from the direct influence of solar light and rays, and the respiration of impure air. Perhaps, also, under this head might be placed the anæmia caused by the poisonous effects of lead. Most diseases prevent the renewal of the blood, and many, at the same time, increase the expenditure. Hæmorrhage is the only instance in which there is direct loss of the red particles of the blood. In prolonged lactation, which is a very common cause of anæmia, and in albuminuria, in diarrhœa, leucorrhœa, and other mucous fluxes, there is loss of the albuminous part of the blood; and Dr. Rees has shown, that where this is considerable, as in granular disease of the kidney, it interferes with the nutrition of the globules by preventing the absorption by endosmosis of the ferruginous part of the chyle. That albuminous nephritis induces anæmia in this manner is clearly proved by the fact, that it lowers the specific gravity of the serum, and prevents the nutrition of the globules in two ways—viz., by direct loss of the albumen of the serum, which passes off by the kidneys, and by retention of the watery part of the serum, from the natural function of these organs being impaired. When this occurs, the globules are surrounded by a serum of low specific gravity, and, by the law of exosmosis and endosmosis, there is increased tendency for the serum to enter and distend the globules, which thus become filled with a fluid of lower specific gravity than natural. It has been shown, however, in a previous lecture, that the fluid within the globules should be of much higher specific gravity than that of the chyle, otherwise the tendency of the ferruginous fluid of the chyle to enter and nourish the globules is diminished, and in this way we see that diminution of the specific gravity of the serum in granular nephritis has a direct and obvious tendency to cause anæmia, by disturbing the natural relations between the globules and the chyle. The effect of other serous and albuminous discharges is less obvious and simple, though it is probable that they act in a similar way.

We are indebted to Andral for the discovery of a fact in regard to the composition of the blood in pregnant women, which shows, that even a natural increased expenditure of this fluid has the effect of inducing a certain degree of diminution of the globules. Of thirty-four cases in which he examined the blood of pregnant women, he found only two in which the proportion of globules was at or above the natural standard, whilst in the others it varied from 95 to 125, the fibrin in the latter months being at the same time increased in quantity. It is easy to understand how deficient nourishment causes anæmia by furnishing an imperfect supply of chyle; the operation, however, of such frequently concomitant causes as the absence of light, and the respiration of impure air, is more complicated; and it is probable that the privation of these natural stimuli acts, not only directly upon the blood, but also more or less directly upon the nervous system, and thus induces a torpid state of most of the functions of the economy.

The observations of Dr. G. O. Rees* upon the exosmosis and endosmosis of the globules, render it probable that anæmia may originate without the intervention of other disease. It has been a common opinion of medical men that chlorosis arises from torpor and deficient secretion from the intestines;

* Gulstonian Lectures, Medical Gazette, March, 1845

and there can be no doubt that this is one way in which deficient exercise may contribute to the production of anæmia. Dr. Rees has, however, drawn attention to the importance of the due performance of the secreting function of another part—viz., the skin; and speaking of the causes of chlorosis, he makes the following observations: "It is probable that we have an imperfect excretory action, on the part of the skin, as a cause of mischief, and that the superfluous water is not exhaled by that emunctory as it is in health, and that too large a portion of it is consequently retained in the circulation, which will lead to the same evils, as though the blood had lost its solids by albuminuria or leucorrhœa." Retention of water, it is obvious, will degenerate the blood precisely in the same manner as loss of solids, and will decrease the specific gravity of the liquor sanguinis. This mode of accounting for the spontaneous occurrence of anæmia, appears to me exceedingly ingenious, and it receives confirmation from the fact, that in many cases of anæmia, especially the form of chlorosis, there appears to be really a state of increased fullness of the vascular system. It has been already noticed as occurring in the early stage, and has been called false plethora, to distinguish it from plethora with increase of globules. I shall also have occasion to show that a plan of treatment which diminishes the specific gravity of the serum by promoting the secretions from the skin and kidneys, whilst it at the same time furnishes iron for the nourishment of the globules, is, in such cases, effectual in removing the morbid condition of the blood.

FOREIGN DEPARTMENT.

M. VELPEAU ON THROMBUS OF THE VULVA.

THROMBUS of the vulva, although mentioned by Kronauer, (1734), by Levret, and since by Boer and Audibert, has been omitted in nearly all modern works on pathology and midwifery. M. Deneux is the author who has given the best description of it.

Thrombus of the vulva may invade both sides of the vulva, but, generally speaking, it only occupies one of the labia majora, or a part of the interior of the vagina. It may be of the size of a walnut, of an egg, of the fist, or even of a newborn child. Of a dark, black colour, it presents a globular, spheroidal, or elliptical form, protruding principally on the free surface of the labia or vagina.

These sanguineous tumours of the vulva are generally indolent and soft, and offer slight fluctuation at the most prominent part of their surface. The pubic or femoral side is, on the contrary, rather dense and resistant, fluctuation being obscure. On pressing the tumour between the finger, as if to strangulate it, or to draw it towards the exterior, it becomes at once evident that the mass is not connected with the pelvis, that it is entirely formed in the soft parts. When a tumour presenting the above characters has formed rapidly,—in the space of a few hours for instance,—the diagnosis is very easy. An abscess, a cyst, or any other tumour, would develop itself in a very different manner, and present other anatomical characters.

The frequency of thrombus of the vulva is very great. I have myself seen more than thirty cases. M. Deneux has collected about sixty in his essay. If the disease has been considered rare hitherto, it can only be because it has often been confounded with diseases of another kind. Thus, Formi describes a case of this malady as gangrene of the vulva. He says that a tumour appeared in the right labium of a lady who had been wounded, and having been neglected for three or four days, became gangrenous. He made a deep incision into the tumour, and withdrew a pound and a half of blood, after which all healed.

The essay of M. Deneux would make it appear that thrombus of the labia is a disease confined to lying-in women, or to women recently confined. Such, however, is not the case; women who are not married, and women who are not in the puerperal state, are often the subjects of these tumours. I have seen as many as six cases in the same year, in women who were not, and had never been, pregnant. I have seen a thrombus of the vulva in a young girl of fourteen, who stated that she had been violated. I have also met with the disease in women of eighteen, twenty, twenty-five, thirty, thirty-five, forty, fifty, and even sixty years of age. De la Motte and other authors, during the last two centuries, have likewise published cases in which thrombus of the vulva has occurred apart from the puerperal state.

Parturition is only one of the causes of thrombus of the

vulva, which is merely the result of the laceration of some vessel or vessels, with or without a wound of the integuments. A collection of blood thus created, may take place at the vulva, as elsewhere, under the influence of all kinds of shocks, pressure, or mechanical violence. Thus it is that non-pregnant women may become affected with thrombus of the vulva from a fall on the angle of a chair, or of any article of furniture, from a kick, or from venereal excesses. This latter, indeed, is one of the most frequent causes of the lesion. The mechanism, in such cases, would be the same as in women in the puerperal state, in whom the tumour is generally occasioned by the passage of the head of the fœtus through the inferior brim of the pelvis. We must not, however, forget, that in pregnant women the pressure exercised by the uterus, or by some parts of the child, on the organs contained in the pelvis, or in the abdomen, must, by interfering with the return of the blood towards the centres, favour the dilatation of the vessels of the vulva, so as to render their laceration and the subsequent extravasation of blood more easy. In parturient females, the tumour acquires a much larger volume than in those who are not pregnant. Sometimes, also, a thrombus will appear, as it were spontaneously, in women in the puerperal state.

Once established, thrombus of the vulva may be assimilated in its symptoms and changes to sanguineous tumours in other parts of the body. It may undergo various transformations; either the effused blood disappears insensibly, and the disease terminates by resolution, or the fluid part alone of the collection is absorbed, and the coagulum which remains forms, in the course of time, a concrete tumour, the precise nature of which it is sometimes difficult to determine. In some cases it is the concrete part that disappears, whilst the fluid part remains, and increases in quantity. Thus is formed a cyst, filled with red pulpaceous matter, with a greasy, semi-transparent substance, or with serum. Sometimes the tumour becomes inflamed, and is transformed into a true sanguineous abscess.

It is more especially in women who are not in the puerperal state that these different phases of the disease are seen, as the medical attendant is seldom consulted at the onset, from the dislike which women, so situated, feel to mention the nature of the disease under which they are labouring. At the epoch of parturition it is different; the tumour originates, as it were, under the eyes of the accoucheur, and when recognised, may be treated at once. Its existence is also more likely to be recognised in parturient women, as with them it is much more painful than with women who are not in that condition. In the course of a few days, the pain which the tumour may occasion, even when not inflamed, passes away, and it becomes indolent, and like any other form of hæmatocœle. When the thrombus exists in the superior half of the labia, or near the pubis, it occasions less pain, and is less disposed to inflame, than when occupying the perineal half of the vulva.

When a thrombus situated near the perineum inflames and suppurates, the pus emitted, when it is opened, has a very foetid odour, which might lead to the supposition that the abscess communicated with the intestine, were it not borne in mind that all purulent collections contract easily the odour of the contents of the mucous canals in the vicinity of which they lie.

The prognostic of sanguineous tumours of the vulva is not very serious, although it may be rather more so than that of sanguineous tumours in general. The danger of this form of thrombus has been exaggerated; if death has followed its manifestation in some instances, it has been owing to excessive hæmorrhage. Thus, Stendel gives a case in which seven pounds of blood escaped from the tumour. When the thrombus has had time to transform itself into a concrete tumour, or a pulpaceous or serous cyst, the disease belongs to another class of tumours, and no longer forms a part of sanguineous tumours, properly so called.

The treatment of thrombus of the vulva varies according as the tumour is small or large, with or without solution of continuity of the skin, with or without thinning of the teguments, with or without inflammation. I need scarcely say that simple sanguineous infiltration of the labia does not demand any particular curative measure, and that it is dissipated by the same precautions, and by the same mechanism, as in ecchymoses, infiltration of blood of greater or less extent and depth, in other regions of the body. Unless there be division of the integuments, resolute agents must be first resorted to, such as linen dipped in a solution of acetate of lead. If by the end of fifteen or twenty days the tumour has not become absorbed spontaneously, or under the influence of these means, other

measures will probably be necessary. When this is the case, the absorption of the effused fluid is probably prevented by a kind of cyst by which it is surrounded, which cyst must be opened. This may be done in two ways,—by introducing a kind of lance into the tumour, cutting or tearing the parietes of the cyst with it, and then forcing, by pressure, the blood to infiltrate into the surrounding tissues, or by simply crushing the tumour. Crushing a thrombus of the vulva, with a view to disseminate its contents in the adjoining parts, becomes impossible, if the skin is broken or painful. When it can be effected, it is preferable to puncture, as the small wound thus occasioned may inflame, and be followed by supuration of the thrombus.

In women in the puerperal state, the thrombus is generally too voluminous, and, more especially, too painful, to admit of crushing, which is also often inapplicable under other circumstances. In such cases, and when the thrombus resists all resolute treatment, the definitive remedy is incision of the tumour. The incision should be large, so as to allow of the thrombus being fairly emptied of the clots which it contains. The minute arteries which may be divided are too small, or too easy to tie or twist, to modify the practice of the surgeon. The cyst having been freed from clots, should be washed, and then filled with small rolls of lint.

The region of the cyst in which the incision is performed is of importance. When the thrombus is very thin and prominent in one part of its surface, and appears likely to burst, the incision must be made on the most prominent spot, otherwise it should be made as near the cutaneous edge of the labium as possible.

When thrombus of the vulva occurs in pregnant women, it constitutes an obstacle to the exit of the child, and there is scarcely any way of avoiding an incision.—*Journal de Chirurgie.*

ON SULPHURIC ACID

AS A

REMEDY FOR POISONING BY LEAD.

By J. HENRY BENNET, M.D.,

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In the Foreign Department of *THE LANCET* for last year, (vol. i. p. 607,) there appeared an article by M. Gendrin, the celebrated physician to the Pitié Hospital, Paris, on the preservation of the health of those who work in lead and its preparations. In this article, it is asserted that sulphuric acid not only preserves the workmen who take it from the diseases which follow the absorption of lead into the system, but that it is also a curative remedy of great energy and efficacy in the treatment of these affections. From its being known to many persons that I was long the pupil and house physician of M. Gendrin, I have been often questioned on the subject, and this has induced me to present the following remarks.

The opportunities afforded by the hospitals of Paris for the study of the diseases occasioned by the introduction of lead into the human economy are considerable, owing to there being in that city several large manufactories of the oxides and salts of lead; and owing, also, to a great number of cases being continually furnished by various trades in which lead or its preparations is used, such as shot and printing-type foundries, potteries, china and crystal works, house-painting, black-dyeing of horsehair stuffs, glazing of visiting cards, &c. During the last few years, the attention of various French pathologists has been much directed to saturnine diseases; and, thanks to the facility for research thus afforded, much has been done to increase our knowledge of their causes, symptoms, and progress. The therapeutics of saturnine affections, however, have not improved so rapidly in their hands as their pathology, which is the more to be regretted, as the truly important discovery of M. Gendrin, with respect to the value of sulphuric acid as a therapeutic agent, has not met with that cordial reception to which it is justly entitled. M. Gendrin's views were, in fact, received with decided hostility by several of the physicians who, by their researches, have connected their names with these diseases—a circumstance which has tended to retard the general adoption of the remedy that he was endeavouring to introduce into practice.

M. Gendrin was first led to try the administration of sulphuric acid in colica pictonum, by the success which he found to follow the administration of alum. This substance has long been used in the treatment of lead colic, especially, I

believe, in Germany; and was tried and much talked of in Paris about twenty years ago. Finding it succeed, M. Gendrin concluded that the active agent was probably the sulphuric acid, and on administering it alone, he found himself correct in his surmise. It was in 1830 that this occurred, and since then he has treated by sulphuric acid alone between four and five hundred cases of saturnine disease, in all the forms under which that affection is susceptible of manifesting itself, and with nearly invariable success;—the only exceptions being, if I am not mistaken, a case or two in which the patient died of cerebral or epileptic phenomena before the treatment was well commenced; and a few cases of incurable paralysis, the result of repeated previous attacks.

During the three years that I was with M. Gendrin, I saw a vast number of cases of lead colic; we had, indeed, nearly always two or three men thus affected in our wards, sent from the carbonate of lead manufactory at Clichy. All of these cases were treated with sulphuric acid, and I do not recollect having seen one in which the disease proved refractory to the treatment adopted,—a case or two of confirmed chronic paralysis excepted. The duration of the treatment, as far as I can collect from my notes, was about three days in slight cases, and six or seven in severe ones. The sulphuric acid was given, largely diluted with water, (forty-four drops to a pint of water;) two or three pints being administered in the twenty-four hours. The amount of pure strong acid taken in that time was, therefore, from one drachm and a half to two drachms. Sometimes the sulphuric lemonade, as it was familiarly called, was vomited as soon as ingested. Still, when this was the case, the patient was made to persevere in its use, and the stomach soon became accustomed to the acid, and retained it. When it was retained, the abdominal pains generally began to diminish after the first, second, or third day, the constipation soon giving way naturally, after they had become less intense. In all these instances, not a grain of any kind of medicine was given besides the sulphuric acid, nor was an enema used, the sulphuric acid being the only medicinal agent resorted to, if we except baths.

At the commencement of the treatment, a sulphur bath was given to the patient, the result of which was, that the sulphur, combining with the particles of lead that were on the skin, formed a black sulphuret. The amount of lead, which is thus discovered to encrust, as it were, the skin of those who have worked at preparations of lead, is nearly incredible. I have often seen men go into the sulphur bath quite white, and come out nearly as black as negroes. The lead lying on the skin having been thus made visible to the naked eye, the patients were supplied with a hard brush and half a pound of soft soap, and made to scrub themselves daily in a warm bath, until all the black sulphuret had been brushed off. The sulphur bath was then repeated, the sulphuret of lead brought out, brushed off, and the process renewed, until it no longer rendered visible any trace of lead.

This precaution is indispensable with all who labour under saturnine disease, if we wish to ensure patients against relapse. Whilst at the hospitals of La Pitié and Saint Louis, I have repeatedly had patients under my care with lead colic, who had been discharged as cured from other hospitals a few weeks previously. The sulphur bath, which exhibited a thick coating of lead on the skin, explained at once the cause of the relapse. Indeed, the presence of this coating of lead on the surface of the body is, no doubt, the principal cause of the relapses which are mentioned by authors as occurring so often in these diseases. The lead which thus lies on the surface is gradually absorbed, and, at last, poisoning having again taken place, all the symptoms to which it gives rise are manifested. No patient who has suffered, and been treated for lead colic, can be considered safe unless he has gone through the ordeal of a sulphur bath, with a perfectly white skin. One of the great advantages of repeating the sulphur baths during the treatment is, that the patients, whom it is easy to convince of the importance of getting rid of the metallic poison when they see it plainly on their bodies, rub with real good will.

The mode in which the acid acts in neutralizing the poisonous effects of the lead is easy to explain. It combines, no doubt, with the lead in the tissues, and forms with it an insoluble sulphate or sulphuret, which is consequently inert, and is gradually eliminated from the economy. This is the interpretation adopted by M. Gendrin, and it appears rational enough.

Some of M. Gendrin's opponents have asserted that it is not by the sulphuric acid that he cures his patients, but by the sulphur baths which he simultaneously uses. I attach great importance, as does M. Gendrin, to the sulphur and warm baths, for the reasons given above, but I do not think that they

are the active agents in neutralizing the effects of the mineral poison contained in the economy. This opinion, moreover, is founded on the results of my own experience. Whilst at Saint Louis, I saw some half dozen cases of colica pictonum treated by sulphur and alkaline baths alone, by one of the physicians to that hospital, who believed that this treatment was sufficient to effect a cure. The patients were under my charge, so that I had every possible opportunity of observing them. They got well, it is true, but after very long and protracted suffering. In one instance, the constipation lasted ten days, and at one time the symptoms assumed quite an alarming aspect. The result of the treatment (or absence of treatment) in these cases, satisfied me that sulphuric acid, given internally in saturnine disease, is really a most powerful therapeutic remedy, and that, in the cases in which I had previously seen it administered, the patients did not get well by means of the use of baths, or through the sole efforts of nature, but owing to the therapeutic agency of the sulphuric acid.

The treatment still resorted to by the greater number of the Paris physicians is a combination of purgatives and opiates. The singular series of purgatives, known under the name of *traitement de La Charité*, is yet followed by many. I have repeatedly seen these modes of treatment tried, both in private and in hospital practice, and always, it has appeared to me, with a less satisfactory result than when sulphuric acid alone is exhibited. Indeed, my confidence in the therapeutic powers of this remedy is so great, that I never think of using any other when called upon to treat a case of lead colic. The simplicity of the treatment certainly much enhances its value. Nothing can be more troublesome and more trying to the patient than the continued medicine and injection taking which many practitioners consider themselves bound to prescribe. The duration of the treatment being, also, evidently shorter under sulphuric acid than when purgatives and opiates are resorted to, from the poison being sooner neutralized, there is less danger of the patient falling a victim to those frightful cerebral epileptic attacks, which constitute one of the chief dangers of saturnine diseases.

Not only is sulphuric acid a most valuable therapeutic remedy, but it has also proved an equally valuable preservative agent, which is the case with no other preparation. At the carbonate of lead manufactory of Clichy, M. Gendrin prevailed on the directors to insist on the workmen drinking every day one or two glasses of the sulphuric lemonade, and also washing themselves well, daily, with soap and water. It was found that these precautions enabled them to work with impunity for many months, although without them a few weeks' labour in the manufactory sufficed to bring on an attack of the lead colic. This result is one of extreme importance, both to the workmen and to the manufacturers. At the establishment mentioned, (that of Clichy,) a very large proportion of the workmen are invariably attacked with symptoms of poisoning, in from three to six or eight weeks after their entrance. This fact being generally known, no workman will, or indeed can, labour regularly at the manufactory. Its population is entirely composed of men who have been out of work until they have exhausted all their resources. Scores of times have my patients at La Pitié said to me, "I knew, Sir, that I should fall ill in a few weeks, but what could I do? I was starving." Such a state of things, on the other hand, is extremely prejudicial to the manufacturers themselves. Their works are often at a stand for want of hands; the workmen whom they do obtain are inefficient, from ignorance of the processes that have to be gone through, and no sooner do they acquire a tolerable acquaintance with their duties than they fall ill, and are obliged to go to the hospital.

The use of the sulphuric lemonade alone is not sufficient to guard against the appearance of the disease, although it will retard it; the skin must be well and daily cleansed. Indeed, it would be well if a sulphur-bath were used occasionally, in order to demonstrate the state of the skin. The facts which I have already mentioned prove that absorption of lead, and of its preparations, by the skin, is one of the principal means by which the economy becomes poisoned—a fact which has been denied by several pathologists.

On some future occasion I may trouble my readers with a few remarks on the pathology and symptoms of saturnine affections. For the present, however, I shall conclude this short article by expressing the hope that it may be the means of inducing, on the one hand, medical practitioners in this country to try sulphuric acid in the treatment of lead colic, and, on the other, manufacturers of the salts of lead to test its efficacy as a preservative.

Cambridge-square, Hyde-park, Feb. 1846.

ON THE STRUCTURE AND THE HATCHING OF THE EGG OF THE COMMON FOWL.

By DAVID TOD, M.R.C.S. Eng., London.

An egg consists of a shell, membranes, glaire or albumen, and yolk. It has an unequally oval shape, one end forming the segment of a larger sphere than the other.

The shell consists of two per cent. of animal matter, and about one per cent. of phosphate of lime and of magnesia, and the remainder, of carbonate of lime, with a little carbonate of magnesia.* It is very porous, and is lined with a thick white membrane, called *membrana putaminis*, or chorion.

The chorion in a new laid egg is easily separated into five laminae, of which three constitute the outer, and two the inner wall of the cavity, called *folliculus æris*.

The *folliculus æris* is situated generally at the broad end of the egg, sometimes directly, and sometimes obliquely, under its centre. In a new laid egg it is very small, but it enlarges progressively as the egg increases in age. It exists in every egg, whether it be or be not fecundated.

The glaire, or albumen, is situated within the chorion, and may with propriety be divided into two parts, one next the broad, and the other next the narrow end of the egg. Each part has in its centre one of those bodies called *chalazæ*, of which the largest is next the broad end of the egg. Each *chalaza* has a firmer and more fibrous consistence and character than the glaire, and has a pyramidal shape, with the apex adhering to the yolk, and the base to the capsule of the glaire, called *membrana albuminis*.

From the apex and sides of each *chalaza*, a number of fibres extend in various directions to the surface of yolk, which enable the latter to swim, as it were, in the glaire, and retain the white speck, called *oculus ovi*, always uppermost.

The glaire, or albumen, is a thin, clear, gelatinous, clammy fluid, deposited, apparently, in very delicate membranous cells, like a honeycomb, and enveloped with a clear and thin membrane, called *membrana albuminis*.

The *membrana albuminis* cannot be removed from the glaire without being torn to pieces. It lines the inner surface of the chorion without adhering to it, for it slides over it with facility.

The albumen, with the exception of the *chalazæ*, is in structure similar to the vitreous humour of the eye.

The yolk is a thin, yellow-coloured fluid, deposited in very delicate membranous cells, like a honeycomb,† and similar to the glaire, and is enveloped with a thin membrane, called *membrana vitelli*.

The yolk has a globular shape, and has on its surface a small round whitish speck, called *oculus ovi*, and which is, in every position of the egg, always uppermost.

The *oculus ovi* exists in every egg, and is the most important part of the yolk, being the situation of the germ, or primordium, of the future bird.

The *membrana vitelli* is thicker and stronger than the *membrana albuminis*; but it cannot be separated from the yolk without tearing.

When a new laid egg is examined before a lamp, it is transparent throughout, the opaque yolk being then not visible; and when the egg is turned in various ways, several globules, apparently of air, move from one place to another. The situation of these globules cannot with certainty be ascertained, but probably they are placed between the chorion and *membrana albuminis*.

All new laid eggs sink in water; but when the *folliculus æris* becomes enlarged from the action of the exhalant vessels, this effect does not occur.

All eggs gradually lose a portion of their fluid substance, and become lighter, and these effects occur to a greater extent in warm than in cold weather. In warm weather, an egg loses daily about three grains of its weight, but in cold weather the loss is not one-half that amount. This loss of substance occurs as much in unfecundated, as in fecundated eggs, and is produced from the action of exhalant vessels. There is another circumstance which demonstrates the organization of eggs—viz., that of acquiring the taste of chaff when packed in that substance.

* Phil. Trans. for 1822, p. 377.

† These cells are readily demonstrated by placing a yolk in a strong solution of bichloride of mercury for a few days, and then dissecting it. They are largest at the circumference, and smallest in the centre.

Although the yolk swims, as it were, in albumen, its specific gravity is greater than albumen; for when the contents of an egg are carefully placed in cold water, the albumen swims above the yolk, and has the latter hanging suspended from it.

When the contents of an egg are placed for a few hours in cold water, the albumen becomes a little opaque, and has a number of minute air globules adhering to it. These globules are probably produced from minute portions of the water becoming decomposed, for the same effect is produced when peas, oats, &c., are similarly placed.

When the contents of an egg are placed in cold water for a few hours, and the water then gradually heated, the yolk and albumen unfold different principles. In cold water, the yolk contracts, and the albumen dilates gradually in bulk. The membrana vitelli becomes wrinkled, and the membrana albuminis plump and smooth. But in warm water these effects are reversed; and it is perhaps owing to these provisions that an egg, when boiling, sustains its integrity.

An egg is produced in the following manner:—A minute branch of the ovarian artery deposits a fluid globule, which soon becomes covered with a delicate and vascular membrane—its formative capsule. This capsule becomes gradually thicker, stronger, and larger, as the yolk increases in size. On arriving at maturity, the yolk bursts its formative capsule, and is then seized by the fimbriated extremity of the oviduct and conveyed to the uterus.

When the yolk is ready to burst its formative capsule, the oviduct begins to secrete a glairy fluid, which afterwards becomes the glaire or albumen of the egg. And when the yolk is passing through the oviduct, the latter likewise secretes the two bodies, called chalazæ, and the thick opaque membrane, called membrana putaminis or chorion.

It is impossible to discover the length of time required to pass a yolk through the oviduct to the uterus; but when it reaches the uterus, the egg is complete in all its structures, except the shell, which is an uterine secretion. This uterine secretion seems to owe its production to the presence of the yolk; for when a blasted ovum is laid, it has no shell.

The shape of an egg is not produced from any uterine action, for sometimes two perfect eggs are found in that viscus.

When an egg is being laid, it is expelled with the broad end foremost.

I have not been able to discover in the ovarium the situation of the oculus ovi of an ovum or yolk; but the *Philosophical Transactions* for 1822, page 339, may be consulted with advantage upon this subject. And as to the cause of one ovum producing a male and another a female bird, that I believe will long remain a secret; for experience has proved that one visit of a male bird can fecundate all the eggs laid during one season, and some of these eggs will produce males and some females.

I have already stated, that when a yolk comes to maturity, it bursts its formative capsule, and passes through the oviduct to the uterus. Sometimes, however, the yolk, instead of entering the oviduct, escapes into the cavity of the abdomen, becomes adherent to the peritoneal covering of the intestines, and forms an extraneous body;* and when this event occurs, the hen lays a blasted ovum—i. e., an egg minus the yolk and the shell.

This extraneous body in the abdominal cavity does not produce any constitutional disturbance, for the bird recommences laying a few days afterwards, as if nothing had occurred to it.

CHEMICAL COMPOSITION OF AN EGG.

In the *Medico-Chirurgical Transactions*, vol. iv. p. 68, &c., Dr. Bostock says that the white or glaire of an egg consists of

Water	85
Albumen	12
Uncoagulable matter	2.7
Salts	.3
	100.

And that the blood consists of

Water	80
Albumen	10
Uncoagulable matter	1
Salts	1
	92

In the *Philosophical Transactions of London* for 1822, p. 377, Dr. Prout says that the specific gravity of new laid eggs varies

from 1.030 to 1.090, and that their contents are in the following proportions:—

Albumen	grs. 394.3
Yolk	289.
Shell and membranes	80.
	763.3

That the albumen burns with difficulty, and that the yolk is very difficult of combustion, on account of the large quantity of phosphorus it contains. That the yolk consists of

Water	170.2
Albumen	55.3
Yellow oil	91.0
	316.5

And that the albumen and yolk contain

	Sulphuric acid.	Phosphoric acid.	Chlorine.	Potash, and soda and carbonate of ditto.	Lime, Magnesia and carbonate of ditto.
No. 1.					
Albumen ...	grains .29	grains .45	grains .94	grains 2.92	grains .30
Yolk	.21	3.56	.39	.50	.68
	.50	4.01	1.33	3.42	.98
No. 2.					
Albumen ...	.18	.48	.87	2.72	.32
Yolk	.19	4.00	.44	.51	.67
	.37	4.48	1.31	3.23	.99

N.B.—The numbers 1 and 2 refer to the numbers of the eggs examined.

Dr. Prout further states that the alkaline matters and chlorine decrease from the commencement of incubation, while the earthy matters increase in the most striking manner; that in the early stages of incubation an interchange of principles takes place between the albumen and yolk; that this interchange is confined, on the part of the yolk, to a little of its oily matter, which is found to be mixed with the modified albumen; that this portion of albumen undergoes some remarkable changes, and is connected into a substance analogous to the curd of milk; and that a portion of albumen is mixed with the yolk.

At the end of the first week of incubation, Dr. Prout found two eggs to consist of

	No. 1. grains.	No. 2. grains.
Unchanged albumen	232.8	247.1
Modified albumen	179.8	
Liquor amnii, membranes, blood-vessels, &c.	97.0	275.2
Animal	22.0	
Yolk	301.3	324.5
Shell and loss	167.1	153.2
	1000.	1000.

Dr. Prout further states, that one great use of the yolk evidently is to furnish the phosphorus entering as phosphoric acid into the skeleton of the animal. And with respect to the earthy matter found in the skeleton of the chick when it quits the shell, it does not pre-exist in the recent egg.

ON INCUBATION.

When new-laid eggs are placed under a clucking-hen and examined every hour with a microscope they exhibit no change, before the tenth* hour of hatching, and from this hour I date the visible commencement of hatching eggs of a common domestic fowl.

At the tenth hour of hatching, we notice around the oculus ovi a very delicate halo, having more than one whitish undulating line in it. This halo has been viewed by several physiologists† as a membrane, consisting of three layers, called by Pander, the serous, mucous, and vascular layers of the blastodermis or germinal membrane; and these layers, they

* In Mr. John Hunter's paper, recorded in the *Philosophical Transactions* for 1822, p. 339, by Sir Everard Home, the fourth hour is stated.

† Wolff. *Theoria Generationis* Berolini, 1774. Pander, *Beitrage zur Entwicklungsgeschichte des Hühnchens im Eie*; Wurtzburg, 1817. *Journal des Progres des Sciences, and des Instit. Medic.*, tom. v. p. 30. *Journal des Physique*, tom. lxviii. Dr. Alan Thomson, on the Development of the Vascular System, in the *Edinburgh New Philosophical Journal* for October, 1830.

* I have several preparations of this kind.

afterwards state, become folded, and constitute the nervous and tegumentary, the vascular, and the intestinal systems of the young chick.* This division of layers and their subsequent productions, I have not been able ever to demonstrate with satisfaction to myself; for the halo is so slight, and the parts are so very delicate, that to make a satisfactory investigation is a matter of extreme difficulty. Out of twenty† eggs I succeeded only once in placing these delicate textures in the field of a microscope; and in this instance the textures appeared to consist of a sac containing a transparent fluid, which the heat of the sun caused to undulate like the undulating fumes seen over a brick or limekiln, in a clear sunny day; for the fluid in the sac is as clear and colourless as the aqueous humour of the eye, and the sac itself perceptible only at its boundary or margin.

At the tenth hour of hatching, the parts over the oculus ovi seem to be slightly elevated; but this appearance is, perhaps, an optical illusion; for eggs, whether hatched or not hatched for ten hours, whether fecundated or not fecundated, when examined after being exposed to the air a few hours, exhibit but one appearance—namely, a corrugated depression over the oculus ovi,

FIG. 1.



1, oculus ovi, in the centre.

which afterwards becomes smooth and plump on placing the egg in warm water for a few minutes.

At the eleventh hour of hatching, the appearances represented in figure 2 are seen with the naked eye, and when the centre circle is placed upon the field of the microscope, the structures represented in figure 3 are recognised.

FIG. 2.



FIG. 3.



In figure 2, the outer circle represents the blastodermis or respiratory membrane; the next, the oculus ovi; and the other, the sac containing the primordium. The blastodermis is about a quarter of an inch in diameter.

In figure 3, the sac containing the primordium, and the germinating or amniotic fluid, has an oval shape. The head of the primordium lies over the centre of the oculus ovi, and near the middle of its containing sac, and the two parallel lines which extend from the head of the primordium, are the primitive structures of the spinal column. The spine lies towards the broad end of the egg.

When the membrana vitelli is at this hour of hatching floated in cold water, the part covering the oculus ovi appears thinner in substance than any other part of it.

At the twelfth hour of hatching no additional structure can be discovered.‡

At the thirteenth hour of hatching, the several structures already noticed are more visible; the spinal column has a darker hue, and a slight projection appears below and near to the head. This projection is the punctura saliens, or heart of the future chick.

Figure 4 represents the several structures as seen with the naked eye; and figure 5, the primordium and sac or membrane, as seen by the microscope.

In figure 4, the outer circle represents the blastodermis; the next, the oculus ovi with the primordium lying partly over it.

FIG. 4.



FIG. 5.



At the fifteenth hour of hatching, the oval sac containing the primordium lies over the oculus ovi, and is surrounded by three undulating circular lines, having a whiter hue than the other parts. These three lines are, I believe, the boundaries of the serous, mucous, and vascular layers of the germinal mem-

brane of Pander.* But this definition is still unsatisfactory to me, for at a future period the outer line is merely the boundary of the respiratory portion of the blastodermis, and the other two lines are apparently slight elevations or wrinkles of that membrane, and not distinct layers, as stated by Pander.

Between the oval sac containing the vital entity and the inner circular line, the surface of the yolk has a darker hue than at any other part. Not the least vestige of vascularity can as yet be discovered.

At the eighteenth hour of hatching, a very extensive change has occurred. The halo surrounding the oculus ovi is now about the size of figure 6, and when this part is carefully removed, and placed under a microscope, the rudimentary body of the primordium, having a darkish-coloured line passing through its centre, is recognised. This line has a roundish double-knobbed head at one extremity, and is bifurcated at the other. It is, perhaps, the rudiments of the aorta and iliac arteries. The head of the primordium has now the rudiments of the eyes projecting from its sides. Below the head, on the left side, the curved projection, called punctum saliens, already noticed, is more fully developed. On each side of the darkish-coloured line, which extends through the centre of the body, there is a transparent space, which, with its fellow, has an oval shape, as represented in figure 7, and on each side of this oval space are the rudiments of the ribs.

FIG. 6.



FIG. 7.



The several structures represented in figure 7 are recognised as various shades of light.

About the twenty-second hour of hatching, the membrana vitelli where covering the oculus ovi is not half so thick in substance as at any other part. All the textures already described are larger and more visible, but not the least vascularity can as yet be recognised in either the primordium or its membranes.

At this period, the whitish undulating lines surrounding the oculus ovi are four in number, besides the one which defines the boundary of the oculus ovi,† and which is not so white as the others.

About the twenty-fourth hour of hatching, a very extensive change is recognised. We notice, first, the halo surrounding the oculus ovi, about the size of a silver fourpence; secondly, a very thin circular membrane, about a quarter of an inch in diameter, having a number of red-coloured granules around its margin, (fig. 8,) this membrane being the respiratory

FIG. 8.



portion of the blastodermis called the allantois; thirdly, the primordium lying over the oculus ovi, floating in liquor amnii, and enveloped in a capsular membrane; fourthly, the liquor amnii and its capsule invisible in situ; fifthly, the glaire or albumen of the egg, having a passage through it for the allantois to the inner surface of the chorion. And on cutting out these structures, and the membrana vitelli under them, and then floating the whole in cold water, the inner surface of the membrana vitelli, which corresponds with the halo around the oculus ovi, has a most beautiful reticulated appearance, which baffles all description.

* Dr. Alan Thomson says, "We are indebted to Pander for the important discovery, that towards the twelfth or fourteenth hour, the germinal membrane becomes divided into two layers of granules, the serous and mucous layers of the cicatricula, and that the rudimentary trace of the embryo, which at this time has become evident, is placed in the substance of the uppermost or serous layer." That, according to this observer, and to Baer, the part of this layer which surrounds the primitive trace soon becomes thicker; and on examining this part with care, towards the eighteenth hour we observe that a long furrow has been formed in it, in the bottom of which the primitive trace is situated. About the twentieth hour, this furrow is converted into a canal, open at the two ends, by the junction of its margins, (the plicæ primitivæ of Pander, the lamina dorsalis of Baer.)

† I am inclined to think that Pander and Baer came to these conclusions from the appearances of the parts as they are seen in the egg; for when the parts are carefully cut out, washed with cold water, and then examined with the microscope as they swim in the water, and afterwards as they lie upon a piece of glass, their exhibitions are very different.

‡ Dr. A. Thomson, p. 8 and 9, says, that from the twentieth to the twenty-fourth hour of hatching, the inner layer of the germinal membrane undergoes a further division, and, by a peculiar change, is converted into the vascular and mucous layers.

* Dr. A. Thomson's work.

† In all my minute investigations, I examined twenty eggs before I came to any conclusion on the subject.

‡ In Mr. John Hunter's paper, already noticed, the brain and spinal marrow are stated to be visible at this hour.

The relative situation of these several structures is represented in figure 9, and when these structures are viewed in situ, they appear as represented in figure 10. The red granules which are in the margin of the respiratory portion of the blastoderma gradually disappear as the egg becomes deprived of its blood heat,* and cannot be reproduced.

When the primordium is carefully placed under a microscope, after its respiratory membrane is removed, all the structures represented in figure 11 are seen.

FIG. 9.

FIG. 10.

FIG. 11.



Fig. 9.—1, Respiratory membrane; 2, Primordium, floating in liquor amnii; 3, Reticulated portion of membrana vitelli; 4, Oculus ovi.

Fig. 10.—1, Reticulated portion of membrana vitelli; 2, Respiratory membrane; 3, Capsule of liquor amnii; 4, Primordium lying over the oculus ovi, natural size.

Fig. 11.—The rudiments of the brain, eyes, punctum saliens, spinal cord, six vertebrae, shades of ribs, a dark knob at the cephalic extremity of spine, and an oval expansion at the caudal extremity. Over this oval expansion, a circular sac or body, containing dark-coloured matter, appears, when the parts are explored with a solar lunar microscope.

At the twenty-seventh hour of hatching,† all the structures already noticed are more fully developed.

On applying blood heat to the under surface of the glass field of the microscope, upon which the embryo lay, no motion could be produced in the punctum saliens, but the upper part of the body moved slowly from one side to the other, like a pendulum.

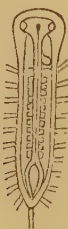
About the twenty-eighth hour of hatching, all the parts already noticed are more fully developed; and on placing the egg in water, at a blood heat, the punctum saliens was immediately put in action, and the blood made to flow through the vessels, which are now very numerous. The respiratory membrane is now about the size of a sixpence, and has many red globules of blood circulating in it.

On removing the respiratory membrane, and then placing the embryo under a microscope, we notice, in addition to the parts already described in previous inquiries, the bodies of all the dorsal vertebrae, the punctum saliens, something like the shape of the caecum caput coli—a bloodvessel passing from the punctum saliens over the head of the embryo.

On applying my warm finger to the under surface of the glass, which sustained the embryo, the punctum saliens, in half a minute's time, was put in motion, dilating and contracting with the greatest regularity and facility, and this motion was kept up so long as the heat existed.

Fig. 12 represents the several structures noticed at this period. The space inside the lines, to which the ribs are fixed, is the transparent area of authors. It passes along the neck, and covers the head.

FIG. 12.

Heart, or
punctum saliens.

About the thirty-third hour of hatching, the cavity of the cranium and the eyes are readily recognised, and likewise a number of dark orange-coloured particles about the caudal extremity of the transparent area. The oval space at the caudal extremity of the dark line, which extends along the middle of the spine, is now more contracted, but it exhibits no visible deposit.

About the thirty-fourth hour of hatching, we notice the head, eyes, spine, and punctum saliens of the embryo—a

bloodvessel passing from the punctum saliens along the abdominal surface of the spine, and dividing, near the caudal extremity, into two branches, which afterwards divide into many others, and ramify in the respiratory membrane; another bloodvessel passing from the heart towards the head, and ramifying in the respiratory.

Besides the action of the heart, or punctum saliens, an undulating or vibratory motion of the body of the embryo is readily recognised. This motion is similar to respiration, and is, perhaps, the first development of the motion noticed at the twenty-seventh hour of hatching.

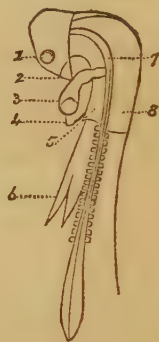
The vascular portion of the membrana vitelli is now about the size of half-a-crown, and has a lighter colour than its other part; and when the vascular portion is floated in cold water, its inner surface has the beautiful reticulated appearance already noticed.

About the forty-fifth hour of hatching, all the structures already noticed are considerably larger.

On placing the embryo under a microscope, we notice the head beginning to assume its proper figure; the punctum saliens forming a cul de sac, and very unlike a heart in shape; an organ afterwards discovered to be the liver lying behind the punctum saliens. No intestines are yet visible.

Fig. 13 represents the embryo lying on its right side, on a piece of glass, under the microscope.

FIG. 13.



1. The eye.
2. The beak.
3. The punctum saliens.
4. The liver.
5. A membrane.
6. Ditto.
7. The spine.
8. Gelatinous matter.

About the forty-eighth hour of hatching, the embryo lies upon its left side, with the back next the broad, and the abdomen facing the narrow, end of the egg. The respiratory membrane is now about the size of a shilling, and floats, as it were, over the embryo. The vascular portion of the membrana vitelli, under the embryo, has, about the size of a copper farthing, a lighter colour than its other parts.

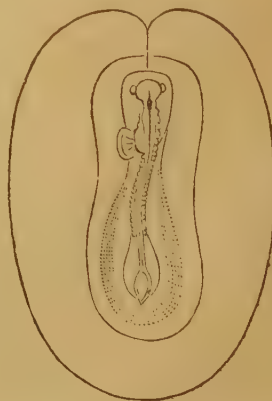
At this period, the bloodvessels which ramify in the allantois, or respiratory membrane, and membrana vitelli, are readily noticed to proceed from the abdomen of the embryo; and when the parts are exposed to the air for eighteen or twenty hours, not a particle of red blood exists in the respiratory membrane.

Fig. 14 represents the embryo and respiratory membrane about their natural size, as they lay upon a piece of glass.

Fig. 15 represents the embryo lying on the field of a microscope, with its abdomen downwards, enclosed in the capsule of the liquor amnii, and with the blastoderma spread out under it.

FIG. 15.

FIG. 14.



* Berzelius noticed a similar effect in blood.—Chir. Trans. iii. p. 221.

† Dr. Alan Thomson's work, already alluded to, may be read here, in order to give the reader a notion of the investigations of the various physiologists upon this subject.

About the sixtieth hour of hatching, the following organs and textures are readily recognised with the microscope:—The head, eyes, brain in a fluid state, and transparent; the spine, extending from the head to the coccyx; the vertebrae, but the cervical not so far advanced in their osseous state as the others; a semitransparent jelly covering the head, and extending down a part of the neck, where it is joined to a darker-coloured jelly, which extends along the back to the coccyx, and then along the inner surface of the spine to the head; the heart, or punctum saliens, below the bend of the neck, with the aorta passing over the abdominal surface of the dorsal vertebrae; the liver, behind and below the heart; two arteries and one vein, emerging from the abdomen above the pelvis, and ramifying in the respiratory membrane. The intestines are not as yet recognised, but I am inclined to think that they now are in a gelatinous condition.

When the punctum saliens is minutely examined, it has a shape something like fig. 16.*

Fig. 16.



About the seventy-second hour, or the third day of hatching, we notice, in addition to the organs and textures already described, several organs in the neighbourhood of the heart, and, with the aid of the microscope, the rudiments of the beak, wings, and legs.

Up to this period, the albumen or glaire of the egg is as transparent as in a new laid egg; but the yolk has apparently undergone some change. Instead of having a yellow hue, it has now the colour of cream or healthy pus, and when placed in cold water its granules readily separate from each other.

The fetus now floats in the liquor amnii, and the latter is as colourless as the vitreous humour of the eye. The whole are situated external to the membrana vitelli, as already noticed.

Fig. 17 represents the fetus lying on its left side, under a microscope. The head, spine, and heart, are now more perfectly formed.

Fig. 18 represents the shape of the heart at this period.

On the fourth day of hatching, the following structures are readily recognised, in situ, with the naked eye. The head, with its beak, the wings and legs, the heart and aorta, the liver close under the heart, and shades of convoluted intestines. The fetus, although floating in the liquor amnii, now forms, from its weight, a cavity on the surface of the yolk, and lies a little nearer the broad end of the egg than on the preceding day. The respiratory membrane, or allantois, has still an oval shape,

Fig. 17.

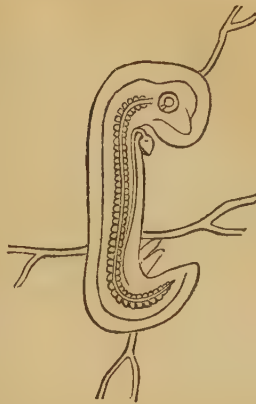
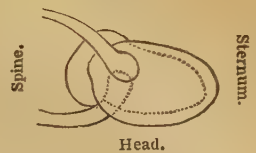


Fig. 18.

Tail.



and is now about the size of half-a-crown. The bloodvessels which pass from the fetus to the several membranes run in a tortuous manner, and allow the contents of the egg to be moved in various ways without receiving any injury. These bloodvessels, on passing from the abdomen of the fetus, separate into two sets, of which one ramifies in the membrana vitelli, and the other in the allantois. Those which ramify in the allantois consist of an artery and a vein. The artery, soon after it leaves the fetus, runs towards the narrow end of the egg, and in its course divides into two branches, which subdivide into many others, and these branches, on reaching the respiratory membrane, are reflected, and run towards the broad end of the egg. The vein, like the artery, divides in its course into two, and afterwards into many, branches, and these run in a contrary direction to the artery*—namely, towards the broad end of the egg, and on reaching the respiratory membrane,† they run from the broad towards the narrow end of the egg.

At this period, the embryo or fetus lies with its abdomen towards the yolk. Its head is the largest and heaviest part, and is replete with vessels carrying red blood. The brain is still in a fluid state. The eyes are more fully developed than at the seventy-second hour of hatching; but the iris is incomplete, for a white line, about two hairs' breadth, extends from the pupil or crystalline lens to the sclerotic coat. (See Fig. 17.)

The embryo, when extended, is now about half an inch in length. The brain is divided into hemispheres, and the thoracic viscera are covered with a thin membrane, which extends from the aperture formed by the absence of the lower jaw to the opening of the abdomen, where the umbilical vessels make their exit. This membrane seems to be a portion of the integument which covers the embryo in a rudimentary state. From the abdominal opening it extends outwards and is lost among the other membranes.

At this period of hatching, the albumen of the egg seems to have undergone some change, for instead of the whole being clear and glairy, a portion of it has a muddy and milky hue.

The various actions of the punctum saliens or heart can now be ascertained by merely exposing the embryo to cold. For as the heat of the body progressively diminishes, the actions of the several cavities of the heart become less frequent, until they at last cease. In this experiment, every cavity of the heart is seen to have an action of its own, and the various actions are noticed to occur in the following order:—The right auricle begins contracting before the left auricle; the right ventricle in like manner begins contracting before its fellow.‡ And it probably is owing to this arrangement in the actions of these several cavities, that no congestion occurs in any of the delicate textures of the body. The interval which exists between the respective actions of the two auricles and the two ventricles is, however, so momentary, as to be recognised only by the closest inspection. In every contraction of the auricles

* From what Dr. Alan Thomson states, it seems, that the body of a chick is made out of the layers of a membrane, and that a difference of opinion exists among anatomists with respect to the formation of the heart. "Baer† describes the rudimentary heart as having the appearance of a dilated vessel, situated between the mucous and serous layers on the lower side of the oesophagus, while Pander, Prevost, and Dumas† compare it to a sac or pouch, closed at the anterior extremity, situated between the mucous and vascular layers of the germinal membrane, and describe it as somewhat similar in its form to the oesophagus itself." Dr. A. Thomson thinks "that the view which Pander, Prevost, and Dumas, have taken of this subject is the more correct one, so far as regards the form and position of the heart. He likewise states, that the heart of the chick retains the appearance of a sac for a short time only," and that up to the forty-fifth hour the heart consists of a simple tube; "but now it begins to be slightly divided into several compartments: the posterior part, or auricle, with which the veins communicate, becomes dilated, and is separated from the anterior part, as well as from the veins, by a constriction in the paries; the anterior part, or ventricle, becomes divided into two compartments by a similar constriction in its canal; the posterior compartment forms the ventricle itself, the anterior connects the ventricle with the arteries, and constitutes the bulb of the aorta." "Between the fiftieth and sixtieth hour, the tube of the heart has the appearance of being coiled into a knot. About the sixtieth hour, the texture of the auricle differs considerably from that of the ventricle; the auricle remains, as at first, composed of a thin and membranous paries, whilst the ventricle has now become stronger and thicker, and is rendered rough by the deposition of muscular fibres. Before the sixty-fifth hour the heart is quite single, consisting, like that of the fish, of one auricle, one ventricle, and the bulb of the aorta. Towards the seventieth and eightieth hours, the cavities of the heart begin to be divided for the formation of the right and left auricles and ventricles. From late observations, it appears that the division of the ventricle commences some time before that of the auricle." In these several changes of structure, Dr. A. Thomson has taken no notice of the corresponding changes in the circulation, which must have occurred if his remarks are correct.

† *Entwickelungsgeschichte der Thiere* Königsburg, 1828, and in Burdach's work, vol. ii., *loc. citat.*

‡ Sur la Formation du cœur dans le Poulet. *Annal. des Sciences Nat.*, tom. iii., and Sur le Développement du Poulet, *ibid.*, tom. xii.

* A preparation showing the course of the bloodvessels of the respiratory membrane is made in the following manner:—Take an egg which has been ten or fourteen days under a hen, and place it in boiling water for about half a minute; then remove the broad end and hold the egg in cold water, so as to allow the contents progressively to escape, then with a sharp scissors cut the membranes adhering to the abdomen of the chick as they appear; and when the contents have made their exit from the shell, the respiratory membrane, with its bloodvessels and their contents, will be left behind, adhering to the inner surface of the chorion.

† I call that portion of the blastoderm which comes in contact with the chorion the respiratory membrane.

‡ At this period the heart evidently consists of two auricles and two ventricles.

and ventricles the contraction is so perfect as to force every atom of red blood out of each cavity, a circumstance indicating that all the cavities are of one magnitude. In the contraction and dilatation of these several cavities, the mechanical laws of the pendulum are obeyed. For every cavity contracts from its fundus towards the opening where it expels the blood, and hence has its greatest amount of motion at the most distant part from that opening.* This pendulous mode of action necessarily causes a momentary rest or cessation of motion between every contraction and dilatation, and produces a regular series of harmonic actions.

Perceiving that the actions of the heart owed their existence to the presence of a certain amount of heat, I tried the following experiments:—I carefully removed the yolk and albumen from, and retained the embryo and its membranes hanging in, the shell of the egg; I then placed the shell in cold water until the actions of the heart ceased; I then gradually applied heat, and noticed that when the heat amounted to 98° Fahr. the actions of the heart recommenced, and increased in velocity in exact proportion to the degrees of heat conveyed to it. I afterwards kept the heat steadily at 120° for one hour, and noticed that the great velocity of action in the heart did not lessen, or appear to wear out, its irritability. After this period, I placed the egg-shell again in cold water, and then noticed the actions of the heart to become progressively slower, and at last to cease. I then, for the second time, applied warm water until the heat reached 120° Fahr., and noticed the progressive restoration of the actions of the heart to their former velocity. After this experiment, I poured cold water into the egg-shell until the embryo floated in it, and noticed that the actions of the heart instantly ceased. I then poured out the cold water, and placed the shell in water heated to 98° and 100° Fahr., and restored the actions of the heart to their natural vigour. After this experiment, I removed the shell, and poured into it a little hartshorn heated to 104° Fahr., and noticed that the actions of the heart soon ceased to exist, and could not be again restored.

That heat is the energizing agent to the vital actions, and the only agent capable of restoring these actions when suspended by cold, is proved by the above-mentioned, and likewise by the following experiments:—I removed a number of eggs which had been four days under a clucking hen, and exposed them five days to the influence of the cold air. I then examined them, and saw that all the vital actions had ceased to exist. I then placed them in water heated to 104° Fahr., and in a very short time all the suspended actions were restored. I then placed the eggs into cold water until the restored actions ceased to exist, and afterwards placed them into warm water, and reproduced the vital actions. This reproducing power shows that eggs will not become addled from the temporary absence of the hen from her nest during incubation. It likewise shows that a certain amount of cold has merely the power of arresting, not annihilating, the vital actions of a tender fœtus, and that a change in the amount of heat is necessary to the perfect development of these actions. In illustration of this remark, I may adduce the circumstance of canary-birds quitting their eggs occasionally for hours, and very seldom having addled eggs; and of the crocodile having her eggs hatched in the sand by the alternate presence and absence of the sun's rays. In the human subject, heat is not generated to so great an amount during sleep as when awake.

Reiterated experiments show that the actions of the heart are slow at 90° Fahr., very rapid at 110°, and that at 128° they in a few minutes cease to exist, and cannot afterwards be reproduced—a circumstance worthy of much consideration.

Upper Fitzroy-st., Fitzroy-sq.

LIABILITIES OF THE MUSCLE IN DISEASE.— POISONING BY LEAD.

In clinical medicine, how important is the negative evidence—how great the interest that attaches to the missing symptoms of a case! The gains from direct observation in our wards are of acknowledged value, and open to all. To the thoughtful physician, there is often most of suggestion in what he looks for,—yet, looking, fails to find. Lead is known among us, chiefly from its effect of palsy on the muscle. As a poison, it is determined from the common blood to the fleshy self-contracting fibre—to that division of the muscular structure which is under direct influence from the will. Here, in the

Burton Ward, is a young woman, (M. G.—, aged twenty-two,) who, at ten o'clock p.m. of Saturday, December 20, swallowed, intentionally, about sixty grains of the officinal sugar of lead, and who, at this present date, retains the full use of every muscle in her body. Hands, feet, toes, and fingers, are all, as much as ever, under her own control. There is not a muscular symptom in the case; neither cramp, twitching, convulsion, nor dropping of any one limb, or of any part of a limb; and yet, during the sixty hours succeeding one o'clock on Sunday morning, the patient was in the utmost danger from the primary effects of the poison. In the case of self-poisoning by arsenic and verdigris, up stairs in the York Ward, the paraplegia of toes and fingers was observed within forty hours after swallowing the mineral compound. The subject of this case (A. D.—, a young man of twenty-seven) is, and will ever remain, a helpless cripple. For how long a period will the unhappy girl now before us retain the use of her limbs? Will she escape the lead palsy altogether? The cases are parallel, and yet in useful contrast. Beginning from the same agency of a mineral poison, happening at the same time, their circumstances being nearly similar, it is impossible to avoid setting one against the other. And thus, we advance in our clinical studies by the help of comparison,—a principle without limit in its practical application. Let it not be confined by nosologists to disorders the same in class. Of disease, as it really occurs, to those who work upon it, there are no two cases, in appearance however dissimilar, that are not better known, the more they are compared. J. A. W.

St. George's Hospital, Dec. 26th, 1845.

P.S.—Jan. 12th, 1846.—M. G.—, the subject of this case, left the hospital this morning entirely "recovered." Did she escape the lead palsy by dint of her violent and frequent vomitings!

OBSERVATIONS ON LUXATION OF THE JAW.

WITH A SIMPLE CONTRIVANCE FOR PREVENTING A RECURRENCE OF THE ACCIDENT.

By J. L. LEVISON, Esq., Surgeon, Brighton.

A SHORT time since, a toothless old gentleman, of a highly nervo-bilious temperament, consulted me, to use his own phraseology, "to know what he should do to prevent his jaw coming out of its place;" thus rendering it evident that he was subject to a luxation of the jaw. On further inquiry, I ascertained that he was only affected on the left side; for he said, "Sometimes I awake up with my lower jaw pushed on the right side, where it is fixed, and I am rendered incapable of making myself understood, from a difficulty, under the circumstance, to utter articulate sounds." After a great amount of painful suffering, particularly near the left ear,* he continued "to pull his jaw—to press it backwards, when, after about a half hour's work, bang it seemed to go, and all was right again," excepting that the pain in the angle of the jaw would frequently remain for hours afterwards. From his active temperament he was always restless and fidgety, even during the few hours he slept at night, or when taking his afternoon's nap, which were the times that the luxation occurred; usually it was just when in the act of waking, and at other times the annoyance was great, from the dread of its recurrence. Having suggested the following simple contrivance, it is some satisfaction to me to mention that it has answered the purpose contemplated.

In my own experience I have invariably found that when a luxation occurs, whether from an excessive fit of gaping,—from opening the mouth to have a back tooth extracted,—or from the loss of teeth, so that the jaws cannot be properly antagonized, (as in my present case;) in all such instances there is a tendency to a repetition of the annoyance, but which might be obviated by the plan alluded to above, and which I shall now describe. A flat band, composed of four layers of wash-leather, is accurately measured to the under part of the chin, with a cap to fix on the latter exactly, and so shaped as not to press on the trachea; and then it is neatly bound with ribbon. At one extremity there is a neat, small buckle, not sown on the edge of the band, but on the flat side, the corresponding extremity having a neat doeskin strap, by which it is fastened at the top of the head, after being placed on the chin. This contrivance may be worn with security and ease. But as a preventive against the instrument being forced off during sleep, two pieces of ribbon or strong tape are sown on

* Some physiologists deny the possibility of the several cavities of the heart being able to contract independently of each other. (See Hertius' "Manual of Physiology.")

* When the condyle slips out of the glenoid cavity, it springs forward, resting on the edge of the zygomatic arch, and hence the accuracy of this description.

it at each side, exactly under the ears, and then they are tied behind just under the occipital process.

It appeared to me in this case, with an upper jaw so much absorbed as to be considerably within the arch of the lower, the latter is, in consequence, so very much thrown forward, and the cheeks are so hollow, that such an instrument as that proposed by Mr. Fox,* could not be depended on, whilst my own can be worn without any annoyance, and is quite secure.

Nature seems to have furnished a hint for such a contrivance, as may be observed when a severe fit of gaping is experienced after great watchfulness, the hand is placed under the chin with a corresponding force, and an instinctive confidence of its utility, just as if the anatomy and articulation of the jaws had been well understood.

Devonshire-place, Brighton, Jan. 1846.

POISONING BY THE STRONG LIQUOR OF AMMONIA.—RECOVERY.

To the Editor of THE LANCET.

SIR,—From the few cases recorded of poisoning by liquor ammoniæ fortis, I have been induced to furnish you with notes of a case under my care, requesting you to insert them in your journal.—Your obedient servant,

University College, March, 1846.

ERNEST P. WILKINS.

M. C.—, aged twenty-four, of a nervo-sanguineous temperament, was attended by me during her accouchement, Jan. 10th, which was perfectly natural. I called to see her on the following day, about four o'clock P.M., when, from her suffering considerably from after-pains, I ordered the following:—Take, liquor of acetate of ammonia, three drachms; tincture of hyoscyamus, fifty minims; camphor water, one ounce. Make a draught, to be taken immediately. If the bowels should not be evacuated before the next morning, to take a dose of castor oil. During the evening her husband came to fetch me to see her, stating that the dispenser had made a mistake in her medicine, which had nearly killed her. I was not at home when he called, but went to see her as soon as I returned. I found a six-ounce mixture, containing a large quantity of strong liquor of ammonia, of which she had measured a wineglassful, and drank half of it. The quantity of liquor of ammonia it contained was doubtful, as no measure had been used in compounding it; suffice it to say, that on tasting a very minute portion, I and others burnt our mouths. There was no label on the bottle, but the husband, who fetched the medicine, said he had verbal direction "to give a dose, and repeat it." As soon as she had drank it, she fell back insensible, apparently (to those with her) as if choked; the husband ran to a chemist, who told him a mistake had been made in dispensing my prescription, and gave him a dose similar to what I had ordered, advising him to come for me directly. She took this about six P.M., I saw her at half-past ten. She had then revived somewhat, but complained of severe burning pain down her throat, in the epigastrium, and left hypochondrium, each of which parts were tender on pressure; pulse 53, small; voice a feeble whisper; great debility; countenance anxious; gruel had been offered to her, but when she attempted to swallow it, a choking sensation prevented. I gave her some diluted vinegar; this she swallowed in small quantity, but with difficulty; pupils widely dilated; breathing difficult; tongue coated with white fur, painful, and tender; two or three patches of its mucous membrane peeled off; she had three convulsive twitches of the right arm at different times during my visit. I directed diluted vinegar to be given occasionally, and ordered citric acid, one drachm; mucilage of acacia, three ounces; pure water, three ounces. Make a mixture, of which take a table-spoonful every hour. Four grains of extract of hyoscyamus to be taken into the mouth, and allowed to dissolve.

Dec. 12th.—Pain less, but still severe, especially the colicky pains; pulse 44, small and feeble; she has expectorated little, flattened, thready substances several times during the night; has had no sleep; tongue coated with a white fur, and very sore; pupils less dilated; lochia absent; breathing easier; on swallowing, a sensation is produced as if the substance was too large for the passage, and seemed to lodge once or twice before deglutition was completed. She said she thought her gullet was swelled.

* The late highly-esteemed Mr. Joseph Fox once contrived an instrument for the same purpose. It consisted of a cap to fit the head, and another cap to fit the chin, with a connecting leather on one side of the face, and a buckle and strap on the other. But this would be annoying to such a restless, irritable patient as mine, and the contrivance has less actual security than the one described in this communication.

13th.—Much better in every respect.

15th.—Still complains of pain and tenderness in the epigastrium and hypochondrium; pain also in the lower part of the abdomen, which was swollen, and a little tender; tongue furred, pulse 56; has had copious perspirations; feels much exhausted and depressed; severe pain across the nose, darting through the head; has passed a restless night; bowels not relieved since the 13th; urine free; milk copious; lochia scanty; thirst; deglutition much easier; no appetite. Take half an ounce of castor-oil at bedtime. Tincture of hyoscyamus, spirit of nitric ether, of each two drachms; liquor of acetate of ammonia, two ounces; antimony wine, half an ounce; camphor mixture sufficient for a six-ounce mixture. Take two table-spoonfuls every four hours. Take of calomel, two grains; Dover's powder, eight grains. Make a powder, to be taken at bedtime. Apply fomentation of poppies to the abdomen.

16th.—Seized, during the night, with severe diarrhœa, which is still present; evacuations pale; pain and tenderness of the epigastrium; urine passed with pain, and high-coloured; pulse 68, weak; pain across the nose gone; tongue coated with a white fur; spirits much depressed. Take of powdered opium, one grain; calomel, two grains. Make a pill, to be taken at bedtime. Take of acacia powder, prepared chalk, of each one drachm; compound chalk and opium powder, half a drachm. Mix them into six powders, one to be taken every four hours.

17th.—Much better; purging ceased.

19th.—Improving.

24th.—Convalescent.

This patient's pulse is unusually slow during health, averaging 48.

ON THE TREATMENT OF CHRONIC DISEASES OF THE SKIN.

By THOMAS HUNT, Esq. M.R.C.S. Eng., Herne Bay.

ORDER VI.—VESICULE.

To this order Willan has allotted seven genera—viz., varicella, vaccinea, herpes, rupia, miliaria, eczema, and aphtha.

Varicella and vaccinea are diseases of limited duration, as well as mild in character. Rupia properly belongs to the order bullæ, and has already been disposed of. Miliaria is probably a disorder of mismanagement, and is, in fact, disappearing before the march of improvement. Aphtha is a disease of the alimentary canal; and herpes, besides being essentially acute and ephemerical, is generally complicated with some obvious disorder of the general health, and requires corresponding treatment. When the health is not materially deranged, it may safely be left to the vis medicatrix naturæ.

Eczema, the remaining genus in this order, both in its acute and chronic form, is occasionally a disease of magnitude, and is often obstinate as well as severe and tormenting. Dr. Willan appears to have been singularly unfortunate in his description of this disease. He distinguishes it from herpes as an eruption of vesicles, with little or no inflammation round their base; and yet the most important variety (eczema rubrum) is described as attended with local inflammation and general vascular excitement. Before we censure Dr. Willan for this contradiction, and attempt to re-arrange his ingenious and highly-convenient classification, it may be well to consider whether every system of arrangement must not necessarily be open to some objection. Diseases are not developments of Nature, but deviations from Nature's order. Concise and exclusive definitions, the very materials with which the nosologist must frame his tables, are inapplicable to the complicated and ever-varying phenomena of morbid action, which, from their very nature, require elaborate as well as accurate description.

The disease which now claims our attention consists of an irregular eruption of vesicles, surrounded by an inflamed base, and attended by excessive pruritus. The vesicles are evolved, and burst with great rapidity, and may easily escape detection. They pour out an irritating fluid, which excoriates the already inflamed skin. The cutis, deprived of the cuticle by desquamation, appears beset with numerous pores, from which exudes a sero-sanguinolent fluid. This dries into scabs, or laminated incrustations, which take their colour from the discharge, being at first of a greenish-yellow, afterwards becoming yellow and brown, if the discharge becomes purulent; or reddish and dark-brown, if the ichor is tinged with blood. Meanwhile, fresh eruptions appear, and go through similar stages: chaps and fissures succeed, and the subcutaneous cellular tissue often becomes involved in the inflammatory

process. Intense pruritus and severe smarting pains attend the evolution of the disease, which in some cases runs a course of unlimited duration. The disease is frequently complicated with impetigo, (eczema impetiginodes,) and is occasionally attended with disordered functions. More generally, however, there is no specific ailment, or tangible disorder, to which attention can be directed in the treatment, excepting only an inflammatory diathesis, which generally prevails in the outset, and must be promptly treated. It attacks certain portions of the body more frequently than the whole. The following cases will illustrate its inflammatory character in the acute stage, and its appropriate treatment in the chronic. In the first case, the vesicles were distinct in the first instance, but rapidly degenerated into pustules, and the discharge became sero-purulent. In the second case, the vesicles were not distinctly perceived, but the general history of the case entitles it to be classed among the *eczematæ*.

CASE OF ECZEMA IMPETIGINODES, OF SEVERE CHARACTER, YIELDING TO ACTIVE DEPLETION, AND ULTIMATELY CURED BY ARSENIC.

Mr. Y—, a studious gentleman, about twenty-five years of age, of nervous temperament and sedentary habits, but of robust muscular frame, has been more than once attacked by a most annoying cutaneous affection, which on one occasion extended nearly over the whole surface of the body.

March 29th, 1841.—The integuments of the throat, neck, and chin, are covered with a vesicular eruption of acute character, seated on an inflamed ground, and tending rapidly to purulent incrustation. The skin is hot and dry, pulse 100, weak, and there is pruritus of a distressing description in the affected parts. The patient was put on low diet, a dose of compound colocyth pill, combined with blue pill, was prescribed to be taken at night, and a saline aperient in the morning. By pursuing this plan of treatment for a week, the activity of the disease was arrested, and the chronic form which succeeded yielded in a fortnight to a course of arsenic.

Having enjoyed good health through the subsequent eighteen months, he at length became nervous, and perhaps hypochondriacal. Complaining to a friend of lassitude and debility, he was advised to take a course of quinine, with Huxham's tincture, and to refresh himself daily with four or five glasses of port wine, a beverage to which he had hitherto been habitually unaccustomed. Having acted upon this advice for five or six weeks, the time arrived for him to pay the penalty.

Sept. 20th, 1842.—He has had a very sudden and severe return of his old malady; the vesicles have broken out on the right side of the neck, chin, ear, cheek, and temple, extending every day, after the fashion of erysipelas, until one eye is closed, and the other swollen. Pulse 120; prostration and anxiety; skin hot and dry. The vesications are not so large as in erysipelas, and there is more tingling and pruritus than in that disease. In other respects there is little difference. An active mercurial cathartic was administered, and low diet ordered, and a refrigerating lotion. In the evening, his bowels had been fully relieved, without any mitigation of the disorder. Effervescing draughts, with tartar emetic, half a grain, every four hours.

21st.—No better; headach; slight delirium; pulse 120, moderately full. Venesection to fourteen ounces. The cathartic to be repeated, and the salines continued. The refrigerating lotion to be abandoned.

22nd.—No better. Pulse 120; purulent incrustation extensively apparent. Increase the dose of tartarized antimony; repeat the cathartic.

23rd.—No better; restless night; delirium; an eruption of vesicles extending to the other side of the face. Venesection to sixteen ounces. A draught composed of sulphate of magnesia and infusion of senna every fourth hour.

24th.—Better. Bowels freely purged; blood buffed. A saline draught every fourth hour.

25th.—Some increase of the vesicles. Two cathartic pills at night, and a laxative draught in the morning.

26th.—Better; a purgative draught every fourth hour. From this time, by persisting in the same kind of treatment, the patient gradually improved.

Oct. 1st.—Skin better; dyspepsia; debility. An alkaline draught thrice a day, and an improved diet.

16th.—Violent head-ach; quick pulse; hot skin; delirium. Apply a blistering plaster to the back of the neck, and take a grain of tartarized antimony every fourth hour.

17th.—Better; continue the medicine.

18th.—Better; take the antimony every eighth hour.

23rd.—Better in all respects, but the skin is still irritable, and new vesicles appear occasionally, with less activity of cir-

culatation. Five minims of Fowler's solution were now exhibited thrice a day. This medicine was persisted in for three weeks, at the termination of which period the patient was quite well.

Dec. 15th.—He continues quite well, and has not, to the knowledge of the writer, had any return of the disease.

The analogy of this case to erysipelas is a striking feature, and suggests comprehensive views of cutaneous pathology.

CASE OF CHRONIC ECZEMA, ACUTE IN ITS ORIGIN, SUCCESSFULLY TREATED BY BLEEDING, PURGATIVES, AND ARSENIC.

[The particulars of this case were communicated to the writer by an intelligent and valued friend,—Mr. Darvill, of Walworth,—to whose judicious and vigilant care its successful termination is attributable.]

Mr. D—, a gentleman of stout proportions, pale complexion, nervous temperament, and convivial habits, had been subject to occasional attacks of a cutaneous disease for many years, and reports that his mother was similarly affected. About Midsummer, 1842, having then been nearly free from the disorder for two or three years, he felt a tingling in his legs, which forewarned him of an approaching attack. In a short time the whole surface of the legs, from the knees to the ankles and insteps, and afterwards a considerable portion of the upper extremities, including the elbow-joints, and the forearm as far as the wrists, became covered with an eruption of an *eczematous* character. The whole of the diseased parts were acutely inflamed. The vesicular character was not distinctly seen, the original eruption presenting rather the character of papule, containing no visible fluid. These spots increased in size, and becoming scaly or scurfy at the top, ran one into another, and speedily the surface became a continuous mass of squamous incrustation. Slight cracks, degenerating into gaping rhagades, soon appeared, exuding a serous discharge. In the legs the discharge was abundant and sero-sanguinolent. At first, the scales were of a yellowish-green shade, not so white as the scales of psoriasis, or so yellow as to indicate a purulent character. At length they became of a reddish-brown, more or less dark and dirty in appearance. The curious in cutaneous diagnosis might dispute whether this disease was eczema, psoriasis, or lichen agrius. It is not uncommon, in these chameleon-like disorders, to find papule, vesicles, pustules, and squamæ, in the same individual at the same time. In this case, although it was difficult to detect the vesicular character of the primary eruption, the acutely inflammatory type, the red and swollen appearance of the surrounding integuments, the peculiar nature of the discharge, and the *tout ensemble* which the diseased surface presented to the eye, all suggested the idea of *eczema rubrum*. The pain and irritation was so great as to prevent sleep, and the patient was perpetually thrusting his limbs out of bed to escape from the tormenting heat.

June 27th, 1842.—The treatment was commenced by bleeding to syncope, which was effected by the abstraction of about twenty ounces of blood from the arm; leeching the affected parts every other day; and administering purgatives of calomel, jalap, &c., with low diet. The inflammatory symptoms were very obstinate, not being reduced before the 15th of July.

July 15th.—The irritation and heat having in a great degree subsided, and the pulse being tranquil, five minims of Fowler's solution were given thrice a day, mingled with the food; and this treatment was persisted in till about the latter end of November. About this time the disease began to disappear, and very soon afterwards the conjunctiva became slightly affected.

Dec. 26th.—Conjunctiva more inflamed; disease gradually vanishing. Dose of arsenic reduced to three minims of the solution thrice a day.

Jan. 12th, 1843.—"Finding the eyes not improved," says Mr. Darvill, "I discontinued its use for a fortnight. It was then resumed, and persisted in till the beginning of April, when the skin had recovered its natural appearance. In this case there was a great tendency, throughout its whole course, to inflammatory action; but the pulse remaining quiet, it was kept under by the simple saturnine lotion."

In answer to inquiries, Mr. Darvill says, "I perceived an improvement in the disease about a fortnight before I saw any affection of the conjunctiva; but it may have existed in a slight degree, as I did not look for it with any view to its connexion with the decline of the disease." He adds, "I think I have several times seen the disease decline at the time of the arsenical effect becoming visible, (in the eyes,) but not having any notes to confirm it, it is testimony of little value."

The arsenic was continued in small doses for some weeks, and the disease did not return.

The preceding cases will suffice to demonstrate the sufficiency of arsenical treatment in the constitutional varieties of eczema, when the activity of the disease has been previously arrested by antiphlogistic measures. The powers of arsenic in eczematous affections have been highly extolled by writers of the largest experience. Rayer testifies that "the preparations of arsenic are occasionally the *only* medicines which can be successfully administered in rebellious eczema of the scrotum, pudenda, verge of the anus, &c.," and Dr. Green expresses himself in terms at least equally strong.

In former times, when mercury was more indiscriminately administered than at present, the occurrence of eczema in an acute form was a common sequence of a severe mercurial course; and the same disease occasionally occurs at present, (eczema mercuriale.) The writer has seen, more than once, a similar eruption excited under large doses of cubebs: and it is well known that the oil of copaiba, when applied externally, will produce a vesicular eruption of a similar character; and the same effect occasionally follows its internal administration. Croton oil, applied externally, is another familiar instance. These forms of eczema, as also those produced by the rays of the sun and other local irritants, will commonly subside spontaneously, shortly after the cause which excited them has ceased to act. Other local affections of an eczematous character, exhibiting a variety of phases, and appearing in positions too numerous to specify, will generally yield to common treatment, and, like all other cutaneous disorders, require arsenic only when there remains nothing, locally or constitutionally, to be rectified by ordinary means.

In the next paper, the writer hopes to demonstrate satisfactorily, that some of those tubercular diseases which have been hitherto deemed intractable or incurable are not less controllable, by a prudent and persevering exhibition of arsenic, than the morbid conditions of the skin which are already disposed of.

Herne Bay, February, 1846.

REMARKS ON MR. HUNT'S PAPERS ON THE TREATMENT OF CHRONIC DISEASES OF THE SKIN.

By WILLIAM A. CORTIS, Esq., Surgeon, Filey, Yorkshire.

As I do not know of any class of diseases which give more trouble and annoyance to the medical practitioner and his patients than the eruptive, I always turn with avidity to any notice of them, in your journal or elsewhere, and have been much pleased by reading Mr. Hunt's three papers in *THE LANCET*, although my opinions and practice in some cases differ from his. Notwithstanding this, I feel sure, from the tone in which he writes, that it will afford him pleasure to see his papers commented on.

It will be seen, that with his opening remarks I perfectly coincide; I have to give the same accordance to his methods of dividing these diseases—viz., into constitutional and local, attended by inflammatory action, or the reverse. I think that the indications of treatment may generally be adopted with comparative ease, by attending to these divisions; and if we examine the best systematic works on these diseases, we shall find, that whatever nosological arrangement they may use, the above principles are those by which they really determine the treatment, so that whilst the varieties of the diseases are almost infinite, their treatment varies little.

With Mr. Hunt's remarks as to the principles of treatment of his first division of skin diseases, (see *LANCET*, January 10, p. 32,) I also agree, and have only to add, on this head, that the alkaline salts, recommended by so many authors, seem particularly useful here. I have been greatly assisted in treating this, the febrile form of chronic skin diseases, especially in children, by using a mineral water which is found at this place, of which the following is an analysis. One pint contains—

Sulphate of magnesia, 6.12 grains, or 12½ grains of crystallized Epsom salts; chloride of magnesia, 4.55; chloride of calcium, 5.15; chloride of sodium, 26.35; carbonate of soda, 7.25, existing in the bicarbonate of soda; water, as 11.6.

I have seen more than one child sent here with obstinate eruptive disease, which had been under treatment for a long course of time, speedily cured, simply by the internal and external use of this water, and an occasional dose of mercury and chalk. Its usual effect is diuretic, and frequently mildly aperient.

In reading that part of Mr. Hunt's paper which comes under the second head, I have been somewhat disappointed, as I hoped to meet with useful information as to the treat-

ment of syphilitic cutaneous diseases, which are often so exceedingly troublesome.

From one paragraph under this head I most decidedly differ. It is the following:—"In every stage of this variety of venereal affection, all other remedies (except mercury) are comparatively useless. None of these affections result from the abuse of mercury. They are all decidedly syphilitic; and mercury, administered, under favourable circumstances, with judgment, tact, and determination, will certainly cure them." Contrary to this, I have occasionally, in these cases, found mercury worse than useless, whilst other remedies have cured the disease. These affections certainly do not exactly result from the abuse of mercury, but they are frequently very much aggravated by it, and they can hardly be called "decidedly syphilitic," inasmuch as their character is frequently very much modified by the administration of certain remedies—viz., mercury, and the iodide of potassium.*

Mr. Hunt has adduced two cases to illustrate his practice. I will relate one, to explain my objection:—A gentleman came under my care who had been affected with primary symptoms rather more than a year previously. He was shortly attacked with sore throat, and soon after with an eruption (lepra) over his head, arms, and other parts of his body. The sore throat was removed by a gargle of solution of nitrate of silver. He was salivated three or four times for the eruption without benefit, and at length he could not take more than a very small dose of mercury, as it immediately caused a return of the sore throat, and affected his general health severely. The iodide of potassium was then administered in decoction of sarsaparilla for about three months, towards the end of which time he was attacked by psoriasis, commencing on the palms of his hands, and extending along the arms. At the time he came here, the scalp was encrusted with the eruption, which also existed in other parts of the body in various stages of development. As he had given mercury and the iodide a fair trial, I prescribed nitric acid and warm baths, and he also drank the spa water of his own accord.

This treatment having no effect, I gave him a few Plummer's pills, which speedily made his throat sore, and deranged his general health. I then prescribed a mixture of Fowler's arsenical solution, carbonate of potash, and decoction of cinchona, which soon caused an improvement in his general health, and in the appearance of the eruption. I also gave him again Plummer's pills, which he could take along with the mixture, but they were discontinued after a few days, as they did not seem to assist the cure. The mixture was taken for six or seven weeks, commencing with five drops of the arsenical solution three times, and afterwards twelve drops, twice a day. The old spots soon healed, but were followed by a succession of new ones for a short time. These gradually diminished in number and size, and at the end of the time above named, as he was nearly well, having only one spot on his head, (which had been prevented healing by his having acquired a habit of picking it,) and the remains of a few on his arms, which were gradually disappearing, he left, with directions to discontinue his medicine, but resume it if any more spots made their appearance, in which case he was to write to me. As I heard no more of him I presume he continued to progress to complete convalescence.

Several cases like this having occurred to me, I am led to differ from Mr. Hunt in so far as this, that while I admit the general utility of the moderate use of mercury in syphilitic eruptions, I believe that it is frequently contra-indicated, and that other remedies in such cases (of which arsenic, and the iodide of potassium are the chief) afford greater benefit. We might have expected this from analogous cases. For instance, how frequently do we meet with patients affected with syphilitic iritis—a disease generally remarkably amenable to mercury—who cannot bear this drug, but whom we cure by the administration of tonics, and the application of local remedies? I think it is M. Ricord who has pointed out a very simple, and, I believe, a very good indication for the treatment of syphilitic eruptions—viz., that if mercury has been given to a sufficient extent in treating the primary disease, we shall derive but little benefit from it in the secondary stage, in which case the iodide of potassium is indicated; whereas, if sufficient mercury has not been given at first, it will cure the secondary eruption while the iodide would be of no service.

* I have seen no remedy equal to the iodide in the treatment of gonorrhoeal rheumatism, in which disease it appears to act as a specific. I have used it in five-grain doses, dissolved in an ounce of camphor water, repeated three times a day, in a great number of cases of the above disease, and I do not at present remember it to have failed in a single case; but I have frequently observed, when it has been administered for more than a few weeks, its use has been followed by an eruption of psoriasis palmaris.

With regard to Mr. Hunt's remarks under the third division of his essay, I have to observe, that I have used his grand remedy, arsenic, in various forms of skin diseases with very great benefit, but certainly not with the universal success which he states has attended his own administration of it; and I am afraid that he furnishes another instance of the liability to colour too highly, in painting the effects of a favourite remedy. The cases he has hitherto published in your journal, (31st January, 1846,) do not appear to me to warrant his flattering inferences; but perhaps it is only fair to suspend our judgment on this head, till we have an opportunity of examining all his cases.

Filey, February, 1846.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

MARCH 24.—DR. CHAMBERS, F.R.S. K.C.H., PRESIDENT.

CASES OF LATERAL OR PARTIAL ANEURISM OF THE HEART, WITH REMARKS. By T. B. PEACOCK, M.D.

The first of these cases, which was the only one read in full to the Society, was that of a gentleman, thirty-one years of age, who was seized, two months before his death, with symptoms of subacute hepatitis, followed by pleurisy of the right side, slight lividity of the face, oedema of the ankles, and dyspnoea. While labouring under these symptoms, he suddenly experienced a sensation as of something having given way in the region of the heart, and became sick and faint; he rallied partially, but the dyspnoea became gradually more urgent, and he died on the fifth day from the period of his sudden seizure. On examination of the body, there were found old thickening of the serous coat of the liver, a large accumulation in the right pleural cavity, and an aneurismal sac, of sufficient size to have contained a hen's egg, at the apex of the left ventricle. The sudden sensation perceived five days before death, was doubtless owing to the rupture of the aneurismal sac, as the cavity of the pericardium contained bloody fluid, mixed with partially developed coagula. No distinct rent in the parietes of the sac was detected, but at the apex they were extremely thin. The termination by the rupture of the sac, in cases of aneurism of the heart, is apparently rare. In eight published cases this is stated to have occurred; but in all these, unlike that reported in the paper, death ensued immediately on the occurrence of the rupture. The formation of the aneurismal sac, it was thought, was probably owing to a previous attack of pericarditis.

The remaining portions of the paper were occupied with inquiries as to the several modes of origin of the cardiac aneurisms, and the detail of illustrative cases, the report of a case of aneurism of the left auricle, and remarks on the diagnosis of these affections during life.

The author agreed with Dr. Thurnam in regarding the disease as most frequently of the true form. Adopting a modification of the views of Reynaud and Cruveilhier, he ascribed the formation of the true aneurismal sac to an altered condition of the endocardium, combined with the fibrous transformation of the muscular walls of the ventricle. The production of these changes, he sided with Rokitsansky in referring to chronic inflammation, and suggested that their frequency at the base, and more especially at the apex, of the left ventricle, (the most frequent seat of aneurism,) might be owing to the thinness of the muscular substance in these situations rendering it more liable to be implicated in the diseased changes affecting its serous envelopes.

Preparations and drawings of the true aneurismal sacs, in their several stages of development, were exhibited to the Society.

The production of the false form of cardiac aneurism by rupture or ulceration of the endocardium and internal portion of the ventricular walls, or by the communication of the cavities of abscesses in the walls of the heart with the ventricle, the author stated to be rather doubtful than established. As illustrating the latter mode of origin, he detailed the particulars of a case in which an abscess formed in the walls of the auricles, and opened into the base of the left ventricle, and into the origin of the aorta, so that the blood penetrated into the cavity of the abscess. Had life been prolonged in this case, it was inferred that an aneurismal sac would have resulted, communicating both with the left ventricle and aorta, and resembling the form of disease observed by Dr. Hope, and referred to by Dr. Thurnam, as the dissecting aneurism of the heart. The case was further interesting from the extreme rarity of abscess or diffused suppuration in the walls of the heart.

In the case of aneurism of the left auricle related in the paper, the dilatation, which was not of very great extent, occu-

pled the appendix. Its cavity was lined by dense and laminated coagula. As in most of the recorded cases of aneurism of the left auricle, the auriculo-ventricular aperture was greatly contracted, and the sinus of the auricle dilated, and its walls hypertrophied.

In the section of the paper devoted to the diagnosis of the cardiac aneurisms, the author, after alluding to the physical signs which would probably be produced by sacs, referred to the various causes which might occasion similar phenomena, and the great difficulty and doubt which would probably always attend an accurate discrimination of the affection during life.

Dr. TAYLOR observed, that he should be sorry to let Mr. Peacock's paper pass without bearing his testimony to the care and accuracy with which it had evidently been prepared. The principal facts bore on the face of them the character of trustworthiness. The very merits of the paper were the more likely, however, to preclude much discussion upon it. He saw no reason to doubt the correctness of the views advocated by the author, and he thought it probable that the aneurism was an example of one of the less common consequences of inflammation of the serous membranes of the heart. He was not surprised that the disease had not been diagnosed during life. He had as great a sense of the value of physical diagnosis as any one, and as much confidence in its indications in the mass of cases; but every day's experience confirmed him in the belief that it was absolutely impossible to discover the exact nature of the affection in all cases. We might almost as soon expect to foresee what word would result from the shaking together of a number of letters of the alphabet, as to be enabled to say, in all instances, what particular combination of morbid changes was the cause of the physical signs observed.

CASE OF EXCESSIVE SECRETION OF THE AMMONIO-MAGNESIAN PHOSPHATE BY THE KIDNEYS, WITH LONG-CONTINUED VOMITING. By GOLDING BIRD, A.M., M.D., F.R.S., Fellow of the Royal College of Physicians, and Assistant-Physician to Guy's Hospital.

This case was brought forward by the author in confirmation of the value of irritability of stomach as a diagnostic sign of calculous affection of the kidney. A lad, aged eighteen, was admitted into Guy's Hospital, under Dr. Golding Bird's care, with all the symptoms of scirrhus pylorus, with the exception of the non-existence of epigastric tumour. He had for four years been the subject of constant irritation of stomach, and had never, for twenty-four hours consecutively, ceased from vomiting, never having retained a meal during the period alluded to for more than an hour, often only for a few minutes. He was emaciated to a skeleton, and appeared actually sinking from exhaustion. There appeared (unless the vomiting were regarded as such) to be no demonstrable evidence of organic diseases. The urine had a foetid fish-like odour, was copious, limpid, rarely whey-like, of moderate specific gravity, and deposited crystals of triple phosphate in abundance. No hippuric acid or other abnormal element. The urine was alkaline on secretion, and always contained a large excess of the crystals alluded to. Treatment directed specially to the gastric symptoms, having failed to relieve in all hands, Dr. G. Bird prescribed strychnine in doses of 1-16th of a grain. The result was, the gradual diminution of the gastric irritability, restoration of the acidity of the urine, and the disappearance of the phosphatic crystal. After a few weeks' continuation of the medicine, the lad became convalescent, and actually fat. The author then entered into the question of the etiology of the disease, and expressed an opinion of its connexion with functional derangement of the spinal and ganglionic nerves. In conclusion, he pressed upon the notice of the meeting the value of strychnine as an anti-emetic remedy.

Mr. LLOYD was of opinion, with Dr. Bird, that the secretion of phosphatic urine in cases of disease of the spinal marrow was by no means uncommon; indeed, it was a sign for which he generally looked in those cases, but this state of urine was not, in his experience, at all associated with loss of flesh, or with stomach disease, as noticed by Dr. Bird. He had frequently met with these cases, and he mentioned one in particular which had existed for several years, the chief symptom being pain in the lower part of the spinal region; the disease was considered to be dependent on repeated attacks of lumbago. The urine, however, eventually became phosphatic, and the true nature of the case revealed. He was in the habit, in all such cases, of examining the urine by the aid of the microscope, and had always found phosphatic crystals present. He was not aware whether Dr. Bird in

his paper had alluded to any other morbid products which were found in cases of this description; but he, Mr. Lloyd, had generally detected much mucus, or a great number of pus corpuscles, in phosphatic urine generally. He mentioned one case in which the urine was loaded with the phosphates, and contained a great number of epithelial cells and other morbid products. He had never met with a similar example. In this case, also, the stomach did not sympathize with the morbid condition of the spine; the patient was still under treatment, but progressing towards a state of convalescence.

Dr. GOLDING BIRD could not help thinking that two very distinct classes of cases had been confounded by Mr. Lloyd, both of which were characterized by the presence of phosphates in the urine, but the circumstances of each class of cases were widely different. One of these classes of cases, occurring frequently to the surgeon, consisted of those in which a diseased secretion was poured out from the mucous membrane of the bladder, as the result of chronic inflammation of that organ, stricture, enlargement of the prostate, or where, after mechanical injury to the spine, a more or less complete paraplegic condition had been induced. In these cases the alkaline and phosphatic state of the urine was produced from changes taking place in the fluid after it had reached the bladder. The urine in these cases was always ropy, and also frequently foetid. If, in these cases, however, the bladder were carefully washed out, and the urine secreted during the next few minutes were examined, it would be usually found to be acid. The second class of cases were altogether of a different nature from these, which, from their dependence on mechanical lesion, were strictly surgical. In the second class, from some antecedent cause, very likely having relation to the function of the spinal nerves, a low form of inflammation or irritation was set up in the kidneys, and the consequence was, a secretion of alkaline urine, which urine contained an excess of phosphates. Dr. Bird believed that the mechanical irritation of the tubular structure of the kidneys by the phosphatic crystals was the immediate exciting cause of the irritation of the stomach, or of the vomiting.

Dr. TAYLOR thought that the distinction to which Dr. Golding Bird had just referred was an important one—viz., that between urine which was secreted in an alkaline condition, and urine which became alkaline only in consequence of chemical changes taking place in it after its secretion. This distinction had been first drawn, or, at least, had been especially insisted on, by Rayer, who considered that urine, which is secreted alkaline, is an important symptom of simple chronic nephritis. Dr. Taylor had had the opportunity of satisfying himself of the fact that the urine is in some cases alkaline when secreted, having made the experiment, referred to by Dr. Bird, of washing out the bladder with water, and collecting the urine in a very short time afterwards. In more than one of these cases he had also had the opportunity of ascertaining, after death, that the kidneys were inflamed, and there was no other appearance to account for the alkaline urine. Whether this class of cases, however, is attended with more disorder of the stomach than other cases in which the kidneys are diseased, he thought was another question. Nausea and vomiting are well known to be common symptoms of various morbid conditions of the kidneys. In the cases of alkaline urine observed by Dr. Taylor, the sickness had not been more marked than in other renal affections. The same thing seems to be implied, if it be not directly stated, in the work of Rayer. The great reason why Rayer insists so much upon the importance of alkaline urine as a symptom of nephritis is this, that very often there is no other obvious sign of the disease. In such cases the inflammation runs a very insidious course. A man complains of some languor, and looks a little out of health, and he may or may not have some slight aching about the loins, and these may be the only symptoms of the disease except the alkaline urine.

Dr. BIRD could not believe that the mere secretion of alkaline urine, when there was no irritation from a calculus, was sufficient to produce vomiting. He referred to Guy's Hospital Reports, which contained a paper by Dr. Barlow, as evidence in favour of this opinion.

AN ACCOUNT OF SOME EXPERIMENTS MADE WITH A CONCENTRATED ALCOHOLIC EXTRACT OF STAVESACRE FOR THE CURE OF ITCH. By THOMAS H. BURGESS, M.D.

The author states he has recently had an opportunity of assisting (at the Hospital of St. Louis, in Paris) at some interesting researches into the history of the acarus scabiei, and the treatment of the disease which it produces. Several patients were removed from the wards of the hospital, by permission of

M. Cazenave, to the amphitheatre, where M. Bourgignon conducted the experimental researches. The hands of the patients, after being thoroughly washed with soap and water, were examined under the microscope, and one patient was selected in whom the disease seemed to be the most pronounced. Several acari were removed from each hand, and when examined by the microscope seemed active and vigorous. The hands of this patient were then immersed in two vases filled with a strong alcoholic extract of stavesacre, and retained for half an hour. The hands were now examined by the microscope, and several acari removed. In this instance the remedy was not entirely effectual, as some of the acari were still alive. The remedy was again applied for half an hour, when not a single living acarus was discovered; they were examined under the microscope, and showed no signs of life. On the following day, the same experiment was repeated on another patient, using the same precautions, and with the same success, for on examining the acari, not the least sign of life was discovered in any. The patient was examined again on the following morning: he said he was entirely free from itching; the skin was paler, and there was no living acarus found in the parts to which the extract had been applied. The author states he has satisfied himself that it is not the alcohol that destroys the acarus, for when used without medication it has not succeeded. He concludes by referring to the advantages presented by this mode of treating itch over the ordinary treatment—viz., rapidity and cleanliness.

Mr. LLOYD cured the itch by the lotion consisting of an ounce of sulphate of copper to a pint of water; this he applied after washing off the scabs; it was an almost certain cure: he employed it in private and public practice.

Dr. OGIER WARD treated scabies by a simple lotion of the iodide of potassium, a single washing with which, in some instances, had completely eradicated the disease. The treatment of this affection was by no means difficult. To insure complete success, he applied "the ointment"* at night, and the lotion during the day. It usually effected a cure in seven days. The lotion consisted of one drachm of the iodide to eight or sixteen ounces of fluid, according to the delicacy of the cutaneous surface.

WESTMINSTER MEDICAL SOCIETY.

MARCH 21, 1846.—Dr. SAYER, PRESIDENT.

ABSCESS OF THE BRAIN.

Dr. W. MERRIMAN read an account of a case of abscess of the brain, which had lately occurred to him at the Westminster General Dispensary. A woman, aged twenty-six, of scrofulous diathesis, had measles when a child, and suffered from discharge from the right ear ever since. On January, 1826, she first complained of ear-ach on that side, which became of a most intense description, and defied all remedial art. She usually lay in a half-sleeping condition, but was perfectly sensible until about thirty hours before her death, screaming at times from the violence of the pain, which extended over the entire right half of the head. At this time, there was no discharge from the ear, or so trifling as to be of no consequence. The jaws became almost fixed from the pain caused in opening them. On one occasion, her leg was drawn up several times in quick succession; but there was no other appearance of convulsions. The day previous to her decease, Dr. Merriman was informed that she had become insensible; but she immediately put out her tongue, and turned her head over, that he might examine her ear, on his requesting her to do so. She also spoke to her friends the following morning, but after that sunk into complete coma. Death occurred that evening, Feb. 18. On examination, a quantity of offensive pus came from the head, while sawing through the temporal bone; this was found to proceed from a large abscess within the substance of the brain, occupying the whole upper part of the right hemisphere. (Dr. Merriman regretted much that an accident had prevented his bringing a model of the appearances with him this evening; but promised to do so at the next meeting.) Close by the temporal bone, it approached very near the surface, and had been opened by the saw. The dura mater was separated from the bone over the petrous portion, and side of the temporal bone, was of a darkish colour, and had a layer of coagulable lymph surrounding the diseased portion, poured out between it and the bone principally, and less so on the internal aspect, when in contact with the arachnoid. The petrous portion of the bone being

* Dr. Ogier Ward meant sulphur ointment.

examined was found to be extensively carious, the mastoid cells being full of dark pus globules, epithelial cells, &c.; the bone was extremely thin, and several apertures in it were noticed. The lateral sinus also presented traces of inflammation; but no pus or coagula were found therein. Dr. Merriman argued, that in this case the abscess was produced by transmission of inflammation from the bone through the membranes to the brain itself; and brought forward, in confirmation, the existence of headaches, and her being very forgetful and giddy at times during the last twelve or sixteen months, and also the frequent connexion of abscess of the brain with disease of the temporal or ethmoidal bone.

In the discussion which ensued, great difference of opinion existed among the members as to whether the disease of the ear, and the abscess in the substance of the brain, had any direct connexion, in the relation of cause and effect, to each other; and also as to the period of formation of the brain abscess.

Mr. HANCOCK related the following case:—He was sent for, on the 1st of January, 1846, to see Miss T—, of the Strand, aged eighteen, who, he was informed, was suffering from a disease of the ear. He found her sitting in the parlour, complaining of intense agony in the right ear and side of the head, so severe that she was obliged to support her head by both her hands, her elbows resting on the table. He was informed that she had been subject to discharge from that ear, at intervals, ever since she was two years of age; but that she had been free from that annoyance for some few weeks. As she complained very much of pain in her teeth on that side, he was induced to examine her mouth, and found one of her teeth so much decayed, that he advised its instant removal, which was subsequently effected, to her relief as to the pain in her mouth. He carefully endeavoured to ascertain whether there were any symptoms of disease of the brain, but could not discover any beyond the pain and sensation of weight in the head. She was perfectly sensible, could converse with her friends, and would answer any question he put to her with the greatest readiness. Neither her arms nor lower extremities were affected; both sides of her face were natural, and she had perfect control over her sphincter muscles up to the period of her death. He would not take up the time of the Society by detailing the treatment employed, further than by stating, that on the second day she complained so much of throbbing in the ear, that he was induced to introduce a probe to ascertain the state of parts, and passed it nearly two inches into the organ without meeting with any obstacle. However, shortly after he left, he was informed that she felt something yield, which sensation was followed by a copious discharge of matter from the ear, to the extent, as the friends informed me, of nearly two ounces, with decided relief. He saw her three times a day until her death, which took place at about one o'clock on the morning of the 4th; and he would observe, that although he carefully watched for any symptom of paralysis, he could not detect any, even at his last visit, about three hours before she died.

On the next day but one, he examined the body, assisted by Mr. Echlin and Mr. Nicolle; and on removing the brain, he found, corresponding to the petrous portion of the temporal bone, an ulcer of the dura mater, about the size of a sixpence, this ulcer being evidently produced by some sharp processes of bone growing out from the petrous portion, the condition of which appeared to be perfectly healthy. Upon cutting into the right hemisphere of the cerebrum, they discovered a very large abscess, implicating nearly the whole of the middle and extending into the anterior and posterior lobes of that hemisphere, the abscess being contained in a very tough and thickened cyst. There was no communication between the cerebral abscess and the internal ear, the petrous portion, as he had observed, remaining to all appearance healthy. They next examined the internal ear, but could discover no signs of abscess in that situation; the lining membrane was thickened, but there was no trace of any collection of matter having been found within that cavity.

SEA-SICKNESS.

A CORRESPONDENT has addressed the following remarks to us on this subject:—

I believe, that in sea-sickness a churning motion of the blood is kept up in the large bloodvessels going to the brain: and in the sinuses &c. of the brain: sometimes there is too much blood, sometimes too little there: confusion takes place, and sympathetic nausea and retching, &c., from irregular distribution or circulation of blood in the brain.

It is acknowledged by seafaring men, that lying across the midship is the best position and remedy for the distressing effects &c. of sea-sickness. We may reasonably agree to the fact, because the centre of the ship is the pivot on or from which the ship's head and stern rise and fall; the more you go fore or aft, the more the pitching is felt, and the worse the illness becomes. So long as you keep lying across the midship, and so long as the vessel does not roll, so long may you calculate on an improved condition. Perfect immunity from the evils of sea-sickness, in a swell, even in the most advantageous position, can never be expected, because, although you are in the centre, the point—out of a swell—where the motion is the least experienced, the whole vessel more or less partakes of the motion, and often, equally throughout, rises on a wave, and falls as it passes on. Neither brandy, soda-water, creosote, beef-steaks, or any other vaunted remedy, can keep off the evil. The most experienced seamen suffer on going to sea, after a stretch on the land, or rest on shore, in rough weather; so that all their knowledge on this point goes for nothing, is of no avail, either to themselves or others, under certain circumstances. Nor is it to be wondered at, especially when we reflect that human knowledge cannot for a moment be supposed capable of controlling the laws of God, or, to modify this expression, can scarcely be supposed capable of controlling the effects of natural causes.

I am, Sir, yours obediently, &c.,
W. R.

A SHE-QUACK.

To the Editor of THE LANCET.

SIR,—I take the liberty of enclosing to you one of Sir James Graham's she-quack bills, which was handed me by a gentleman of my acquaintance. It is really a curiosity, and is worth recording. Will you be so good as to find a corner for it in your valuable journal.

I am, Sir, yours, &c.,

Adelphi-street, Glasgow, Jan. 1846.

M. H. GIBSON, Surgeon.

"By her Majesty's Authority.

MRS. GALLIER,

No. 32, HIGH-STREET, GLASGOW,

MRS. GALLIER, got the Receipt from her husband who was beloved, not only for the many surprising Cures performed by him, but also for his charity to the poor and distressed, who has an extraordinary gift; and by studying and travelling abroad, she has attained the art of curing the most inveterate disorders incident to the human body.

She gives her advice at first sight, by informing the Patients whether their disease be incurable or not, and will not take them in hand if incurable on any consideration, it being well known to all who are acquainted with her, that her sole aim is to do good to her fellow-creatures, particularly in the charitable work of curing the dry and wet Inflammation of the Eyes. She cures WOUNDS in every part of the body, and all Running Sores: she has a never-failing Cure for the Bloody flux, and Fits; she cures the Gravel, and also Deafness, (provided the drum of the ear is not broken,) as numbers who have been deaf for years have been cured by her; as also Jaundice, Scurvy, Fits, Coughs, and all kinds of bilious complaints arising from the stomach; Worms, Rickets in children, or Broken Bellies in young or old; Scald Heads, Wens, and Disorders in the Teeth or Gums, Spleen, Wind, &c., &c. She cures with great success the Venereal Disease, having practised in many desperate cases—taking none in hand but those she thinks she can do good to. Her Medicine is highly approved of for Inward Complaints by those who have used it; also her Salve for Green Wounds and Running Sores. She cures the Rheumatism by an internal application; the Itch, Piles, and Green Sickness.

Mrs. G. also carries a large assortment of HERBS with her, ready prepared for various diseases; therefore let none despair, though ever so afflicted; for perhaps the hour of help is at hand. The cures she has effected, and the approbation she has met with, are convincing proofs of her abilities. All her cures are performed through the medium of Herbs alone.

Mrs. G. considering that there are people in the country whose disorders render them unable to come to her for advice, will, for the relief of such, call for this BILL, that they may have an opportunity of making their case known to her.

As Bills are expensive, please return this with your answer, and Medicines for all disorders may be had when called for.

 Bleeding if required."

THE LANCET.

LONDON, SATURDAY, APRIL 4, 1846.

GRAVE reports of irregular and improper conduct, in connexion with the bestowal of the honours of the Royal Society, have now been for some time both privately and publicly promulgated. In the absence of all contradiction or explanation by the parties most intimately concerned, rumour grows into assured certainty. The Royal medal for the present year, in the department of physiology, has been prominently referred to; but the facts in our possession enable us to sketch a history of the medals from their institution in 1825 to the present time.

The first Royal medal in physiology was given to Sir CHARLES BELL in 1829. No one ever asked the grounds of this award. None could question its justice. It honoured the man, and reflected honour back upon the Royal Society. The labours and the fame of BELL are familiar things to all.

The next was given to Mr. NEWPORT; and here it is necessary to mention the eminent contributions to science which were held to have deserved it. These were papers on the nervous system of the Privet Moth, and on the Respiration of Insects. It is quite within our province to discuss whether these papers and the topics treated of in them were the noblest and most deserving that had come before the Royal Society during the triennial cycle which the award embraced. It did so happen, that in 1837, Dr. MARSHALL HALL presented to the Royal Society his memoir "On the true Spinal Marrow and the Excito-motory System of Nerves;" a nobler and more important paper than which, as time and the result have shown, the physiological department of the Society never had under its notice. This paper, on being referred, was blackballed as unworthy of publication! It was sneered at by one Secretary, Dr. ROGET, in the Abstract of the Society's proceedings, and returned to the author with a written lampoon upon it by the pen of the other, Mr. CHILDREN. As the Royal medal is only awarded for published papers, the labours of Dr. M. HALL did not attain to the farce of being placed in competition with those of Mr. NEWPORT! But another contribution to science did compete with the papers on the nervous system of the sphinx ligustri and the respiration of insects—namely, the researches of Mr. KIERNAN into the minute structure of the Liver. It would be an insult to the physiologist to discuss which of these things was the greatest; which the most worthy of reward. That of Mr. KIERNAN is one of the best gifts of the microscope to physiology, while the contemned discovery of Dr. HALL, possessing the developmental power of all great truths, has taken the highest place in modern physiology, and is modelling to itself the whole range of the pathology, diagnosis, and therapeutics, of nervous diseases. The intrinsic value of Mr. NEWPORT's papers may be of some import; but comparisons are indeed odious, if these papers are to be mentioned side by side with the others.

And the causes of such things are even worse than the very results themselves. Previously to these events, Dr. GRANT had refused to correct the proofs of Dr. ROGET's Bridgewater Treatise, on the ground that the "proofs" actually contained the matter of his own lectures, delivered at University College. Rumour said that Mr. NEWPORT, a pupil of Dr. GRANT, sup-

plied the deficiency, and before the medal was awarded, rumour said, too, that Mr. NEWPORT was to have the next Royal medal as his reward. However this may have been, Mr. NEWPORT did obtain the medal. The truth of the imputation contained in the rumour will hereafter be judged of by individuals, according to their estimate of the comparative value of Mr. NEWPORT's communications, (not to Dr. ROGET,) but to the Transactions of the Royal Society, and according to the degree of their knowledge of various collateral facts. It should be mentioned, that between the insertion of Dr. HALL's first memoir on "the reflex function of the medulla oblongata and spinalis," and the contemptuous rejection of the second memoir which we have referred to, this physician had come into collision with Dr. ROGET, the senior Secretary. It may also be mentioned, that Mr. KIERNAN, after the misaward of the Royal medal, was sufficiently ill-advised to stoop to accept an inferior honour—the COPLEY medal.

The two next medals were awarded, in 1839 and 1840, to Dr. MARTIN BARRY and Mr. WHEATSTONE,—the one, for his researches in Embryology; the other, for a paper on the Physiology of Vision. With respect to Dr. BARRY, no one denies him the merit of having been a most enthusiastic and indefatigable labourer in science, but no very definite opinion can as yet be pronounced of the value of his microscopic investigations. As regards Professor WHEATSTONE, the very highest scientific honours would sit well upon him, as the award of discoveries in his own department. It is, however, somewhat *outré* to see the inventor of the electric telegraph, one of the greatest things of the age, receive a Royal medal for, at the most, a very ingenious and elegant paper on the Physiology of Vision.

Next came the award of the Royal medal to Mr. BOWMAN, in 1842, for his researches into the intimate structure of the kidney; and to this, considered in itself, no exception need be made. Mr. KIERNAN might, however, complain, that what he had done for the liver was done for the kidney by Mr. BOWMAN; and that his, the first and largest discovery, was less rewarded than the fortunate second. It might also be asked, what was the constitution of the Council—of the physiological committee—and who were the referees, when the fourth Royal medal in physiology was awarded?

Now comes the recent award of the Royal medal to Mr. BECK, for his paper on the Dissection of the gravid Uterus. This was commented on in Mr. REDFORD's letter, published last week; and this gentleman certainly deserves much praise for his courage in openly detailing many of the facts connected with the award—facts which tend very much to bring the medical section of the Royal Society into contempt for their extraordinary vacillation. Up to the present date, the proceedings of the Royal Society have expressed, five separate times, an opinion on Dr. LEE's dissections. Of these, three are favourable and two are adverse. Dr. LEE's first paper was printed in the *Philosophical Transactions*; a supplement also was printed; then an additional supplement was reported as not to be printed; next, Mr. BECK gets the Royal medal for contradicting all Dr. LEE's labours; and lastly, the second supplement, once reported against, is now ordered to appear in the forthcoming Transactions.

The charges brought against the medical section of the Royal Society are as follow; if they can be proved to be incorrect, doubtless the proof will be supplied:—On the 19th

of June, the last paper of Dr. LEE was read before the Society. On the 28th of October, (four months afterwards,) the physiological committee met, to receive reports on the merits of the different papers, and to recommend to the Council the award of the medals, Mr. LAWRENCE being in the chair. After the despatch of the ordinary business, and after voting the recommendation for the COPLEY medal, Mr. LAWRENCE dissolved the meeting, on being informed by the secretary, Dr. ROGET, that there was no further business for transaction. As soon as Mr. LAWRENCE had left Somerset House, the committee was re-formed, Dr. TODD being placed in the chair; and Dr. TODD and Dr. SHARPEY, being the referees, produced from their pockets reports favourable to Mr. BECK's paper. On these reports, it was resolved to recommend the award of the Royal medal to Mr. BECK.

It should be mentioned, that Mr. LAWRENCE had been the referee of Dr. LEE's papers, on former occasions, and was, of course, well acquainted with the subject, and that neither Dr. TODD nor Dr. SHARPEY had seen Dr. LEE's preparations and dissections for four years. Another extraordinary fact (as we are informed) is, that Dr. LEE's paper, which for four months had remained unreferred in the secretary's possession, was actually produced at this extraordinary committee, and, as if in mockery, put in competition with Mr. BECK's paper and some others. The very next act of this alleged illegal committee was to refer Dr. LEE's paper to Sir BENJAMIN BRODIE, to ascertain whether it was worthy of being printed in the *Transactions*. Sir BENJAMIN BRODIE reported in its favour, but it was blackballed by the physiological committee. It must, however, in justice to the Council, be stated, that this body afterwards ordered it to be printed.

It will scarcely be believed, that on the 30th of October, two days after the recommendation of this irregular committee, the Council met and adopted the award of the committee, after which it resolved itself into a committee of papers, to consider whether Mr. BECK's paper should be printed! They then could know nothing of the grounds on which the award had been made; the only persons who had seen Mr. BECK's paper were Drs. TODD and SHARPEY, and the secretary, Dr. ROGET; it had not, as yet, even been read to the Society! In such a mole-like manner were the proceedings conducted, involving a most important point in anatomical discovery, and implicating the reputation and labours of a Fellow of the Royal Society!

Another extraordinary circumstance is, that Mr. BECK, after presenting his paper, was allowed to have it back for correction; and it is even alleged that Mr. BECK had been permitted access to Dr. LEE's paper; for it is stated that his corrected paper contains allusions to the subject matter of that which had been presented by Dr. LEE. Such proceedings are subversive of all order and justice. Who can say that Mr. BECK's paper for which he received the medal is the same paper as that originally presented, or that the paper, when printed, will be the same paper as that upon which the award was made!

There are yet other singularities connected with this affair. From some cause or other, the Council, apparently not satisfied with the first recommendation of the committee, ordered them to state the grounds upon which the recommendation was made. The physiological committee, on the 20th of December, appointed Drs. SHARPEY and TODD to draw up a

report; on the 27th, the committee met, received the report, and adopted it. On the 1st of December the Council met, received the report, confirmed the recommendation of award made by the irregularly constituted committee on the 30th of October, and an hour after, the Royal medal was given away by the Marquis of Northampton.

Thus, then, the recommendation of the award was made by the referees, Drs. SHARPEY and TODD, and adopted by the physiological committee, and by the Council, before even the paper was read to the Society, and before it was known whether it was to be printed or not. The medal was given before the minutes of the Council had been confirmed, and before the paper for which it had been given had been printed. Even now it has not appeared in print! And this is in glaring contravention of the regulations according to which the foundation of the Royal medals was restored by her Majesty, which orders,—“That the Royal medals be given for such papers *only* as have been presented to the Royal Society and inserted in their *Transactions*.” This regulation is printed, too, on the front page of every volume of the *Philosophical Transactions*. The justice and propriety of such a regulation are obvious. Time is afforded for weighing the merits of different communications, and the possibility of unfair alterations and omissions in a paper printed subsequently to its reward prevented. The scientific world has no guarantee whatever, looking to the previous conduct of the parties concerned, that the paper may not be adapted to suit any contingency that may arise. Properly, morally, and, it would appear, legally, Mr. BECK could not have appeared as a candidate for the medal, supposing his paper to be printed during the course of the present year, until December, 1848. Thus time would have been allowed for deliberation, and the award of the medal would have had some force; now, it falls to the ground, utterly valueless to its recipient.

But supposing Mr. BECK's dissections to be quite correct—supposing the uterus has no nerves at all, or that Dr. LEE's ganglia are fictions, creations from cellular tissue, what are Mr. BECK's researches worth? One might imagine a great discovery, so instant in its reception and application, that such hot haste to reward it might have been in some measure pardonable. But Mr. BECK's pretends to be none of these. According to all that the profession yet knows of it, even granting it true, it would be but the pains-taking correction by mere mechanical dissection of the mistake of another anatomist. The medal is actually given for *not* making a discovery. One might imagine Sir CHARLES BELL ashamed of the medal he received. The first falls to BELL, the last, to BECK! What a difference! what a decadence! If all this be severe to Mr. BECK, let him thank Drs. TODD, and SHARPEY, and ROGET, who have placed him in a false position. No one would more readily have rendered legitimate praise to his labours than ourselves.

The relation of the Royal Society to men of science should be distinctly understood. If the council or the committees do wrong, the Royal Society must suffer. In the eye of the world there is no injustice so odious, and so severely resented, as that of unjust judges, in any case. There is no misconduct so vile as that of malversation of office; the higher the office the greater the atrocity, when wrong is perpetrated. Even the Royal Society is not omnipotent; it cannot *make*, though it may “adjudicate,” the bad to be good, and the good to be

bad. A paper unjustly treated may bring *temporary* pain and discredit to its injured author, but it reflects *lasting* ignominy on his judges. A medal unjustly awarded brings a double discredit—discredit on those who give, and on him who receives. It was a true and beautiful saying of one of the most illustrious presidents of the Royal Society, Sir HUMPHREY DAVY, "It is better to deserve and not to have, than to have and not deserve."

Justice it is which gives value to honorary rewards. Could fifty Royal medals raise Mr. NEWPORT to a level with those who were insulted by the award in his case? Could fifty, awarded to Mr. BECK, under the circumstances detailed, have the effect of destroying the credibility of Dr. LEE's dissections? Would they not rather create a prejudice in their favour? The recoil acts always upon the doers of injustice. Let the Royal Society look to it, particularly the medical section of those in authority. They are on trial before their profession, upon whose opinions their reputations rest. Let the Royal Society look at the Society of Antiquaries, where intestine cabals have already caused the resignation of the president, Lord ABERDEEN, and take warning. We are not sure whether, in the present state of things, it would not be proper to call on all the parties aggrieved to state what they know respecting the events in question. But we wait awhile. Time is an instructive monitor.

At the recent assizes, held at Stafford, Mr. DICKENSON, a medical practitioner, residing at Bilston, was indicted for the manslaughter of Mrs. HICKMAN, the wife of a respectable farmer, whose death, it was alleged, he had occasioned by want of due skill and care at the time of her confinement.

From the evidence, it appeared that the deceased, a young woman in the prime of life, was unexpectedly seized with labour pains, whereupon she was supported to her room, and, without being undressed, was laid upon a bed. An old midwife was sent for, who speedily arrived, and assisted at the birth of a child, which almost immediately took place, followed by a considerable flow of blood from the uterus. In order to stop the discharge, the old woman applied cold wet cloths to the abdomen of the patient, and thus, for a time, caused the hæmorrhage to cease; but as several symptoms manifested themselves, which alarmed her, she despatched a messenger for Mr. DICKENSON, who resided about a mile and a half from the spot, and who arrived without a moment's delay. Upon his entering the room, the quantity of blood which the poor woman had lost was pointed out to him, and he proceeded, as is usual in such cases, to ascertain the position of the placenta. After some manual investigation, Mr. DICKENSON succeeded in withdrawing from the vagina a good deal of coagulated blood, together with what he maintained to be the greater part, if not all, of the placenta. On the arrival, however, of Mr. BEST, another medical man, whose services had also been put in requisition, he was shown the vessel containing the above discharge, and after examining it, he said to Mr. DICKENSON, "You do not call that the after-birth, do you?" Mr. DICKENSON replied, "Yes, it is." Mr. BEST rejoined, "Now I will show you the after-birth." He almost immediately brought into view a sanguineous mass, observing, "There is the after-birth." At the same moment, the patient, who had evidently been for some time previously in a

sinking state, her forehead covered with cold perspiration, and her pulse indicating great debility, uttered a loud shriek, as if the operation she had undergone had occasioned considerable pain. In little more than an hour after this she expired.

The exact nature of the case does not appear, and no post mortem was allowed; but it is preposterous that a medical man should ever have been placed at a bar of justice under such circumstances. The friends of the patient should have blamed themselves for entrusting the woman's life to an ignorant midwife, when they were evidently in a station of life to pay for proper medical attendance. The woman would possibly have been now alive had Mr. DICKENSON been called in, in the first instance. The evidence respecting Mr. BEST's behaviour was most extraordinary; if blame attaches to either, it would be to him. There appears some doubt whether coagula or the placenta had not been improperly removed; but we entirely concur with the remarks of Mr. BARON PLATT, in which he passed a deserved eulogy on the profession, and insisted on a certain amount of discretion as to the impropriety or propriety of any doubtful practice to be exercised by the qualified medical man. Otherwise, he observed,—

"We should none of us, gentlemen, if that were not the case, have the benefit, in a variety of emergencies, of the services of that profession to which we are often so greatly indebted; and the promulgation of the doctrine that medical men are criminally responsible for following the dictates of their matured judgment, might have the effect of preventing surgeons and others from acting with that confidence and boldness, under peculiar circumstances, to which the preservation of life and limb is often due. There are numerous cases in which the judgment of medical men must be relied on; and if the works of the most able authorities of those whom I may justly term the sages of the profession, are not to be relied upon, I know not what guidance would be left for the direction of medical practitioners at large. It would, indeed, be a monstrous thing to say that the conduct of the gentleman now under deliberation evinced either gross ignorance or gross negligence. I can, in fact, hardly leave it to your consideration. It is, indeed, possible, that the manipulation of the witness now in the box (Mr. BEST) may have caused the death of the poor woman. We should, therefore, take the greatest care that we are in the right before we convict a gentleman in Mr. DICKENSON's position of such an offence as manslaughter, and brand him with an imputation which may not only injure, but ruin, his character and his prospects."

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

SURGICAL CASES TREATED AT THIS HOSPITAL.

(Reported by HOLMES COOTE, Esq., Fellow of the Royal College of Surgeons of England, Surgeon to the North London Ophthalmic Institution, and formerly House-Surgeon to St. Bartholomew's Hospital.)

SERO-CYSTIC SARCOMA OF THE MAMMARY GLAND—RETURN OF THE DISEASE AFTER EXTIRPATION.

CASE 1.—H. L.—, aged thirty-six, a respectable, healthy-looking woman, twice married, was confined with her first child twelve years ago. About two months afterwards, whilst she was suckling, inflammation came on in the right breast. An abscess formed, which burst and discharged; the surrounding induration slowly disappeared, leaving a small, hard, but not painful lump, the size of a cherry-stone, below, and somewhat behind, the nipple. She was subsequently again confined, and soon after lost her husband from consumption. Both children died young.

Her third child, by a second marriage, was born two years ago. By this time, the tumour, still free from pain, was as large as a small orange, but it did not prevent her suckling with that breast. At the end of twelve months she weaned the child, when the tumour became much more prominent and painful, and a black spot appeared upon its surface. Her friends advised her to use a cold lotion, but she did not con-

sult a medical man until five months ago, when the pain had become more severe, and the black spot considerably larger. A plaster was now applied to the part, without effect. Subsequently a lancet puncture was made, from which some dark-coloured fluid, like coffee, flowed out. About three months ago, a large slough of integuments came away, leaving a dark-coloured, unhealthy surface, from which a fungus protruded. The surgeon in attendance removed this with scissors. The operation gave her no pain, but in a fortnight the fungus had sprung forth again, attended with profuse discharge, and occasional hæmorrhage. A ligature was now tied around its base. This proceeding caused considerable suffering, and up to the time of her admission, she has experienced occasional, but severe, lancinating pains in the breast. Menstruation, which for two years has been irregular, has ceased altogether for the last four months.

Admitted, Feb. 14th, 1844.—A reddish fungous mass, with narrow base, the size of the two fists, of tolerably firm consistence, and moveable upon subjacent parts, protrudes from the lower part of the right breast. The surface, whence issues a sparing but thin and offensive discharge, bleeds readily when touched, and is occupied here and there by shreds of sloughy tissue and small coagula; towards the circumference it is cicatrized in parts with the integuments; the surrounding tissues are but slightly indurated; the nipple, in its natural situation, and above the tumour, is surrounded by a dark-coloured areola, and is more prominent than natural. She suffers occasional darting pains, but the tumour is chiefly distressing from its weight, size, and tender surface. Around the base there was found a portion of the ligature applied two months ago; it was quite loose, and was easily removed.

Mr. Lawrence intimated the propriety of removing the entire breast—an opinion confirmed in consultation by the other surgeons to the hospital. The patient readily assenting, the operation was performed in the early part of March.

The whole mass was covered with lint, so as to allow of its being more readily grasped. With a common scalpel, Mr. Lawrence made an incision five inches long, below the tumour, and dissected it from its attachments; he then made a similar incision above, and speedily removed the whole mass. There was considerable hæmorrhage, and twelve arteries were tied; the wound was then united with sutures and broad strips of adhesive plaster, and the patient was put in bed.

Examination of the tumour.—Upon making a vertical section, it was found composed of yellowish masses of firm, homogeneous structure, amongst which were interspersed cysts of various sizes, containing serous fluid. The disease extended to the pectoral muscle, fibres of which, in immediate contact with the tumour, were firmer and whiter than natural, but not otherwise altered in character.

In forty-eight hours the sutures were removed, and a bread-and-water poultice was applied. Some slight inflammation in the neighbourhood of the wound yielded readily to moderate leeching: although there was a considerable quantity of adipose tissue, the wound healed rapidly, and the patient left the hospital the latter end of March. She remained free from disease till the beginning of the present year, when she noticed a small tumour on the same side, near the axilla.

Admitted Feb. 1st, 1846.—Tumour in the right breast, the size of the closed fist. Removed by Mr. Lawrence.

21st.—The tumour, when examined, appeared of the same character as that extirpated upon a former occasion. It was composed of an homogeneous substance, interspersed with cysts of various sizes, containing a glairy fluid. There were, however, redder, softer, and more vascular portions, so much resembling malignant structures that they were viewed with considerable suspicion.

Under the microscope, the tumour appeared composed, 1st, of a dense fibrous stroma; 2nd, of numerous granules; 3rd, of irregular-shaped cells; 4th, of oil globules, in great quantity; 5th, of epithelial scales, from the cysts. The wound healed readily, and she left the hospital, March 10th. Both tumours are preserved in the hospital museum.

Sero-cystic sarcoma, commonly regarded as a non-malignant affection, commences, according to Sir B. Brodie, by a dilatation of some of the lactiferous tubes. One or more cysts, containing a clean serous fluid, which, by pressure, may be made to escape by the nipple, are imbedded in the healthy glandular structure. The disease, which may attack both breasts simultaneously, is not attended with pain, advances slowly, and does not affect the absorbent glands. In case 1, twelve years elapsed between the first appearance of the tumour and the performance of the operation: the patient, rather inclined to embonpoint, had enjoyed good health during the whole period.

Next, firm solid matter, deposited upon the exterior of the

cysts, binds them together into one mass, and destroys their globular form. The contained fluid assumes a brownish or blackish hue, probably from admixture of altered blood-discs. At some point, a cyst, larger than the rest, manifests itself externally as an elastic tumour, over which the integuments, if not divided by the knife, slough, and allow the escape of the fluid coffee-coloured contents. An albuminous or fibrous growth is formed upon the inner surface of the cavities, and covered by a delicate membrane, rapidly becomes organized, and shoots forth as a vascular bleeding mass. The discharge, in the present case, offensive in smell; the occasional bleedings; the size, weight, and tender surface of tumour, are the chief circumstances which induce patients to submit to the operation of extirpation. Nature, however, makes some attempts at reparation; the cyst may burst, and heal, and burst again; and even when the fungous growth has protruded, granulations may arise, and cicatrization may connect it in parts with the surrounding integuments.

The case here related establishes the fact, that sero-cystic tumours may recur after their complete and satisfactory extirpation. A reference to the morbid appearances presented, upon examination of the second tumour, may raise some doubt as to the benign character of this affection. Mr. Lawrence, in the course of his clinical observations, referred to a case in private practice, in which he extirpated the mammary gland for simple hypertrophy. In the course of some months, a second tumour was developed, which, when examined after removal, resembled an ordinary sero-cystic sarcoma. Shortly afterwards, a third tumour appeared, which proved to be genuine medullary cancer. Upon this point Sir B. Brodie observes, "I am not prepared to say that it (i.e., a sero-cystic tumour) may not in peculiar constitutions assume a malignant character, this being no more than may happen to any morbid growth."* Although the accuracy of this statement is undoubted, it cannot, I think, be denied, that there are some tumours, apparently benign, which show a much greater tendency than others to allow malignant degenerations to be subsequently engrafted upon them. Amongst these must be ranked sero-cystic sarcoma.

In the very early stages, Sir B. Brodie recommends the employment of a stimulating embrocation. Ordered, camphorated spirit, proof spirit, of each three ounces and a half; solution of di-acetate of lead, one ounce: mix for an embrocation. In the latter stages, the evacuation of the cyst by puncture is apt to be followed by protrusion of the fungus, which, after partial removal by the scissors, is rapidly reproduced. (Vide case.) The only proper measure, when the disease is advanced, is the complete removal of the mammary gland, for it should never be forgotten, that other cysts, "so small as to contain only one drop of fluid,"† and not recognisable upon external examination, may be dispersed throughout the whole substance of the organ.

CYST OF THE MAMMARY GLAND.

CASE 2.—Theodosia H—, aged forty-four, a delicate-looking woman, and a widow, received a sharp blow upon the right mamma, three years ago. She consulted Mr. Hodgson, of Birmingham, under whose care all pain and inconvenience speedily subsided. She remained well till two months ago, when the breast began to swell without pain or obvious cause.

Dec. 26th, 1845.—She came to the hospital to consult Mr. Lawrence, who found an elastic tumour, covered by healthy integument. Mr. Lawrence made an opening with a lancet, and let out ten ounces of thin, yellow, purulent fluid, mixed with clots of blood. Ordered a bread poultice, and meat diet.

Jan. 2nd, 1846.—There is a considerable discharge of thin purulent matter, which makes her feel weak and exhausted. Ordered two ounces of port wine daily.

10th.—The tumour has entirely subsided: about an half-ounce of thin yellow discharge escapes daily in the poultice. She left the hospital at her own request, promising to return should any unfavourable symptom arise.

CUMBERLAND INFIRMARY, CARLISLE.

CASE OF TRAUMATIC TETANUS SUCCESSFULLY TREATED BY ACONITE.

(Communicated by W. B. PAGE, Esq., Surgeon to the Infirmary.)

W. E—, aged twenty-four, an agricultural labourer, previously in good health, was admitted into the Cumberland Infirmary, Nov. 22nd, 1845, with a gun-shot wound of the left forearm, which he had received a few hours before, from the accidental discharge of a gun. The charge had entered the

* Vide Pathological and Surgical Lectures, p. 156.

† Op. Cit.

anterior surface of the ulnar side of the middle of the forearm, and passed obliquely, upwards and backwards, to near the elbow-joint, shattering and carrying with it a considerable portion of both bones, and extensively lacerating the muscles, but without injuring the principal vessels, or opening the elbow-joint. The wound having been cleared of the shot, wadding, &c., which it contained, as well as of some detached portions of bone and contused muscle, and the hæmorrhage arrested, the arm was bent at nearly a right angle, and placed on a splint, in the position most favourable for allowing the subsequent escape of the discharge, and for dressing the wound. For three weeks the case went on most satisfactorily, and was attended with but little of that constitutional disturbance which is usually so severe after the infliction of gun-shot wounds. The slough separated, and healthy suppuration was established, without the supervention of a single bad symptom.

Dec. 13th and 14th.—First complained of slight difficulty in opening his mouth, and in swallowing, which he attributed to having either scalded his mouth, or taken cold, the ward having been washed the day before. These symptoms were looked upon with considerable suspicion by his medical attendants, in consequence of the nature of the injury he had received.

15th.—The symptoms of trismus were found much increased; the contraction of the masseters having become aggravated into a painful spasm, which had extended to the whole of the muscles of the throat and jaws, rendering mastication impracticable, and deglutition difficult; and the countenance had assumed a well-marked tetanic aspect. The nurses, wishing to make his bed, requested him to get up, which he did; but on touching the floor, spasmodic contraction of the muscles of the legs and back was immediately excited, and he would have fallen violently, had he not been prevented. From this time the tetanic spasms were constant and severe; the muscles of the abdomen were rigid and unyielding; and those of the inferior extremity were now so stiff as to render it very difficult to flex the limbs. He also complained of a severe aching and "stabbing" pain along the whole course of the spine, but there was no pain or stiffness in either arm, and the wound appeared perfectly healthy. During the night he perspired freely. The bowels, usually very regular, had not been moved for two days. The case was now evidently one of acute eccentric tetanus, rapidly increasing in intensity, and demanding the most vigorous treatment. It was at once determined to administer some one remedy, having a tendency to allay muscular spasm, and to continue its use until some decided effect was produced. The known influence which aconite exerts in destroying muscular irritability, and its powerful sedative effects on the nervous and vascular systems, led me to entertain a hope that its administration in cases of tetanus might be attended with beneficial results; and fortunately having in the hospital some tincture of aconite, prepared by Dr. Fleming, I decided upon employing it, giving it in doses sufficiently large effectually to subdue the muscular spasm, and keeping the system under its influence until the tendency to a recurrence of the spasm had ceased. At noon, therefore, a turpentine injection having been first administered, three minims of the tincture of aconite were given, the effect of which became very speedily manifest, and in half an hour there was an almost total remission of the muscular spasm.—Three p.m.: The pain and spasms having again returned with increased intensity, producing a slight degree of opisthotonos, four minims of the tincture were administered, which produced the same speedy and marked effects as the former dose.—Six p.m.: The patient has been comparatively easy since the last dose, but there is now an evident disposition to relapse. Four minims to be given immediately, and to be repeated every hour until some decided effect is produced, the patient, of course, being carefully watched, in order that remedial measures may be adopted should symptoms of poisoning become apparent.—Ten p.m.: Three doses have been given, in all nineteen minims, between twelve and eight o'clock: at present there is a complete cessation of the pain and spasms; which, however, did not yield until after the third dose had been taken. The system is now evidently under the influence of the aconite. He complains of chilliness; the skin is cold, and covered with a clammy sweat; the pulse 120, weak, and intermittent.

16th.—Has passed a comfortable night, and this morning is free from pain; but the tetanic spasm in the muscles of the jaw, neck, back, abdomen, and inferior extremities, is very violent and continued, and he is now in a perfect state of opisthotonos, the head being drawn back with a total inability to raise it, and the back forming an arch under which the hand can readily be passed. He is disposed to sleep, but is

prevented by convulsive tremors, more especially in the lower limbs, attended with slight pain, which come on as soon as he begins to doze. The pulse is 90, soft and regular, and there is an absence of all feverish excitement. He perspires freely. To have a turpentine injection at once, and as much porter and beef-tea as he can take. Four minims of the tincture to be taken every two hours.—One p.m.: The spasm in the muscles generally much less marked than in the morning, particularly in those of the abdomen and legs, and he can now partially flex the latter. The injection administered at nine, has been retained.—Half-past six p.m.: Little or no alteration.—Eleven p.m.: During the day eight four-minim doses have been taken. He is, and has been, almost entirely free from pain, except that arising from the convulsive twitchings when he dozes. The whole of the muscles are much less firm and resisting than in the morning; the abdomen not so rigid, the arch of the back considerably diminished, and he is able slowly to protrude the tip of the tongue between the teeth. The effects produced by the aconite are very similar to those on the previous day; the pulse 100, weak, and intermittent; the skin cold and clammy.

17th.—The convulsive twitchings, of which he complained yesterday, have recurred throughout the night, and have prevented his sleeping more than a few minutes at a time; he is, in consequence, much fatigued and exhausted. The spasmodic rigidity of all the muscles has returned to the same state as yesterday morning, having much increased during the night, and it is accompanied by a constant aching pain in the back. The bowels not having been moved for the last two days, an aperient enema was administered, which did not return. Five minims of the tincture to be taken every two hours.—One p.m.: No perceptible alteration.—Four p.m.: He complains much of chilliness, and says that after each of the two last doses he has experienced an uncomfortable dryness in the mouth and throat; pulse 100, weak and intermittent; the muscular rigidity again much diminished.—Six p.m.: About ten minutes since he became suddenly affected, to a very alarming extent, by the large quantity of aconite which he had taken during the day—twenty-five minims in seven hours. There is now entire relaxation of the muscles, accompanied by extreme prostration, so that he is unable to move his limbs, and he can scarcely make himself audible; the skin is pale and cold, and covered with a clammy perspiration; the pulse very slow, extremely intermittent and irregular; the pupil is dilated and insensible, and the vertigo and confusion of ideas are great. To these symptoms is added the most extreme irritability, the slightest impression on the senses producing an effect similar to that which is observed in hydrophobic patients. The least noise, the moving of persons in the room, the opening of the door, the act of swallowing the saliva, severally induce a severe fit of convulsive shuddering. It was evident that the aconite had now been continued to the fullest extent consistent with safety, and that, for the present, its use must be discontinued. Forty minims of laudanum were now given in a small quantity of mulled wine, which the patient swallowed with much difficulty. In little more than a quarter of an hour, the restlessness and irritability had almost disappeared, and the heart's action was somewhat more regular.—Eight p.m.: Pulse about 98, still very irregular, both in volume and rapidity, but less so than two hours ago; the muscular prostration continues.—Eleven p.m.: Pulse fuller and more regular; he has now partially recovered the power over his muscles; feels much exhausted, and disposed to sleep. To take half a drachm of laudanum.

18th.—During the night he has had some comfortable and refreshing sleep, and the irritability which was so marked yesterday has in a great measure disappeared. The system seems to have completely recovered from the influence of the aconite. Pulse seventy-five, regular and fuller; and the muscles have relapsed into a state of spasm, which is continued and well-marked, but much less intense than yesterday morning, the back being now flat upon the bed, and he is able by an effort to open his jaws a little. A purgative enema was administered, which acted well. The aconite to be again resumed in five-minim doses every six hours; and he is to have as much wine and other nutriment as he can take.—Three p.m.: No alteration of moment has occurred.—Ten p.m.: Three doses of the tincture have been taken during the day, each dose being followed by a sensation of dryness and numbness of the lips and tongue. The muscular rigidity has evidently diminished since the morning, and in all respects the patient appears better.

19th.—A great alteration for the worse has taken place during the night. He lies drenched in perspiration, and the extreme irritation has returned, producing most painful and

violent convulsive startings and cramps, particularly in the psoas and iliacus muscles of the right side. The muscular rigidity generally is also much increased, and there is, in addition, a sensation of tightness in the situation of the diaphragm, by which respiration is considerably embarrassed. Pulse ninety, small and regular. Appetite continues good, and the wound is healthy, although the discharge is, perhaps, less profuse. The administration of opium seems now to be demanded, to allay the excessive irritability: twenty minims of laudanum were therefore ordered to be added to each five-minim dose of the aconite, and to be given every six hours. An aperient enema to be given, and a poultice applied to the arm instead of the water-dressing, which had been hitherto used.—Three p.m.: All the symptoms continue, but in a less degree.—Eleven p.m.: Three draughts have been taken during the day, and the patient is now pretty easy; occasional painful spasms, however, still occur, and there remains a morbid sensibility to external impressions. Tincture of opium half a drachm.

20th.—The patient has slept well during the night, and all the symptoms are considerably relieved. To continue the opium and aconite as yesterday.—Two p.m.: He continued comfortable up to this time, when suddenly, without any previous warning, he was seized with very severe chronic spasms of both thighs, which recur every five minutes, attended with most intense pain, so that his cries can be heard throughout the building. A draught composed of five minims of tincture of aconite and twenty minims of laudanum is therefore to be given every half-hour until their influence upon the pain and spasm become apparent.—Four p.m.: Four draughts (twenty minims) have been taken during the last two hours, with but little apparent effect until after the last dose; since which, although not completely subdued, the cramps have been comparatively trifling. The pulse being now weak, frequent, and irregular, with much vertigo, and muscular prostration, it is advisable to discontinue the aconite for a time.—Six p.m.: The vertigo is much diminished, and the cramps are kept almost entirely in abeyance, but the pulse continues weak and irregular.—Eleven p.m.: Since the spasmodic affection of the muscles of the thighs came on, he has been unable to pass his urine; a catheter was therefore introduced, and a large quantity of water withdrawn. The perspiration throughout the day has been excessive and continued, and he appears exceedingly weak and exhausted. Pulse, still depressed and irregular. Ordered laudanum half a drachm, sal volatile half a drachm. During the day he has taken three pints of port wine, six pints of porter, and as much strong beef-tea as he could drink.

21st.—The spasmodic rigidity of the muscles generally is evidently less than yesterday, and the cramps in the thighs, although they have returned this morning, are neither so violent nor so frequent. Tincture of aconite five minims, tincture of opium twenty minims, every six hours.—Three p.m.: The cramps in the inferior extremities having increased in severity, an opiate injection was given, which afforded speedy relief.—Eleven p.m.: As the cramps in the thighs show a tendency to return, the opiate enema was repeated. No urine having been passed during the day, the catheter was again introduced, but only four ounces of highly concentrated urine were withdrawn. He appeared somewhat less exhausted than last night, but is still in a very debilitated state. The same quantity of nutriment has been taken as on the previous day.

22nd.—He has passed a very comfortable night, and all the symptoms are more favourable this morning. Pulse 100, fuller, and regular. The countenance more natural, and the general muscular rigidity much less marked; the mouth may be opened to a considerable extent; the perspiration is also less excessive. The chronic spasms in the thighs, still occasionally recur, but they are neither so frequent nor so violent as they were. To have an opiate enema, containing one drachm of laudanum, and to continue the opium and aconite as before.—Three p.m.: The cramps in the legs still continuing, the opiate enema to be repeated.—Eleven p.m.: The patient is altogether better, although the cramps sometimes return. The pulse is fuller, but irregular, about 100. An opiate enema to be given.

23rd.—The spasms are now restricted to the right thigh, and pelvic muscles on the same side, but are much less intense than they have hitherto been. There is also more power in the pulse, and the perspiration is less profuse, and on awaking he was able to pass urine without any very great difficulty. To continue the aconite, and to have an opiate enema.—Eleven p.m.: Each dose of the aconite, but more especially the last, has produced a most marked effect upon the pulse, which is now very irregular and frequent. The

cramps, which during the day have been very trifling, seem rather to have increased this evening.

24th.—The symptoms this morning are still more favourable; the mouth can now be opened so as to allow the greater part of the tongue to be seen. The perspiration has ceased, and the cramps are now the only unfavourable symptom remaining. They are still restricted to the right thigh, and recur at longer intervals; the wound also continues in a healthy state. Opium and aconite as before.—Eleven p.m.: All the tetanic symptoms continue relieved, but during the last hour he has been annoyed with frequent vomitings, which ended with the expulsion of a lumbricus, seven or eight inches long, since which he has been quite easy; the pulse is evidently affected by the aconite.

25th.—In every respect progressing favourably. During the day he has several times passed urine without difficulty, and had also a free alvine evacuation. In the evening there was the same irregularity in the pulse as had been observed on the three previous evenings. Three doses had been taken during the day.

26th.—The countenance has now recovered its natural expression; the muscular rigidity in the thighs, back, and abdomen, has almost disappeared, the occasional spasms in the right thigh are both slight and infrequent, and the pulse is increasing in volume; in short, the symptoms are favourable in every respect. Still, however, some degree of rigidity exists, and this, together with the occasional recurrence of the cramps, seems to render necessary the continuance of the aconite and opium, but in diminished doses. Tincture of aconite three minims, tincture of opium twenty minims, three times a day.

30th.—Symptoms progressively improving; the mouth can now be opened so as to show almost the entire tongue, and he has sufficient control over the muscles of the jaw to enable him slowly to masticate a piece of bread. The cramps in the right thigh are very slight, and recur at very distant intervals.

Jan. 15th, 1846.—The rigidity of the muscles, which has been gradually lessening up to this time, has now altogether disappeared, and during the last six days he has not had any return of the cramps. The arm is in an improving state, and he this day discontinued the aconite, and sat up for half an hour.

From this time he continued gradually to regain his strength; the amendment in the arm was uninterrupted; two small pieces of bone exfoliated; and he was discharged on the 19th of February, perfectly well in health, and with the wound in the arm nearly healed.

Remarks.—This case presents several features of considerable interest. The length of time which had elapsed between the receipt of the injury and the appearance of tetanic symptoms was unusually great, it being the evening of the twenty-second day before the slightest stiffness of the jaw was observed. The circumstance of the ward in which this patient was placed having been washed the day before the first symptoms of trismus manifested themselves, is also worthy of notice. The probability that in many cases some concurrent cause, in addition to the external injury, is required to produce tetanus, renders it necessary that the utmost care should be taken, after the infliction of those injuries which predispose to this disease, to keep the patient as much as possible from the usual exciting causes, of which cold and damp appear to be by far the most frequent.

The tolerance of the aconite which was exhibited during the continuance of the disease should not be allowed to pass unnoticed. It will be seen that this patient, on the 15th of December, in eight hours took nineteen minims of tincture of aconite, (prepared according to Dr. Fleming's formula;) on the 16th, thirty-two minims in fourteen hours; on the 17th, twenty-five minims in seven hours; and on the 20th, twenty minims in two hours. Dr. Fleming, in his treatise on "The Physiological and Medicinal Properties of the Aconitum Napellus," states that "the utmost extent to which he would recommend the physiological effects of aconite to be carried, in order to obtain, with safety and success, its therapeutic effects," is the administration of a second dose of five minims, two hours after the first. The remedy, to be effectual in this disease, must, I believe, be carried to such an extent as entirely to subdue the muscular spasm, and should be continued until the tendency to return of that spasm has materially diminished. To carry it to such an extent requires the extreme caution—the most constant attendance. And here I feel bound to acknowledge the judicious and scientific care which this patient received from Dr. C. B. Radcliffe, who at the time was acting as house-surgeon to the Hospital.

Lastly, are we justified in ascribing the successful termina-

tion of this case to the employment of aconite? For my own part, although I by no means undervalue the other remedial measures which were adopted, I believe that the recovery may fairly be attributed to the administration of this drug. No one who reads this case can, I think, doubt the extraordinary influence which the aconite exerted over that spasm which is the essential characteristic of the disease, and which, in the majority of instances, destroys life, either by causing suffocation from spasmodic contraction of the diaphragm and muscles of the glottis, or by exhausting the nervous energy. A considerable experience of the remedy in this disease is necessary before any positive conclusion can be come to; but believing, as I do, that it was of essential service in this case, I have thought it right to make it thus public, in order that others may be induced to employ it under similar circumstances, and that in time a sufficient number of cases may be recorded, to render its curative power in this hitherto fatal disease free from doubt.

The analogy which exists between tetanus and hydrophobia naturally leads to the inference that if aconite be efficacious in tetanus it may also be employed with advantage in the latter disease; and should a case occur in my own practice, I should certainly employ this remedy in preference to any other, carrying its effects, as in the above detailed case, to the furthest allowable extent. In fact, from my previous knowledge of the physiological effects of this drug, I had determined to administer it in the event of hydrophobia manifesting itself in any of six children who were bitten by a dog, in an undoubtedly rabid state, about the time when the foregoing case occurred. In five of the children the bitten parts were excised; and happily, I have not been called upon to test the therapeutic properties of aconite in any one of them. I may here mention that the results of Dr. Garrod's important experiments on the property which animal charcoal possesses of destroying the power of vegetable poisons, whether in or out of the body, together with his suggestion that it may exert a like influence over animal poisons, induced me to recommend the application of poultices of animal charcoal to the wounded parts, which was continued until they were perfectly healed.

UNIVERSITY COLLEGE HOSPITAL.

ON PERICARDITIS.—By JOHN TAYLOR, M.D., Professor of Clinical Medicine in University College, and Physician to University College Hospital, London.

CASE 28.—A man, suffering from necrosis of the leg, and general bad health, after slight exposure to cold, was seized with cough, dyspnoea, and slight pains in the sides; admitted, after three weeks, with double friction sound in both pleurae; wheezing respiration over the larynx and trachea; inflammation of throat; fetid breath; systolic murmur at base of heart, with extended dullness on percussion; death after three days.—*Post-mortem examination, with remarks:* effusion of serum in both pleurae, with very little lymph; characters of the rubbing sound; may resemble crepitation; cause of orthopnoea; serum poured out immediately before death; infrequency of double pleurisy with effusion, except with tubercles in the lungs; circumstances in which it may occur; engorgement of the right lung; brittleness of both; slight condensation of apex of right lung.—*Heart:* effusion of recent lymph on pericardium, but no redness of the inflamed surface; no friction sound over body of ventricles, because lymph effused on one only of the two opposed serous surfaces; absence of both symptoms, and of signs of pericarditis. *Hypertrophy, with dilatation of the left ventricle of the heart: signs; causes.* Redness of mucous membrane of pharynx and larynx; collection of pus in antrum maxillare; old adhesions of arachnoid; mammillation of mucous membrane of stomach; granular disease of kidneys; its latent course; no dropsy; albuminuria.—*Causes:* 1. Of the renal disease; 2. Of the various acute inflammations; characters of secondary inflammations; nature and importance of the predisposing, compared with the exciting causes of inflammation.

FREDERICK L.—aged thirty-four, admitted March 30th, 1842; of slender conformation, short stature, and nervous temperament; aspect pale, slightly sallow, and indicative of greatly impaired health; a bookbinder, married; has always had sufficient work, and plenty of food; habits steady. Parents enjoyed good health; he had chronic rheumatism three or four years ago, and since then has been subject to rheumatic pains; never had acute rheumatism, nor syphilis. The left leg and knee-joint have been diseased for twenty-two years; the disease was produced by a kick. The whole leg and the knee-joint are much enlarged, and of irregular form; the foot

rather oedematous; subcutaneous veins very large. There is a fistulous opening on the inner side of the thigh, just above the knee, and extending to the bone. There has been a purulent discharge throughout the whole duration of the disease. The patient continued to work up to the time of the present attack, three weeks ago; when, after being out of doors without a cap on his head, he began to cough; had some expectoration dotted with blood. Had much dyspnoea, the least exercise putting him out of breath; and very soon he could not lie down, for fear of suffocation. Had also sharp pains in both sides of the chest, aching in the loins, thirst, and sickness. A fortnight ago, he went to a dispensary, had six leeches applied to his chest, and took medicine; and he has since placed a blister, of his own accord, on the right side.

On admission, face pale, and very anxious; emaciation considerable; skin not hot or dry; respirations short, laborious, noisy; thirty-two in a minute; he rests on his back in the upright posture, and cannot turn towards either side; has not slept for a fortnight, on account of the dyspnoea, and feels faint and giddy. There is severe dull pain, mixed with some of a more acute character on both lateral surfaces of the chest, but most on the right side, increased by a deep inspiration, or by coughing; cough troublesome; but short and hacking; no expectoration; chills and flushes of heat alternately; pulse eighty-four; small, rather hard. There is an excessively disagreeable odour proceeding from the nose, of three or four weeks' duration; a slight discharge from the nostrils, but no other morbid appearance about them; tongue dry and of a dark-red colour; the fauces and the pharynx, as far as can be seen, are dry, and of a dusky-red hue; there is a burning sensation in the throat; and hoarseness, which he has had for a fortnight; appetite bad; sickness after each meal; thirst; bowels open; urine, tested by heat and nitric acid, throws down an abundant precipitate; specific gravity, 1014.

Physical signs.—Respiratory sounds over the trachea, loud, rough, and wheezing, and in a less degree also over the larynx; when the nostrils were closed, and the patient made to breathe through the mouth only, the noise over the larynx and trachea was much less, but still more than in health.—*Right lung:* A very loud, rough friction sound in front and behind, over about the lower two-thirds; heard both with inspiration and expiration; but loudest with expiration; not audible over the upper third; a very distinct vibratory sensation is felt by the hand applied to the chest over the parts where the friction sound was heard; in the infra-clavicular region the inspiration was feeble, and the expiration louder than natural.—*Left lung:* Over the lower half or two-thirds a distinct friction sound behind and laterally, but less loud than on the right side; a vibratory tremor is perceived by the hand over the same extent. In the infra-clavicular region the inspiration is louder and the expiration feebler than on the right side; no ægophony or bronchophony over either lung.—*Percussion:* Behind, duller on the right side than on the left; not distinctly dull on the left; in front, no marked dullness, except in the region of the liver. Ordered to be cupped beneath the right scapula to eight ounces; to take five grains of blue pill three times a day. A lotion of chloride of soda for the nose; low diet.

April 1.—*Right side:* Friction sound not so loud; and is not heard with expiration; it was difficult to say whether there was not some crepitation, but the sound resembling it was concluded to be a less degree of friction sound; vocal vibration felt on both sides behind, but less distinctly on the right than on the left.—*Heart:* A trifling murmur with the first sound at the base; dull sound on percussion over a greater extent than usual transversely; no palpitations or pain in the cardiac region.

2nd.—The friction sound behind is less; respirations thirty-two a minute; no expectoration; pulse 80, small and soft; heart sounds as before.

3rd.—Died at one o'clock A.M.

Inspection of the body thirty-eight hours after death.—*Exterior:* Emaciation considerable; dark reddish-brown discoloration in the course of the superficial veins of the abdomen and chest; the veins about the left knee, which were very large before death, are not now visible.—*Chest:* The right pleura was attached posteriorly by a few long cellular adhesions; the portion over the lower lobe of the lung was covered here and there by false membrane; not very soft, but easily removed, and having a slightly rough surface; no redness of the subjacent pleura; the pleura costalis was studded with similar portions of lymph, and was redder than usual; the pleura covering the upper lobe was healthy; three or four ounces of reddish serum in the cavity of the pleura; the lower lobe of the right lung was darker coloured than usual, crepitated less, and contained much frothy serum; its tissue yielded under the slightest pressure of the fingers, and soon broke

down into a soft putrilaginous mass. The middle lobe and the lower part of the upper presented nearly the same appearances, but were less dark coloured, less lacerable, and contained more serum; the rest of the upper lobe was pale, less crepitant than natural, contained little serum, and was more lacerable than usual.—*Left Pleura*: A few long cellular adhesions, behind which serum had infiltrated. No distinct portions of more recent lymph either on the pleura costalis or pulmonalis; the surface of the pleura covering the lower lobe, however, was thought to feel slightly rough to the finger passed over it; but even this was doubtful. The pleura contained fifteen ounces of serum tinged with blood, but otherwise clear, and without flakes of lymph. The *left lung* was paler than the right; the upper lobe and back part of the lower were rather more dense and less crepitant than natural; the lung contained very little blood or serum, but its texture was much more easily lacerable than natural in every part, but chiefly in the lower and posterior portions.—*Bronchial tubes*: In the left lung the mucous membrane was of an uniform red colour in the larger divisions, but not thickened or softened; in the smaller divisions it was pale, and covered with but little mucus; in the right lung the redness of the mucous coat was deeper, and extended through a larger number of subdivisions. The membrane was not otherwise changed.—*Heart*: The pericardium contained about half an ounce of serum. Nearly the whole of the membrane covering the auricle and ventricles was coated with a layer of soft and not rough coagulable lymph, from half a line to a line in thickness. No redness of the subjacent pericardium, except over the posterior surface of the left ventricle, where it was general, and of a ramiform and punctiform character. No white patch on the pericardium, and very little fat under it. No redness; deposition of lymph, or loss of smoothness of any part of the loose pericardium. Walls of the left ventricle decidedly too thick; substance firm, and rather pale; columnæ carneæ much thickened; cavity distinctly dilated; endocardium transparent, and not thickened; aortic valves very healthy; aorta not carefully examined; mitral valve healthy, but the orifice admitted my two first fingers rather too freely. Right ventricle, walls, cavity, endocardium, and valves healthy; auricles natural; foramen ovale closed. *Blood*: Both ventricles and the right auricle contained a small colourless coagulum; none in the left auricle. The endocardium in the left ventricle and auricle, and the inner surface of the aorta, were deeply and uniformly stained of a red colour, especially near the valves, and in the auricle; that in the right cavities less deeply coloured than in the left.—*Abdomen*: Liver full sized; substance rather pale, and distinctly softer than natural. *Spleen*: Of full size, rather pale, not softened.—*Kidneys*: The left decidedly too large, and the right of full size. Capsule not thickened; on tearing it off, a little of the cortical substance adhered to it in parts; external surface mottled with white patches of various extent; more in the left than the right kidney; no unevenness or granular appearance; posterior surface of the right extensively injected; the redness has a fine ramiform and punctiform character; substance of both rather firm, and of a yellowish-white colour; cortical portion diminished in volume. A large serous cyst in the left, and one or two smaller ones in the right kidney; mucous membrane in the pelvis of the right kidney rather red; in the left, not so; ureters and bladder not examined.—*Intestines*: Externally, of a dark greenish colour; they were not laid open.—*Stomach*: Mucous membrane in the great cul de sac considerably injected and ecchymosed; it was also softer and thinner than elsewhere; in the rest of the stomach it had a greenish-grey tint, and was mammillated, but not softened.—*Head*: Skull very thick, one-third of an inch; arachnoid over the anterior lobes for about an inch on each side the longitudinal fissure, but especially on the left, was opaque, milk-white in colour, and thickened; the two layers were connected in several places by old adhesions; the veins between the convolutions were not turgid; a moderate quantity of sub-arachnoid serous effusion; membranes easily removed, without injury to the surface of the brain; both grey and white matter paler than natural, and of healthy consistence; about a drachm of serum in each lateral ventricle; plexus choroides studded with small vesicles; all other parts healthy. The right antrum maxillare was filled with pus of healthy aspect; the lining membrane was neither thick nor red; the exact state of the nasal fossæ was not visible.—The *left tonsil* was of a greenish colour, and, on pressure, an abundance of curdy matter exuded from its follicles. On the right tonsil was a vesicle, the size of a horse-bean, filled with a clear jelly; papillæ at the base of the tongue very large, and the orifices were very plainly seen; the

mucous membrane of the pharynx, and about the upper part of the larynx, was redder than usual; some fine ramiform injections in the interior of the larynx about the true vocal chords, and some reddish frothy mucus; œsophagus healthy.—*Weights of organs*: Brain, fifty ounces and a half avoirdupois; heart, fourteen ounces and a quarter; left lung, twenty-three ounces; right lung, nineteen ounces and a half; liver, fifty-eight ounces and a quarter; left kidney, six ounces and a quarter; right kidney, six ounces; spleen, five ounces and three quarters; stomach, seven ounces.

SUMMARY OF THE CASE, WITH REMARKS.

Symptoms, Diagnosis, and Morbid Appearances.—This patient, after having been long in bad health, was attacked, soon after a slight chill, with symptoms of an acute disease. He was admitted about three weeks after, and only three days before his death, and was then discovered to be labouring under a double pleurisy. I shall notice the chief points of interest in the morbid appearances, and their symptoms.

Pleura.—1. The pleurisy was attended by pain from the first, but it was of a *dull* character, and not very severe. It existed on both sides.

2. The dyspnoea was very considerable; the patient could not lie down, nor on either side, and the countenance was expressive of much distress. The appearances in the pleuræ alone will hardly explain so much dyspnoea, for a far greater quantity of effusion may exist without such effects. But the affection of the thoracic viscera altogether will furnish reason enough for this suffering. There was bronchitis, laryngitis, and morbus cordis, in addition to the double pleurisy.

3. The friction sound in the right pleura was very rough and loud, and accompanied by a strong vibratory tremor. The effusion of lymph was very trifling in amount, but it was rather *firm*: hence, probably, the roughness of the sound. The roughness of the *left* pleura was scarcely to be distinguished by the finger, yet the sound had been very distinct during life, although not so loud as on the right side. The roughness of the pleuræ had perhaps diminished before the patient's death; but it is certain that a very slight inequality of the surface may occasion a very distinct rubbing sound. (Vide Case 27.)

4. The crepitation which was noticed was believed to be a phase of the friction sound. I think it probable that this opinion was correct; but it cannot be proved so in the present case, because the condition of the lung might have been the source of the sound.

5. The serous effusion into the left pleura must have occurred shortly before death, because within thirty-six, if not within twelve hours before death, the rubbing sound was audible to the bottom of the chest, and the vocal fremitus was more distinct, and the dullness on percussion less on the left side, behind and inferiorly, than on the right.

6. There was double pleurisy with effusion, without any tubercles in the lungs, or gangrene. This is so rare an occurrence that M. Louis states he has never met with it in adults. The opportunity of seeing several other such cases has occurred to me. I believe they will be found to occur in diseased states of the system at large; for example, in Bright's disease; poisoning of the blood; in phlebitis, with purulent infection; in acute glanders, and such diseases. I have met with this double pleurisy in childhood, in a scrofulous subject, without tubercular deposit in the lungs.

Lungs.—1. Was there inflammation of the typhoid variety of the substance of the lower lobe of the right lung? This is very possible, but cannot be proved. The sanguineous and serous engorgement are common results of much dyspnoea, and the extreme lacerability of the tissue was found in the upper lobe and also in the left lung, where there was no engorgement; perhaps this brittleness of the tissue was due to the depressed state of the system, and the unhealthy condition of the fluids, of which also the tendency to early putrefaction was another result. The engorgement of the lung must have been the cause of the dullness on percussion, observed during life over the right side behind.

2. The slight condensation of the upper lobe of the right lung explains the increased expiratory and diminished inspiratory murmur under the right clavicle as compared with the left.

Heart.—1. Pericarditis was not suspected during life. There was no pain, palpitation, or other symptom, to draw attention to the heart; it was examined only in conformity with the rule (of which it well exemplifies the necessity) of examining the condition of every organ during life.

2. Though the whole surface of the heart was covered with recent lymph, there was no friction sound, except a very slight

one, limited to a small space, about the origin of the aorta. The production of such a sound was not prevented by serous effusion, which amounted only to half an ounce. There are, probably, two reasons for the general absence of the rubbing sound,—the first and chief being the smoothness of the reflected pericardium, in consequence of which there were one rough and one smooth surface, instead of two rough surfaces rubbed together. The second reason is the feeble action of the heart, which would thus occasion less friction than usual between the opposed layers of pericardium.

3. The aortic valves were healthy; hence the morbid sound at the base must have been produced, either in the pericardium, or from anæmia. The carotids were not examined. It was probably a friction sound, occurring at the spot where the two layers of pericardium are in the closest apposition; and the case shows that a friction sound so limited may be mistaken for a valvular murmur, at least without an examination of the carotid arteries.

4. The pericardium on the anterior surface of the heart, and also the pleuræ, although covered with coagulable lymph, and therefore inflamed, were not at all red. The redness on the posterior surface of the heart was therefore probably due to gravitation. It is a common appearance in that situation. A similar absence of redness in pleuritis existed in Case No. 27.

5. The hypertrophy with dilatation of the left ventricle was detected only by the increased extent of dulness on percussion. There was no increase in the force of the impulse, owing to the enfeebled action of the heart.

6. What was the cause of this hypertrophy? The valves and lining membrane were remarkably healthy. There was no trace of any former attack of pericarditis. The patient's habits are stated to have been regular. It may have been the renal disease, but proof is wanting; we do not know whether the disease of the heart or of the kidneys existed first. The cause appears to have been limited in its operation to the left ventricle; hence, if the renal disease were the cause, it would seem to operate by causing some obstruction to the capillary circulation, rather than by modifying the nutrition of the heart through the changes to which it leads in the composition of the blood.

7. The blood was in an impoverished state, and the solids of the body were not healthy; hence the early disposition to putrefaction (the weather being cold); the colouring, by inhibition in the left cavities of the heart; and the small proportion of fibrine in the blood contained in the heart, notwithstanding the previous existence of so much inflammation in various organs. Nothing was found to explain the occurrence of suppuration in the antrum maxillare. There was no disease of the bone. There seems nothing, therefore, to which it can be ascribed but inflammation of the membrane lining the cavity, yet there was no apparent alteration in the colour, thickness, or texture of this membrane. The pus was inodorous; hence the extreme fœtor of the breath must have had some other cause.

Kidneys.—1. The appearances after death, as well as the condition of the urine, concur in proving the existence of Bright's disease. The renal affection had run the insidious course so common to it, and would not have been discovered if the urine had not been tested. There was no œdema, (except a little of the diseased leg,) perhaps because the obstruction in the chest had not been of long duration.

Causes.—1. The causes of the renal disease are not obvious. The patient stated that he had not been a drinker, and had not suffered any particular privations. The long-continued disease of the tibia must have undermined the general health, and rendered the patient more susceptible of the influence of any other causes of disease.

2. The immediate exciting cause of the last illness was a trifling exposure to cold; but it seems impossible to attach more than a very secondary importance to this cause; it was but the last link in a long chain.

3. The various acute inflammations found, belong to the important class of secondary inflammations, those which are so often the immediate cause of death, by supervening in the advanced stages of other diseases. They depended, no doubt, upon the state of the constitution, and that state probably consisted largely in a vitiated condition of the fluids, the main cause of which, again, was, perhaps, the renal disease. We thus see the character and importance of what is called the predisposing cause of these inflammations; for it is no less than an already diseased condition of the whole body, as distinguished from the exciting cause, which is but the last, often trifling, exposure to cold or some other morbid agent, and which, in a healthy state of the system, and when not long

continued, or of great intensity, will be generally sustained without injury.

4. The acute inflammations in this case exemplify several of the common characters of the secondary class, such as the tendency of several of them to arise together, or quickly succeed each other; their asthenic unhealthy character; the absence of any, or of any considerable, local pain and febrile reaction; the impossibility of using active or lowering measures to combat them; their generally fatal termination; and the early putrefaction of the body after death.

DR. LAYCOCK AND REFLEX ACTION OF THE BRAIN.

"Experiment shows that in the lower animals the cerebral ganglia are not necessary to the production of emotional movements." Thrust a spade into the earth of your garden, and shake the soil; in a few moments you will find a number of worms hastening to the surface, *with all the phenomena* the creatures can exhibit, of the emotion of fear, yet they have no brain. But I will not confine myself to brainless animals. Irritate a scolopendron, it erects its tail in anger or fear; now cut off its head, and irritate it again, the tail is again raised in a threatening attitude. Decapitate a wasp, and irritate the headless trunk, and that trunk will diligently attempt to sting you. You may perform similar experiments on reptiles. The decapitated frog, or turtle, exhibits the emotional act of fear, by fleeing from irritation. I take for granted, that these motor phenomena, exhibiting anger and fear, are emotional, although termed reflex by Dr. Hall."—*Dr. Laycock's Letter to Mr. G. Combe, March, 1846.*

To the Editor of THE LANCET.

SIR,—Looking on Dr. Laycock as in great measure the cause of what I termed the "egregious error" of Mr. Anderson, it seems to me that the teacher ought in fairness to be scrutinized as well as the pupil. Dr. Laycock has for some few years been engaged in promulgating a new doctrine respecting a so-called reflex motor action of the brain. It has been placed before the British Association for the Advancement of Science; it has been published in Dr. Forbes's Review, and separately; and it has also been the chief topic of a somewhat *we-gotistical* correspondence among Dr. Laycock, Professor Reid, and Mr. Combe, as your readers will doubtless remember. Of course, it will be supposed that Dr. Laycock is well up in the nervous system, before he undertakes an original adventure. Nothing of the kind. I might go through his entire subject and put him to the rout; but I prefer to take a passage like the above, complete in itself, and tolerably good, too, as a specimen of Dr. Laycock's labours, for the purpose of submitting it to anatomical and physiological examination.

I pass over the familiar handling, "experiment shows," "but I will not confine myself," "you may perform similar experiments," "I take for granted," &c., as merely involving a necessity that the individual so writing should be a perfect master of the subject, should, in fact, almost have Nature as a mistress in his own keeping, to the exclusion of all other admirers.

I take Dr. Laycock's first position—"experiment shows that in the lower animals the cerebral ganglia are not necessary to the production of emotional movements." Now for the correctness of the experimental proofs of this dogma. The passage quoted boasts five of them. 1. Dr. Laycock says, that "Worms exhibit the emotion of fear, *yet they have no brain!*" It happens that the annelidans belong to the division of the animal kingdom, Articulata, the distinguishing feature of which is, that a small brain, cephalic ganglion, or supra-oesophageal ganglion, is contained in the anterior segment of the animal. Worms, then, *have* brains. This is the first experiment! 2. "But I will not confine myself to brainless animals." We are told that a scolopendron erects its tail, in anger or fear, the same after decapitation as before. Here the gist of the matter is, that the scolopendron has the brain which the earth-worm has not. But the fact happens to be, that the earwig, like the worm, is an articulate animal, with a nervous system after the same plan. This is the second experiment! 3. "Decapitate a wasp, and irritate the headless trunk, and that trunk will diligently attempt to sting you." It happens that the wasp, like the scolopendron, belongs to the articulata, so that, as a contrast to the worm, it is of no value. This is the third experiment! 4. "You may perform similar experiments on reptiles." The same results are of course inferred. This is mere assertion without shadow of proof, and I defy Dr. Laycock to adduce any such. 5. "The decapitated frog or turtle exhibits the emotional act of fear, by fleeing from irritation." Has Dr. Laycock experimented on the frog and the turtle? I suspect not. The decapitated frog retracts its legs—the turtle moves on the application of stimulus—but I most distinctly deny, and upon experimental proofs, that anything which can be properly called "*fleeing*" takes place. Thus much for the fifth and last confirmation of

"experiment shows," &c. And mark, reader! All this cumulative error ends with an "I take for granted." The whole quotation is, indeed, an example of the great danger of taking things for granted!

In the first place, Dr. Laycock is not aware of the analogy between the nervous organisation of the annelidans and the insects. In the second, he compares the functions of the articulatæ with those of the vertebrata, when they are not properly comparable. In the articulatæ we do not yet know to what extent the different ganglia are independent centres for all the nervous functions, while we do know that in vertebrate animals the different segments are *not* such centres. In the third place, Dr. Laycock assumes, that because the movements caused by irritation in decapitated animals are like those which depend on volition and emotion, they are, therefore, of the same nature. There are three motor powers, volition, emotion, and spinal reflex action. Withdraw volition, and the emotional and reflex actions still have a certain resemblance to voluntary movements. Now withdraw volition and emotion, the reflex actions still resemble those of volition and emotion. If it were not so, what confusion there would be in nature. We use these three powers upon the commonest occasions; and but for their harmonious action, what muscular twitchings and contortions we should be the subjects of. Take an example of the harmonious action of the motor forces. A person under an insult strikes a blow—the motor act of emotion instantly follows the insult, and this is not a *physical* reflex action but a *psychical* action, no more reflex than the voluntary acts themselves; the emotional action is aided by voluntary action, and by reflex action, the closure of the fist, and consequent irritation of the palm, exciting the reflex action of the arm. On the other hand, in stammering, chorea, and some other affections, the emotional, voluntary, and reflex powers, are all acting, and are at variance. But this I merely hint at. I might pursue the quotation from Dr. Laycock further, but I will not. I think I have shown he is hardly in a fit state to dogmatize; hardly a leader to be followed when he treats of a reflex action of the brain. It is at best an ungrateful task, but so many men ignorantly rush upon the nervous system, that it can hardly be denied there is a real necessity for the lash of

VINDEK.

PAULUS ÆGINETA.

To the Editor of THE LANCET.

SIR.—As many of my friends are, as well as myself, desirous of disposing of our copies of "Paulus Ægineta," will you allow me to inquire, through your pages, if any bookseller is willing to purchase copies, and at what price?

Yours obediently,
A COUNTRY M.D.

MEDICAL NEWS.

THE EXAMINERS OF THE COLLEGE OF SURGEONS.—

A correspondent informs us that it has been stated, in a respectable publication, that before Mr. LISTON was elected an examiner in the Court of the College of Surgeons, he entered into an engagement to pay Mr. WHITE, who has retired, one half of the emoluments of the office, amounting to about 200*l.* per annum. The report in question is a malicious falsehood. It is entirely without foundation. We regret, however, to learn, that there are circumstances which induced the Court to consider whether something might not be done for the benefit of Mr. WHITE. Hence, probably, arose the publication of the falsehood respecting Mr. LISTON.

NEW MEDICAL SOCIETY.—(From a Correspondent.)

—The practitioners of the western districts of the metropolis are engaged in instituting a new medical society, to be entitled "The Western Medical and Surgical Association for the Advancement of Science." The office-bearers proposed for the first year are, Sir James Clark, Bart., F.R.S., President; Messrs. Goderich and Gaskell, Vice-Presidents; Mr. D. O. Edwards, Treasurer; Mr. A. B. Barnes, Hon. Secretary. The initiatory general meeting of the members will take place on Wednesday evening, the 5th of April, 1846, at seven o'clock, in the great room of the Western Grammar School, Alexander Square, Brompton. The presence of all medical men will be deemed a favour. Sir James Clark will take the chair, and a code of regulations will be discussed and adopted.

Mr. James Dixon has been elected Surgeon to the London Ophthalmic Hospital.

NON-PAYMENT OF MEDICAL WITNESSES IN POLICE COURTS.—The case of two parties accused of rape, brought before Mr. Greenwood, at Clerkenwell Police Court, lately, having been adjourned, for the purpose of obtaining medical evidence which negatived the capital charge, the magistrate observed to the medical man "he was sorry that, owing to the wording of the act of parliament, he was unable to award him any remuneration for his professional services. Had the medical gentleman gone a little further in his evidence, it would have come within the charge of felony, and he could then have awarded him 'compensation.'" This was a very unfortunate state of the law, for it held out inducements to an unprincipled medical man to strain his evidence. This law ought certainly to be altered, for if medical testimony is to be paid for, it ought to be so in all cases where justice required it.

CORRESPONDENTS.

The qualifications of R. H. (St. Albans) are sufficient to entitle him to be registered on equal terms with the first men in the profession. The testimonial which was granted by the institution he has named confers no legal distinction, as the establishment was neither founded by Charter, nor is it recognised by Act of Parliament.

Chirurgicus.—The new Charter, whatever it may be, cannot in any respect nullify the provisions of an Act of Parliament. This is an answer to the first and second questions. In reply to the third, we say—No.

A Constant Reader and Constant Loner by Attending the Poor.—Whether he is bound to attend them or not would entirely depend upon his terms of contract or engagement with the guardians. By reading that document carefully, our correspondent will find little difficulty in discovering the extent of his liabilities. Masters are not bound to pay for medical attendance on their servants, except in cases where the attendance of the medical practitioner was required by them. We shall be happy to receive the communication to which our correspondent has adverted.

A Subscriber.—Mr. Mackinnon has given a notice, to the effect that he will re-introduce his Bill in the present session of Parliament. On the subject of the Health of Towns' Bill nothing has been yet determined.

M.R.C.S.L., (Essex.)—Did Sir John Walsham or the Board of Guardians reprimand the relieving officer? Is the relieving officer dismissed from his situation? Has any reply from the Commissioners, founded on the report, been received by the Board of Guardians? We much regret that the surgeon did not render assistance, the moment he found that the requisite order could not be obtained from the hard-hearted relieving officer. When human life is in a state of peril, it is not a moment for calculating the value of a few shillings. The application of the powers of our science, from pure motives of humanity, in rescuing human life from danger, must ever have the effect of ennobling the profession of medicine in the minds of the best members of society. Science ought ever to stimulate the generous impulses of our nature.

The paper of Dr. Mason, on Puerperal Epilepsy, is left for him at THE LANCET office.

H. G. G.—The fees vary in different places, but we believe that the usual one paid for such examinations is one guinea.

N. J. W. is advised to apply at the East India House, Leadenhall-street, where he will immediately receive all the information he requires.

The note of Dr. Robert Barnes is in type, and will be published next week.

L. N. D., (Whitehall-place.)—Reading while walking is a very foolish practice, as it is not, on many occasions, unattended with danger to the person, and when pursued in public has a very pedantic appearance. It is, besides, injurious to health, by exhausting the nervous system at a time when it ought to be renovated by air and exercise. We are inclined to believe, that people who read books whilst walking in the streets, and in public promenades, seldom read at all when at home, and probably cannot think anywhere.

We have received two elaborate communications from Mr. Markwick: one, on the application of Professor Seutin's starch bandage in various surgical diseases; and the other, on its modification by Mr. Christophers. We presume that he wishes the latter to be the first published, and it shall appear on the earliest available occasion. But we would suggest condensation both to Mr. Markwick and other contributors, as without it we shall never find space adequate to enable us to give prompt insertion to all the contributions which continue to flock upon us.

A correspondent addresses to us the following remarks:—"In the exhibition of animalculæ under the hydro-oxygen microscope, some are seen through, the heart's interior and exterior being visible in action. Could not the more transparent portion of man—the thorax for instance—be placed in a similar relative position to a microscope of greater power, if needed? Those who are blessed with the means may be induced, by a notice of this, to try whether the idea be practicable."

A Student.—If the blood came from the cavernous sinus, the bone must have been fractured.

Communications have been received from—Mr. Butterfield; Medicus Chirurgicus; Messrs. T. and H. Smith, Edinburgh; Mr. Cattell; Mr. Bernard; A Militia Medical Officer; and A Surgeon, (Taunton.)

CLINICAL LECTURES
ON THE
PRINCIPAL FORMS OF INSANITY,
DELIVERED IN THE MIDDLESEX LUNATIC-ASYLUM
AT HANWELL.

BY JOHN CONOLLY, M.D.,
PHYSICIAN TO THE ASYLUM.

LECTURE XIV.

The probability of recovery in cases of insanity.

THERE are certain general questions usually put to the practitioner by the friends of a patient recently affected with insanity—questions having reference to the probable chances of recovery—to which it is more desirable than easy to be able to reply with perfect confidence. Whether the patient will recover his reason soon, or ever, or in how long or short a time?—whether removal from home is, or will be, necessary?—whether merely to another residence, or to an asylum, and to what kind of asylum the patient should be taken?—are all inquiries of great interest to the relatives, and the answers to which may affect all their worldly arrangements. From long experience, when that experience was limited to private practice, I think myself warranted in saying that practitioners have not ordinarily the means of giving satisfactory answers to these inquiries, and that severe disappointment and inconvenience are often the consequences.

Consider on how many circumstances the prognosis itself must depend; for the methods to be resorted to, and all the consequent arrangements, depend on this preliminary. The symptoms actually present, the duration of the attack, the age, the susceptibility, the hereditary constitution of the patient, the configuration and character of the brain, the nature of the causes, the slow or sudden development of the effects, and the treatment that has already been adopted,—all these must have some consideration before we can give a reasonable opinion as to the probability of recovery, whatever may be advised or done. When, therefore, you are expected to prophesy, you may reasonably ask for much preparatory information, some of which is not always to be readily obtained.

If you recal to memory the cases you have seen in the course of your visits to the asylum, you will find, on reflection, that you have already gathered some materials of a general kind to assist you in forming a just prognosis, at least in some cases of mental disorder. In the female wards, No. 3 and No. 7, and in the male ward, No. 1, you have noticed but too many unfortunate cases in which no hope of recovery exists; cases of idiocy, dependent on congenital defect, and of imbecility, either congenital, or resulting from previous maniacal attacks. The same unfavourable opinion may be pronounced in the numerous cases combined with epilepsy, and with paralysis. You will find a recollection of these cases useful to you on future occasions, especially when consulted about young persons who manifest irregular mental development, and in recent cases of all kinds. Congenital defects are irremediable; but the defect may permit eccentric or partial mental manifestations, and the regulation of these, and the cultivation even of the fragments of mind in these cases, will materially modify the character and life of the individual. Imbecile and even idiotic children are capable of being educated to a certain extent, and may be made happier, better, and healthier, and longer-lived, by culture. This limited hope, therefore, may be held out in these unfortunate cases: There are cases, also, already spoken of, in which manifest debility of the brain has been caused by short maniacal attacks; and yet in which a recovery of tranquillity, of comfort, and a capability of enjoying ordinary life, are quite within the limit of probability, although the chances of these may be diminished by excitement, and by a disturbing treatment.

When, in an epileptic young person, you find that there is much mental eccentricity, or even frequent and great mental excitement, the prognosis is unfavourable; increase of excitement to mania, or imbecility gradually overshadowing the intellect, are what you have to expect. When mental peculiarities have appeared in persons of middle age, if you find the lips and tongue tremulous when the patient speaks, and the mind exhilarated, there is every reason to believe that paralysis has commenced in that most hopeless form so fully described in a previous lecture. But you have seen that there are cases of epilepsy, combined with insanity, in which the patient is very rational in the intervals between the epileptic

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attacks, and when the intervals are long, a state of mind is regained which very nearly, if not entirely, amounts to sound mind; and this possibility must, of course, influence your disposal of the patient. The exposure of such patients to the continual society of idiots, or of violent or uncleanly patients, is a cruelty common in some of the continental asylums, painful to witness, and really without excuse. Their neglect in such places is extreme; their minds are uncultivated; they are taught no useful art; and their whole physical and moral nature passes through much suffering into the lowest depths of degradation. There are cases of general paralysis in which the mental faculties have not yet suffered severely; and a tranquil treatment may long retard further deterioration. Some degree of freedom may consequently be accorded in these cases, but intelligence and life are still always in particular jeopardy. In both of these combinations of disease, renewed attacks of the disorder, which attends, and which ushered in, or caused, the insanity, are always to be feared. In both descriptions of cases, also, you will usually find the temporary recovery most marked when the forehead is duly developed, and the vertex, occiput, and sides of the head have a natural proportion to each other; remembering, however, that the forehead may be too bulging and too large, as well as too narrow, and the whole head ample beyond what is natural, as well as too small.

The symptoms of an acute maniacal attack are less unpromising than those of a quieter form of mania, with delusions, when both are recent. In a large proportion of incurable cases, remarkable delusions have been long entertained, and the patients are ordinarily quiet. Recurrent attacks of maniacal excitement, however tranquil the patient may be in the intervals, are very unfavourable. In the beginning of this course of lectures, S. A—, in female ward No. 9, appeared to be so well that you could scarcely suppose her to be a patient. She is about forty-five years of age, stout, and good-looking, and was then very neatly dressed, and had an air of great respectability; her manners were composed and gracious, and she was occupied in the fancy work-room. Within the last fortnight you may have observed that she became restless, appeared to be irritable, and talked much of being quite well, and fit to leave the asylum. These are always, in her case, the incipient symptoms of relapse. The following week you saw her untidy in her dress, without bonnet or cap, her hair uncombed and hanging about her face, which was covered with snuff; and her language had become violent and gross. In a few weeks she will be herself again: when better, you will find that she is intelligent; and she will remain so well, even for months, that one might again and again be tempted to hope for permanent recovery. But she has been insane many years; her habits are intemperate; and I fear she will always be the subject of these recurrent attacks of excitement. E. S—, a very little woman, in ward No. 8, and H. S—, in No. 15, have sometimes remained tranquil and sensible for more than a year; and also J. F—, in male ward No. 11; there being only some slight impairment of the mind observable during that period; yet all are subject to severe recurrent attacks, and appear incurable. In these patients, you will find that the head is pretty well formed; and it is remarkably so in the long-existing and incurable case of D. E—, in female ward No. 13, who has been for years liable to extremely violent maniacal attacks, in which, so long as restraints were applied to her, she was the terror of the house, and yet who is sometimes for weeks tranquil and rational, and exhibits great acuteness of intellect. You will see a marked difference between the well-formed forehead of this patient and of the other patients who recover to the same extent, and the shape of the same part of the head of those who have passed, after a few returns of excitement, into the stages of imbecility or dementia.

But in a recent case, very violent symptoms are by no means of unfavourable omen, as you may have remarked in the cases of M. A. C—, in female ward No. 12, formerly particularly mentioned; and more recently in S. C— and in M. H—, in the female infirmary. The most favourable cases are those in which there is simple excitement of all the faculties, resembling the excitement produced by wine or other stimulants: those characterized by inactivity and depression are less hopeful. Even cases of melancholia are more hopeful than those in which this mere dulness prevails.

In young persons, and most frequently, I think, in young women, short maniacal attacks are, unfortunately, often seen to end in a state of imbecility, which, although sometimes recovered from, too frequently passes into an incurable form, and after several interruptions of slight excitement, terminates in

dementia. Dementia, properly so called, is never recovered from; all the faculties are obscured; there is neither excitement nor depression, but a negative condition, in which the intellect, the feelings, the propensities, and even the senses, have very little exercise; and the patients live for years without seeming to do anything from the prompting of their own will.

In cases of melancholia, the course is often this:—The first attack occurs at about forty years of age, or soon afterward, in a person who has always been disposed to hypochondriasis, and has been what is called nervous. This attack perhaps lasts about two years. Seven, ten, or fifteen years afterward, another attack of melancholia comes on, and continues longer, or is never recovered from. The prognosis, therefore, is partly to be formed on these circumstances. As great a number of patients recover, probably, from melancholia, as from mania; but in both forms of malady, successive attacks, longer than the first attack, and of course coming on at later and later periods of life, are less and less easily recovered from. Melancholia supervenes in some patients after every maniacal attack, and precedes recovery; but the end is a gradual advance to imbecility. When melancholia of some continuance suddenly gives place to mania, it is remarked by Esquirol, that the patient is prone to sink, either from the malady or from any means employed for relief; of this, I have seen two very striking examples.

The prognosis in insanity coming on after delivery is, we have seen, generally favourable; recovery takes place in a considerable proportion of such cases within six months after the commencement of the attack, and in many more within a year. Those cases in which the symptoms come on very soon after delivery are commonly regarded as more dangerous to life than the cases in which they appear later, or during nursing, and in which we have often only to contend with debility. A very quick or fluttering pulse, sleepless nights, and much fever, indicate danger. I have noticed a longer continuance of symptoms of a kind of childishness or imbecility, in patients who have become insane after delivery, than in other cases of mania; and until corrected by further observation, I considered such cases incurable, which they certainly are not.

It does not seem by any means to follow, that a woman who has become insane after one delivery will again become so in subsequent confinements, or that she will ever become insane again; and I do not think that, generally speaking, women who have been so affected in the puerperal state are particularly liable to become insane from causes entirely unconnected with that state. Opinions on these subjects should always, however, be cautiously given. Puerperal insanity certainly may occur after the birth of the first child, and never afterward; or it may occur, for the first and only time, after the birth of the second child, or third, or fourth.

In some cases of insanity ascribed to the puerperal state, you will find, on careful inquiry, that slight symptoms of mental derangement had been observed for some months before the confinement, and even before that particular pregnancy, and that the puerperal state has merely aggravated such symptoms. When pregnant women are insane, it is usual to hope for immediate recovery after delivery: I have myself never seen any grounds for this hope, but have found the insanity to persist for some time afterwards, even in cases terminating in recovery, as if in no degree modified by the circumstance of delivery.

Cases of monomania, or madness on one subject only, are always pronounced difficult of cure. But pure cases of monomania are very rare; and in cases considered to be such, one strong delusion usually co-exists with several minor ones, or with a perceptible feebleness of some of the faculties. Where a single and marked delusion depends upon any manifest bodily disorder, an indication of cure may be pursued, and a strong hope of recovery entertained. If there is much plethora present, or marked debility, or manifest gastric or uterine disorder, a hope may be entertained that the removal of such states may remove the delusion. In many cases, the delusion cannot be traced to anything of the kind, or explained in any way, except by supposing that some portion of the brain has lost its energy or suffered paralysis. This form of delusion is very incidental to persons in the decline of life, and is commonly a part of senile insanity. Ideas of irretrievable ruin or disgrace, or of the impropriety of eating and drinking, or unhappy delusions respecting the identity of those about them, form the frequent afflictions of such patients; and from these very little hope of relief can be entertained.

When the symptoms of insanity have come on very gradually, a long course of eccentricity, or peculiar changes in, or exaggerations of, the habits and manners of the patient,

having been noticed for a year or two before the malady has declared itself, I have seldom found that the case was curable, even in patients in the vigour of life, free from paralysis, and apparently of good constitution. Temporary changes of the propensities and general habits may take place to a great extent in a recent case of insanity, without lessening the prospect of amendment. Great perversion of the affections may also exist, and yet pass away. Of these, aversion to the nearest friends and relatives is the most common. The dislike conceived by the patients for those who were not known to them before is usually founded on some resemblance, real or imaginary, or on an absolute illusion of the senses; and this will disappear when convalescence is becoming established. But generally, the patient conceives an aversion for his parents, or for some relative to whom in his sane state he is particularly attached, as if there existed some reversal of action in some part of the brain. In recurrent cases, the aversion and the reconciliation succeed one another in the most curious manner: the same patients who one day accost you in terms of unbounded friendship and confidence, assailing you on the next in the most violent and threatening language, and accusing you of torturing or poisoning them. These frequent and violent alternations belong to cases which are chronic and incurable.

After a certain duration of mania or melancholia, if incoherence of thoughts and language is perceived, recovery, I fear, seldom or never takes place. Of such cases, remarkable examples exist in J. B—, in male ward No. 3; in J. S—, in male ward No. 6; and in M. A—, in female ward No. 10. If you listen to their fluent discourse, you will be able to form a clearer idea of the perfect incoherence to which I am alluding than any mere description can furnish you with. There is some lingering hope in chronic cases of mania, although of very old date, so long as the patient talks coherently in the intervals between the paroxysms; but a quiet and chronic incoherence, only increased in the paroxysms, is quite a hopeless state of mind. The incoherence often observed in recent cases is a different condition, and generally temporary in its nature; but if very great, or if continuing long, it may excite apprehension that the case will end in imbecility.

Many other symptoms incidental to recent cases, and in them only temporary, also supervene in chronic cases, in which they indicate a great change for the worse. Inattention to personal cleanliness is one of these. It occurs in some recent cases, and is recovered from. It occurs in each attack of some recurrent and curable cases, and passes off with the attack, and wholly disappears when the state of the mind is finally recovered; but if it comes on in a case of long continuance, it is always an unfavourable circumstance. Another and more trifling peculiarity, that of crouching on the ground, is chiefly seen in old cases: the patients cannot be persuaded to sit upon a chair; they sit on the ground or on benches, with their knees drawn up to the chin; and all such patients are commonly in an incurable state. They are almost always very feeble, and probably instinctively adopt the crouching position, for support and relief. A disposition to sit alone in the corners of rooms, or at the end of the galleries, or behind the doors, and a dislike to the smallest exertion, are unpromising indications in cases where there has been maniacal excitement. In the greater number of recent cases, the patient is too much excited to be employed, or is too full of some immediate discontent: these symptoms will pass away, and a wish to be employed will spring up among the first appearances of amendment. At the same time, a wish to see friends and relatives, heretofore much blamed by them, is often expressed, and should be attended to. In old and incurable cases, employment is more readily entered upon, but does not strengthen the hope of recovery.

A return to natural sleep, in a recent case of insanity, affords a hope that amendment is taking place. Many of our chronic and incurable patients generally sleep well, although some are, apparently, always restless at night. In walking through our wards, you will see several sleeping very comfortably after dinner, and among these few that are curable. Both in asylums and in private practice, a want of sleep is often to be attributed, in chronic cases, to a want of attention to proper exercise during the day. In recent and curable attacks, the sleep is seldom good for some time; and sleep artificially induced is often followed by increased irritability. It is when the cerebral excitement is subsiding that refreshing and natural sleep is once more enjoyed.

Progressive emaciation in a recent case is often a favourable circumstance: it may advance almost to an alarming degree, and yet precede perfect recovery; the patient beginning to

grow stouter after appearing to be on the brink of the grave, and then the body and mind recovering strength together. A voracious appetite sometimes accompanies this state, and the system should be allowed the full supplies which it seems imperatively to demand. In chronic cases, growing emaciation is merely one of the signs of general failure of power. In either chronic or recent cases, it is not a promising thing to find the patient becoming stout without any mental improvement being at the same time observed. M. Esquirol remarks, that even in old cases, so long as there is a marked disorder in the functions of nutrition, a cure may be hoped for. It is certainly to be observed, that in cases attended at first with manifest disorder in the organs of digestion, a removal of this state leads to a subsidence of the mental symptoms. The same circumstance in relation to uterine affections is very commonly observed.

Phthisical symptoms, jaundice, dropsy, irregular action of the heart, are all unfavourable combinations, some obviously threatening life; and I think it is a rare circumstance to find the supervention of these maladies, or their distinct recognition, (for in insane persons they frequently supervene long before they are distinctly recognised,) followed by a mitigation of the mental disease. Insanity occurring in a member of a phthisical family is generally, I fear, connected with a constitution incapable of recovery. Mental disorders also sometimes depend on some bodily disease, of which the origin has not been noticed or recorded, and the future progress is masked, and yet which renders the disorder of the mind chronic, and is undermining the patient's life. Of these, I am inclined to think organic disease of the liver one of the most common, that viscus being sometimes found greatly enlarged and diseased.

A remission has been so frequently found to occur in attacks of mania in about a month from the commencement of the attack, as to assimilate its course, in some degree, to the rule of febrile disorders. Esquirol has particularly spoken of this remission, and has observed, that if this remission does not end in recovery, the case becomes chronic. Dr. Copland records that the acute symptoms usually subside in eight, fourteen, twenty-one, or twenty-eight days, or within forty days. If these observations are correct, they strongly illustrate the importance of the treatment being judiciously regulated in a stage in which the cure may be advanced or confirmed, or retarded, or utterly prevented.

The probability of cure must often have a relation to the nature of the injury done to the brain, and often to the cause of such injury, and, in all cases, to the recuperative power of the brain. But the nature of the injury done is only occasionally appreciable, even when the cause is distinctly physical; it is most obscure where the cause is a moral shock or impression, and it is difficult in any case to predicate the power of recovery in the individual brain. A physical injury of the head, to a certain extent, will produce permanent insanity; such as what a violent fall or blow may occasion, or a kick from a horse, leaving a depression in the bones of the cranium. The mental affection sometimes follows such injuries at a long interval; but in all the cases, inflammatory action and disorganization are presumable, and these states are, it is to be feared, not to be removed. But in other cases in which the insanity has arisen from a physical cause, as from intemperance, or has supervened on the puerperal state, or is obviously connected with disorder of the bowels, or with irregular states of the uterus, the chances of recovery are considerable; and yet all must depend upon the irritation induced in the brain stopping short of that point at which the disposition to disorganization begins.

When the insanity has been produced by a moral shock or impression, the actual effects seem to be analogous to those arising from physical injury; for not only does irritation ensue, but, apparently, subsequent chronic inflammation, effusion, and disorganization. The origin of insanity from such a cause probably indicates a brain peculiarly susceptible; and this is unfavourable as regards the prognosis. Few or no physical phenomena of any kind appear in some such cases, and yet the case may be hopeless. Disordered conditions of the arachnoid, with subsequent effusions, thickening, or depositions, are, I am convinced, the most ordinary physical results in all these cases; and these results certainly appear to be more frequently produced when the head is ill formed, the forehead low and narrow, the vertex high and inclined backward, and the occiput large. Such a shape of the head seems in some way to be connected with a brain easily discomposed, and deficient in the power of recovery. Disturbance of the affections, disappointed ambition, the loss of money, prosperity too suddenly experienced, grief for the loss of relatives, most

generally seem to produce permanent disorder in such a brain, of which the original constitution appears to have been so defective, and so ill adapted to receive and re-act upon the various impressions incidental to man's progress through life, that it has no power to rectify itself or throw off the disorder, and that neither medicine, nor regimen, nor time, nor all combined, can enable it to do so.

I believe that there is a striking progress in some recent cases from a moral impression to extreme and obvious physical consequences. A process, apparently inflammatory, ensues in the membranes of the brain, sometimes rapidly, on the first indefinable lesion resulting from a known and distinct moral impression, and which lesion is connected with insanity from the outset. Effusions take place between the membranes, or in the ventricles; the membranes are thickened; the cranial bones become more than usually vascular, and, as it would seem, inflamed; the bony structure becomes hypertrophied; disordered actions extend to the scalp, which, with the subcutaneous tissue, becomes inflamed, and a formation of purulent matter takes place. Symptoms of violent mania, and occasional convulsive attacks, are developed during some part of these processes with fever of a typhoid character, ending in death. This certainly appeared to be the order of events in the case of a female patient, H. Y—, aged thirty-four, who died in the asylum three years ago. Her insanity came on suddenly, when she was told that her lover had deserted her; she was previously in good health, and she died with all the symptoms and physical lesions which I have mentioned about nine months afterward.

The whole history of this case was subjected to the most careful investigation, and there was not any reason to suspect the intervention of any other than the moral cause for all the lesions that led to death. But less marked cases, in which all the appearances enumerated are present, with the exception of those connected with the scalp, are not uncommonly met with in the heads of lunatics after death.

Cases of insanity from over-exertion of the faculties of the intellect occasionally present themselves. They are produced by exertion too long continued, even in powerful minds, but by new and anxious studies in minds of less power, for which such studies are too much. The fear always is, that a kind of paralysis of the mental faculties is established, and that the mind may never recover. Very strong brains do recover, however, if warning is taken in time, and rest submitted to; but if the warning is neglected, the strongest will fail. In many of such cases, moral commotions have been a part of the cause, but mere intellectual labour will alone produce the malady, and the prognosis in such cases is not favourable. The history of some of the most distinguished English writers of our time illustrates this subject strongly and painfully. In some, the mind has been destroyed piecemeal, by paralysis; and in others, it has sunk at once into oppression and stupor, never to be removed.

Insanity from religious impressions is seldom cured, or the insanity which takes a fanatical character, although religious emotions did not cause the disease. In this part of England, this is not one of the most frequent forms of malady; but almost all our cases of it, recent or chronic, are very unpromising. It has several times happened, as we have passed through male ward No. 2, to see J. C—, an epileptic patient, at his customary religious exercises, which are repeated three times a day. He then stands in the middle of the airing court, with his head uncovered, in all weathers, and with his arms fully extended, extemporizing prayers and hymns, which are said and sung in a loud voice. He considers himself a divine person. His small head, his very narrow forehead, and the striking development of that portion of the cranium which the phrenologists believe to be connected with the sentiment of veneration, deserve your attentive examination. The two sisters, A—, have been already mentioned to you. Each thinks herself a divine person, and each, strange to say, gives credit to the delusion of the other, as well as to her own. We have some other cases, and all are apparently incurable.

Where pride has seemed to occasion the malady, or forms a conspicuous part of it, the same incurability seems to belong to it. A belief of being of high descent, or of possessing extensive accomplishments, is very remarkable in some of our most hopeless cases. The manner and attitude of A. C—, in female ward No. 3, present you with a striking illustration of this disagreeable form of mental disease. She will hold communication with no one. No kindness soothes, no attentions conciliate her. She draws her head back to the utmost possible extent, and sits with fixed gaze, and eyelids unmoved, for hours at a time, considering every interruption an insult, repulsing civilities with violence of tongue and gesture, and

representing accidental contact with curses and blows. She has been insane six years, and is now about forty years of age. There are several other examples in the asylum, as that of E. D—, in female ward No. 10, who calls herself Queen Victoria; and all the examples are in incurable cases. In most of these you will find a defective forehead, and a high vertex. In patients of a rank above that of our Hanwell patients, are many, especially of the female sex, who present these characters of the head. You will generally learn that they were wayward from childhood; that a love of distinction has been carefully cultivated; and that their moderate intellectual powers offer very small resistance to delusions. The ill-directed ambition of parents usually aggravates the faults of character of such young women into actual insanity.

Although hereditary insanity is often recovered from, there is always an unhappy tendency to relapse. In private practice, where evidence of this character of the affection is more accessible than in the annals of the poor, hereditary predisposition is found to be of very frequent occurrence, and to be often derived from the families of both parents. In every case in which this hereditary character prevails, our opinion of the prospect of cure should be guardedly given. The practitioner, however, and still more the superintendent of an asylum, may sometimes be placed in a difficult position by the known hereditary character of the malady of a patient apparently convalescent, or quite recovered from an attack. Relapse may be almost certain, and the time of it uncertain, and the form of it unsafe, and yet the mind may be so much recovered in the interval, that interference with the patient's liberty does not appear justifiable. This can scarcely be better illustrated than by the case of G. D. C—, in our male ward No. 11, who is about to leave the asylum, (1842.) He is thirty years of age, and has been, during three years past, frequently insane, and three months only in the asylum. He has gradually become quite well, and is naturally anxious to go home. We find, however, that his periods of sanity are seldom long-continued,—that his father and grandfather were both insane,—that he had a brother whose state bordered on insanity, and a sister who destroyed herself. He and his brother were both always liable to violent headaches, and the same predisposition has shown itself in his child. When his insanity first appeared, he was, for a time, abstracted and silent; but soon made attempts to burn his house, and also to destroy himself, alleging that he never could be cured. His own account is, that he became ill from fretting, during a long illness of his wife, fearing that he should lose her. We shall be obliged soon to discharge this patient, as he is now quite sane, and it is impossible to say that he may not continue so for some time. In private practice you would be still less able to detain such a patient in an asylum.

The question of the propriety of marriage with persons of insane families is sometimes very important, and referred to medical opinion. In every family, however disposed to insanity, I have always found so many members of the family of perfectly sound mind, that where there has been no attack of insanity in the particular case, and no peculiarity of character has ever shown itself, I should always hope that the individual might escape; and I meet with so many cases, in women especially, where a nervous family character, even amounting to unsoundness of mind, has evidently been increased by celibacy, and the absence of domestic affections and occupations, that I should always lean to the indulgent side in such cases, and feel averse to dissuasions from marriage with a partner of a healthier mind. Doubtless, also, by a succession of healthy alliances, such a disposition might be expected to disappear.

The expectation of the cure of insanity is generally admitted to diminish in proportion to the duration of the malady and the increasing age of the patient. Those who are advanced in age seldom or never recover from insanity. Patients do sometimes recover after having been insane fifteen or twenty years. W. W—, aged forty-five, went out of this asylum in 1839, quite well. He had been insane twenty years: he went out quite sane, but into a world of strangers; all his friends had died, or grown old, or disappeared from the neighbourhood in which he was grown up. He had to contend with loneliness, and poverty, and bodily ailments; but his mind did not give way. J. C— was discharged in 1842, after being ten years here, and some years in other asylums; but the protracted difficulties with which he had to struggle brought him back to us two years afterward. He now seems well and comfortable, and if he had been more fortunate when at liberty, he would probably have continued sane.

In general, however, the greater number of cures occur in the first and second year, after which the probability of cure greatly diminishes. Still, many patients recover after being

ill three, four, or five years, both after mania and melancholia. Whilst I confess that experience has taught me to doubt the curability of the majority of cases of insanity, it has also shown me examples of unexpected recovery after years of mental disorder, which prevent despair.

The mortality, also, is greatest in the first two years of the malady, so that whilst a cure may be most hoped for if the patient survives the beginning of the attack, we must remember that the life of the patient is itself uncertain. For the general proportion of cures and deaths,—the effect of different kinds of treatment,—the age at which insanity most commonly appears,—the liability and comparative curability of the different sexes, and many other particulars of more or less interest, I must refer you to the statistical returns appended to the Reports of different lunatic asylums,—to the excellent essay prefixed to the translation of Jacobi, by Mr. Tuke,—to Dr. Thurnam's recent and comprehensive work on the "Statistics of Insanity,"—to the "Report of the Commissioners in Lunacy in 1844," and to the article, "Lunatic Asylums," in the "Supplement to the Penny Cyclopædia." The object of any remarks of mine on the subject, in these lectures, is to enable you to form tolerably correct opinions of the probable progress of individual cases.

My observations on relapses must be made with the same limited intention. Indeed, I scarcely know any tables of relapses that can be considered as correct. That relapses are very numerous, I am very well convinced, and I fear they amount to one half of the number supposed to be cured. They are said—but I scarcely know upon what grounds—to be rarest among the rich. Assuredly the distress to be faced by the poor man on his recovery is overwhelming, and such as in many cases to exclude every ray of hope. All the world has gone on without him, and he seems shut out from every avenue to independence, or even to procuring a subsistence. His home is often ruined, or exists no more; his family is dispersed, or his children are in the workhouse; his friends are estranged from him; and if it can ever be said of any human being without impiety, it may be said of him, that his life is a superfluity, and death the only blessing he has to expect.

We much require an institution, subsidiary to the asylums for the poor, to which those cured or decidedly convalescent and curable might be removed, and where they could be supplied with work, receiving board and lodging, and some small payment in money for a time, until they could find work and a home for themselves. In Paris, such an institution exists, and even the children of the insane can be received into it during the malady of their parents, and properly taken care of. By this excellent charity many a convalescent from insanity must be saved from relapse, or from a broken heart. But it is a subject which has not yet received adequate attention in our country; any more than the great distress entailed on those above the class of paupers, but wholly dependent on continued exertions, when insanity affects them, or those dependent upon them. I trust it may be the happiness of some of those whose attention has been directed, by these lectures, to the condition of our poor people at Hanwell, to succeed in obtaining some attention, on the part of benevolent persons, to these subjects, and in providing relief for some of those bitterest forms of distress which are now scarcely regarded.

FOREIGN DEPARTMENT.

THE REPORT OF THE COMMITTEE OF THE PARIS ACADEMY OF MEDICINE ON THE PLAGUE.

THE following are the conclusions of the report which has just been presented by the plague committee to the Académie de Médecine:—

"1. The plague has been seen to arise spontaneously, not only in Egypt, in Syria, and in Turkey, but likewise in a great many other countries of Asia, Africa, and Europe.

"2. In every country in which the plague has been observed to arise spontaneously, its development may, with reason, be attributed to determinate causes acting on a great portion of the population. These causes are, particularly, dwelling on alluvial soils, or on marshy lands near the Mediterranean sea, or near certain rivers; such as the Nile, the Euphrates, and the Danube, low, badly-aired houses, a warm and moist air, the action of animal and vegetable matter in putrefaction, unwholesome and insufficient food, and great physical and moral suffering.

"3. All these causes being united every year in Lower Egypt, the plague is endemic in that country, where, almost

every year, it is seen under the sporadic form, and every ten years under the epidemic form.

"4. The absence in ancient Egypt of every pestilential epidemic during the long space of time that an enlightened and vigilant administration and a good sanitary police had contended victoriously against the causes productive of the plague, justifies a hope that the employment of the same means would again be productive of the same results.

"5. The state of Syria, of Turkey, of the regency of Tripoli, of that of Tunis, and of the empire of Morocco, being nearly the same at the period when the epidemic of the plague has shown itself spontaneously, nothing authorizes a belief that similar epidemics should not again appear there.

"6. The spontaneous plague appears not to be apprehended for Algeria, because, on the one hand, the Arabs and the Kabyles living, the one under a tent, and the others in places situated either on the summit or on the side of a rock, cannot engender disease; and, on the other hand, because the draining of several tracts of marshy land, and the truly remarkable improvement introduced in the organization of the police in the small number of towns existing, appear to afford a sufficient guarantee against the spontaneous development of the plague.

"7. The progress of civilization, and a general and constant application of the laws respecting good health, can alone supply us with the means of preventing the development of spontaneous plague.

"8. When the plague has raged with violence in Africa, in Asia, and in Europe, it has always shown itself with the principal characters of epidemic maladies.

"9. The sporadic plague differs from the epidemic plague, not only on account of the small number of persons attacked by the malady, but particularly because it does not present the character belonging to epidemic maladies.

"10. The plague is propagated in the same manner as most other epidemic maladies—that is to say, by the air, and independently of the influence which persons attacked with the plague may exercise.

"11. The inoculation of the blood drawn from the veins of a person affected with the plague, or from the matter of a pestilential bubo, has furnished but equivocal results. The inoculation of the serous matter drawn from the gangrened ulcer of a person suffering under the plague, has never given the plague; it is not therefore true that the plague can be transmitted by inoculation.

"12. An attentive and strict examination of the facts contained in scientific works establishes, on the one hand, that in the focus of the epidemic the immediate contact with thousands of pestiferous subjects has remained without danger to those who have suffered it, with free air or in well-ventilated places, and, on the other hand, that no strict observation demonstrates that the plague can be communicated by contact alone with the diseased.

"13. Numerous facts prove that the clothes which have been worn by infected persons, when made use of by other persons, have not communicated the disease, although they had not undergone any kind of purification.

"14. That the conveyance of the plague by means of merchandise, in countries where the plague is endemic, or epidemic, has been in no way proved.

"15. That the plague may be conveyed into epidemic places by the vapours which the infected exhale.

"16. That it is an incontestable fact that the plague may be conveyed out of epidemic localities, be it on board vessels at sea, or in the lazarettos of Europe.

"17. Nothing proves that the pest is transmissible out of epidemic places by the immediate contact of the infected.

"18. It is not proved that the plague is transmissible out of epidemic places by clothes which have been used by infected persons.

"19. It is in nowise proved that merchandise can convey the plague out of epidemic places.

"20. The distinction made in our lazarettos between susceptible and non-susceptible objects, does not rest upon any fact, or upon any experience deserving of confidence.

"21. The study of the means by the aid of which it is sought to destroy the pestilential principle supposed to be contained in clothes or merchandise, is, and ever will be, wholly without its object, so long as the presence of the principle is not proved.

"22. The plague may be transmitted out of epidemic localities by means of miasmatic infection—that is to say, by the air being charged with pestilential vapours.

"23. That the plague is more or less transmissible, according to the intensity of the epidemic, according as it may be in

its first, second, or third stage, and, lastly, according to the organic dispositions of the individuals submitted to the action of the pestilential vapours.

"24. That infected persons, by rendering the air of the localities in which they reside unwholesome, may create a focus of pestilential infection capable of transmitting the disease.

"25. That such places may retain the infection after the infected persons have been removed.

"26. That the infection, once established on board a vessel by the presence of one or more infected persons, may be conveyed to great distances.

"27. That the moving centres of infection cannot become the cause of secondary centres, and, consequently, of an extensive propagation of the malady, except when they encounter, in the countries into which they are transported, the necessary conditions for the development of the plague.

"28. That the usual period of the incubation of the plague is from three to five days; that the length of the incubation appears never to have exceeded eight days."

ON THE NON-DUALITY OF MIND.

By THOMAS CATTELL, M.D., M.R.C.S., &c., Braunston, Northamptonshire.

It is now necessary that I should analytically pursue the general remarks made in the previous paper against the mind's duality. Although we are not immediately conscious of the existence of mind, we are conscious of sensation, thought, and volition—operations which imply the existence of something that feels, thinks, and wills. It is the confounding this distinction that has, no doubt, led Dr. Wigan into the error previously alluded to.

Descartes was the first who clearly saw that our idea of mind is not direct, but relative—relative to the various operations of which we are conscious. "What am I?" he asks, in his second meditation: "a thinking being—that is, a being doubting, knowing, affirming, denying, consenting, refusing, susceptible of pleasure and of pain. Of all these things I might have had complete experience, without any previous acquaintance with the qualities and laws of matter; and therefore it is impossible that the study of matter can avail me aught in the study of myself." This, accordingly, Descartes laid down as a first principle, that "nothing comprehensible by the imagination can be at all subservient to the knowledge of mind;" and that the sensible images involved in our common forms of speaking concerning its operations, are to be guarded against with the most anxious care, as tending to confound, in our apprehensions, two classes of phenomena, which it is of the last importance to distinguish accurately from each other.

The force of the asseveration, "that consciousness is not the essence nor the test of mind," will be perceived, when it is regarded as possessing only a relative existence to the mind: for while the ideas of consciousness and perception are admitted to exist, the understanding is necessarily carried, in a retrospective manner, to some substance in which they unite, and at the same time carried forward to some object of which we are conscious, and which we must perceive.

And it is substantially evident, as regards any given substance, either retrospectively or subsequently considered, that we must first have a perception of it before we can be conscious of its existence. The consciousness must follow the perception: it is applicable only to things present; to apply it to the past is to confound it with memory.

When there is a reference to former states of mind, we discover only a remembrance like all other remembrances, and a feeling of common relation of the past and present affection of the mind to one permanent subject. Consciousness, even in the latter sense, is only a belief of a continued identity, and is a word expressive only of that belief.

The belief of our identity is instinctive and irresistible. Identity is a relative term: it implies a double observation of some sort. The identity of our mind is its continuance as the subject of various feelings; the belief of it, therefore, can arise only on the consideration of the successive phenomena, and is involved in the consideration of them as successive. We remember the past, feel the present, and believe that the rememberer of the past existed in that past which he remembers. Our faith in our identity, as being only another sort of faith which we put in memory, can only be opposed by those who deny all memory. That a state of remembrance, a present feeling, should be representative to us of some former feeling, so as to impress us with the feeling of the former

state of mind, is most wonderful; but that it does impress us with that belief is undeniable.

To still urge the dictum, that consciousness is the essence and test of mind, would surely be paralyzing, and especially when a little reflection would convince any person to the contrary.

For to maintain "that consciousness is the consciousness of identity," is to assert, that a person has not existed a single moment, nor done one action, but what he can remember; indeed, none but what he reflects upon. And one should really think it self-evident that consciousness of personal identity presupposes, and therefore cannot constitute, personal identity, any more than knowledge, in any other case, can constitute truth, which it presupposes.

This extraordinary mistake of Dr. Wigan may possibly have arisen from the idea, that to be endowed with a consciousness is inseparable from the idea of a person or intelligent being; or he might suppose that consciousness makes personality, and hence it might make personal identity too. This is the most favourable construction that can be given to such unphilosophical notions, for the belief of our identity arises, not from any inference of reasoning, but from a principle of instinctive assent, operating universally, immediately, irresistibly, and therefore to be regarded as essential to our constitution.

Besides, consciousness indicates the unity or monality of the mind, inasmuch as by reflecting upon that which is myself now, and that which was myself twenty years ago, I discern they are *not two*, but *one* and the same self. And though the successive consciousnesses which we have of our own existence are not the same, yet are they the consciousnesses of one and the same thing or object, of the same person, self, or living agent. The person of whose existence the consciousness is felt now, and was felt an hour or a year ago, is discerned to be, not two persons, but one and the same person, and therefore is one and the same.

How unmeaning it is, then, to urge that consciousness is the consciousness of *individuality*, as well as of *identity*!

All mankind, the mob, the sage inquirer, the very sceptic himself, when they speak or think of themselves, feel a sort of unity, in which there are no parts, the unity of a sentient being, which, if they think of organs at all, is that which sees in the eye, hears in the ear, smells in the nostrils, itself one in all; and not merely sentient, in the strict meaning of that term, but the subject of various feelings of different classes, remembrances, comparisons, hopes, fears, love, indignation. The verbal proposition may never have been formed in the mind; it is one being which has been the subject of all the feelings of life; and merely because the proposition may never have been framed in words, or clearly developed, the multitude may be regarded as not having felt the truth itself. Yet if we were to ask of any one, however little accustomed to philosophic inquiries, whether he was the same thinking being at the end of the year as at the beginning of it, he would smile at our question; and he would not smile the less, if we were to speak to him of the difference of three-fourths of a joy and half a joy, or of the many co-existing happinesses in the many co-existing atoms that form the happy organ, the simplicity and sameness of the thinking principle; of that principle of which we speak as essentially one, whenever we use the word *I*, this having been felt by him tacitly, without the application of those technical terms, the employment of which might perhaps render obscure to him what had no obscurity till it was darkened with language.

In support of the mind's individuality, numerous authorities could be cited, but reference to Reid, Descartes, Carden, Campanella, Arbuthnot, and a few others, will be sufficient. "All mankind," states Dr. Reid, "place their personality in something that cannot be divided or consist of parts. A part of a person is a manifest absurdity. This, of course, is speaking in the philosophic, and not in the popular, sense of that term."

A person is something indivisible, and is what Leibnitz calls a "monad." The presence of this one indivisible mind is essential to personality.

Jerom Cardan, an Italian physician, of the eclectic class of philosophers, says of mind, "it is universally diffused, and though it appears multiplied, is but one, and can never perish."

Thomas Campanella asserts, that "the mind is not a property of the body, but an agent inclosed in, and operating upon, the body." Such distinction led Arbuthnot to compose the following beautiful and impressive lines:—

"What am I, whence produced, and for what end?
Whence drew I being, to what period tend?
Am I the abandoned orphan of blind chance,
Dropp'd by wild atoms in disorder'd dance?"

Or from an endless chain of causes wrought,
And, of unthinking substance, born with thought—
Am I but what I seem, mere flesh and blood,
A branching channel, with a mazy flood?
The purple stream that through my vessels glides,
Dull and unconscious flows, like common tides,
The pipes through which the circling juices stray,
Are not that thinking I, no more than they:
This frame, compacted, with transcendent skill,
Of moving joints, obedient to my will;
Nursed from the fruitful glebe, like yonder tree,
Waxes and wastes—I call it mine, not me.
New matter still the mould'ring mass sustains;
The mansion changed, the tenant still remains;
And from the fleeting stream repair'd by food,
Distinct as is the swimmer from the flood."

Dr. Wigan speaks of "the consciousness of individuality," and surely if we were to attend to that principle alone, it would tell us, that what we term *I* is not two, but one; that it is the same being which hears and sees, compares and remembers, and that the very notion of duality and division is as inconsistent with the notion of individuality, as the notions of existence and non-existence. Of this our mere consciousness would inform us, without any inference of reasoning; and as Lord Shaftesbury justly observes—"We act as resolutely upon the mere supposition that we are, (identical and individual,) as if we had effectually proved it a thousand times."

Not only are the general principles of Dr. Wigan exposed to severe animadversion, but the whole reasoning and examples which he has adduced are so anomalous and inconsistent, that to pass them by without strict analysis would be impolitic and unjust. Place, for instance, the illustrations of a divided consciousness (*vide* LANCET, Oct. 11th, 1845) in juxtaposition with the examples adduced to prove the divarication of the mind into two minds, consciousness supposed at the same time to be the great adjudicator, and we shall see that the question of a dual-mind reposes in a petitiō-principiū.

To infer that "the man who thinks himself God, and knows himself to be John Smith, or that the man who believes himself to be two persons at the same time has two minds" is altogether absurd, and begging the whole question at issue. It is the same in the illustration given of a divided consciousness, and a divaricated mind into two minds; in the effect it is demonstrated to be two; and when co-operating with, or acting upon, the cause that produced it, it is asserted to be but one; or, to use the words of Dr. Wigan, when speaking of the divaricated mind, "consciousness being necessarily in only one mind at a time when they are discrepant." What inconsistency in accordance with the theory itself! A dual-consciousness, the effect from a divaricated mind into two minds, its cause is asserted to be only one consciousness. He has proved a thing to be two, and directly asserted it to be only one. He has asserted consciousness to be the essence and test of a mind; he has, besides, on the hypothesis, proved the duality of consciousness in connexion with duality of mind, and now he gravely assures us that consciousness can necessarily be in only one mind at a time. But the question may be urged, that if there be two minds and two consciousnesses, and if one consciousness can only exist in one mind at a time, what has become of the other consciousness? It is certain, that in this interim, the consciousness must necessarily cease to exist—I say, the consciousness—for in this view of the case one is supposed to be absent.

It must, however, be borne in mind, that duality of consciousness is affirmed, equally with duality of mind; but for the facility of demonstration, I will take the case simply as Dr. Wigan has expressed it. "In proceeding, it is necessary to state, and I do so without fear of disproof, that the whole theory of mental duality reposes in the notion, that the faculties of the mind possess a primary or positive, and an independent existence." Or why the opinions expressed, the illustrations given, and the definition adhered to, that "the mind is the aggregate of the mental functions, whether exercised by one brain or two."—(*Vide* LANCET, Nov. 22, 1845.)

That consciousness is but the attribute of a substance will appear, when we consider that it can have no independent existence. Whatever has a primary or positive existence must be independent, and what is independent must be invariably the same. Without this uniformity, its existence cannot be ascertained, and to speak of primary or positive existence, which at times may be, and at other times may cease to be, is a contradiction. For could we conceive anything that possesses a primary or positive existence, which can dispense with its being for any given time, and yet retain its name, by the same mode of reasoning it might dispense with its being entirely, and we must give, in this case, a primary and positive existence to a nonentity.

If consciousness can only BE in one mind, at a time when discrepant, then it is evident consciousness does not invariably exist, not only from the irregularity of its existence, but from its passing out of one mind into another. And if it be affirmed that it is capable of exerting itself in different directions, I would ask—What is become of its existence in that moment of duration in which it passes from one mind to another?—between its forsaking one conscious act, and displaying another in the next link of successive action? Here, it is certain, it can have no existence. Or if it have, it must be a consciousness without any consciousness, which is a contradiction in terms.

As consciousness must, in this interim, necessarily cease to exist, it follows, hence, that its existence cannot be positive; and if not positive, it can only exist in relation to some principle from which it results. Nothing cannot produce action. Mere nothing can have no accidents. And as nothing must ever correspond to nothing, consciousness itself demonstrates the positive existence of some primary substance. As, therefore, consciousness is what every man feels,—as it cannot of itself possess a positive existence, and it certainly cannot be produced by a nonentity, the positive existence of some primary indivisible substance necessarily ensues, and it is of little consequence whether that be epithetised as mind, or soul.

The mind must either be divisible, or it must not. If it be, it must be capable of divarication; and if it be divaricated, I would ask—Does consciousness survive this divarication, or expire? If it survive, then the adhesion of the two distinct minds is not necessary to its existence, which includes this contradiction, that consciousness is dependent for its being on a substance which is not necessary to its existence.

If consciousness expire, then it must have depended for its existence, not upon the union of the two minds, but upon the adhesion of these minds; but, in admitting a mere adhesion of minds to be capable of producing what the minds individually had no power of communicating, is a contradiction. It is therefore evident that consciousness cannot inhere in any divisible substance, and if so, a substance which is indivisible and identical must necessarily be admitted.

To revert to the absurd hypothesis founded on consciousness being the essence and test of mind, "that the man who thinks himself God, and knows himself to be John Smith, has two minds; or that the man who believes himself to be two distinct persons at the same time, has two minds," will be to allow another opportunity of exposing error, and supporting truth. As to the first hypothesis, I deny the possibility, not only that a man can think himself God, and know himself to be John Smith, but that he can think himself God at all. And in this assertion I am assisted by that profound infidel and deist, Thomas Hobbes, who, in his "Leviathan," says, "Every conception, being derived from the senses, is finite; we have therefore no idea of infinity, and God is not an object of apprehension, but of reverence." Besides, the employment of the phrase, thinking upon an object, in the place of the conception of it, is purely a popular expression, and ought not to be confounded in disquisitions on the mind. Shakspeare, whose talent for philosophizing was equal to his imaginative powers as a poet, uses, in the following two lines, the former of these phrases, in the same sense as we should conception:—

"Who can hold a fire in his hand,
By thinking on the frosty Caucasus?"

If consciousness be the essence and test of one mind, it must be the essence and test of two minds, notwithstanding Dr. Wigan asserts that it can necessarily be in only one mind at a time during discrepancy, and yet this very discrepancy is alleged as a proof of the existence of two minds. Now, it requires no argument to prove that if there really be two consciousnesses prior to discrepancy, there must be two subsequently; or else it supposes a destructive agency in the power of discrepancy. But the assertion destroys the hypothesis of a dual mind, and makes consciousness to be necessary to identity, and not necessary, at the same time. It is, however, the height of folly to affirm that a man can perceive what is not within the province of perception, or that he can be conscious of what he perceives not. For a man to be conscious that he is God, and conscious that he is John Smith at the same time, would pre-suppose that he perceives himself to be God, and to be John Smith at the same time, or that he perceives what is not perceivable, and that he is conscious of what he cannot be conscious.

We may conceive or imagine an Infinite Being, or a devil, but to assert that we actually perceive, or are really conscious

of what we conceive or imagine, is to betray a total misunderstanding of the philosophy of the mind. Perception is applicable only to external objects, and the immediate object of perception must be something present, and not what is past.

I do not demur to the fact that the exercise both of conception and imagination in dreaming and intellectual aberration, is accompanied by a belief that their objects exist; and in the case, too, of those that in spite of their own general belief of the absurdity of the vulgar stories of apparitions, dare not trust themselves alone with their own imaginations in the dark, we have all the evidence that the thing admits of, that imagination is attended by belief. The artist, who conceives the face and figure of an absent friend, in order to draw his picture, believes, for the moment, that his friend is before him. The belief is only momentary; for it is extremely difficult, in our waking hours, to maintain a steady and undivided attention to any object we conceive or imagine; and as soon as the conception or imagination is gone, the belief which attended it is at an end. We, in fact, consider them as creations of the mind, which have no separate and independent existence, from the facility with which we can recal or dismiss the objects of these powers at will; and as we cannot perceive without a conception of that which we perceive, nor can be conscious of that which we do not perceive, so it is undeniably evident that a man cannot perceive himself to be God, or any other entity not within the circumscription of the senses.

This reasoning is not in any way obviated by a recurrence to the belief that accompanies conception or imagination; it is totally distinct.

These remarks are applicable to the case of "the man who believes himself to be two distinct persons at the same time," an example nowhere to be found except in persons dreaming, or suffering from intellectual aberration. But admit that such phenomena were of frequent occurrence, the doctrine of a "dual mind" receives not the slightest corroboration therefrom. And this must be so, according to Dr. Wigan's own statements; for if consciousness be the essence or the test of mind, or if it resolve itself into the consciousness of identity or individuality, it can have no connexion with the present case. And this must be so also from the foregoing reasoning, inasmuch as the belief accompanying disordered states of the imagination and conception, inclusive of dreaming, is essentially and immutably distinct from that consciousness which succeeds perception.

Dr. Watts, in his twelfth essay, referring to analogous examples, says, that "fancied memory might make two men born in the most distant places and times the same person, or real forgetfulness might make the same man different persons. Lee, the tragedian, when distracted, might be successively Alexander, Socrates, Tully, Virgil, Luther, Queen Elizabeth; and, therefore, Lee, when distracted, might justly be rewarded or punished for all the different actions which he ascribes to himself; and, finally, several men might become the same persons." This he asserts to be contrary to the common forms of speech, and to true philosophy.

Braunston, Northamptonshire, April, 1846.

CASE OF UNUSUAL MORBID CONDITION OF THE HEART, DISCOVERED AFTER DEATH.

By C. F. Hodson, Esq., Surgeon, Bishop Stortford.

A BLACKSMITH, aged twenty-seven, came into the Infirmary of this Union House a short time since, rapidly sinking. He was jaundiced, and much emaciated, complaining of diarrhoea, and urgent dyspnoea. The former was easily relieved, but the latter continued until his death, which occurred shortly after his admission. Upon examination after death, the liver was found to be in the first stage of cirrhosis; the stomach tolerably healthy, the lungs particularly so; the pericardium contained about seven ounces of serum. The right side of the heart presented concentric hypertrophy of the left ventricle, with "vegetation" disease of the semilunar valves. Contained in the chamber of this ventricle, there were from fifty to sixty globular membranous sacs, filled with a puriform fluid, and varying in size from a pea to a small nut. They were slightly adherent to the walls of the ventricle by a small portion of their surfaces between the columnæ carneæ, the smaller ones being thus almost hidden, and the larger projecting into the chamber. "I have ascertained that the man had been ill for several months, and was of exceedingly intemperate habits.

Bishop Stortford, March, 1846.

ON THE
STRUCTURE AND THE HATCHING
OF
THE EGG OF THE COMMON FOWL.

By DAVID TOD, M.R.C.S. Eng., London.

It has been already stated that the blood of the foetal chick, which circulates in the membranes, runs towards the narrow end of the egg, and returns from the broad end to the chick. This peculiar course never varies, whether the chick be a male or a female, and in whatever position it may be placed. This circumstance indicates that the course of these vessels proceeds, not from any provision inherent in the primordium, but in the egg itself. What, then, is the cause of this particular arrangement of these vessels? We know that the egg is composed of parts peculiarly arranged and held together by a particular kind and amount of force, and that so long as this kind and amount of force exist, the egg continues in a state of integrity. We likewise know that the folliculus aeris is almost invariably situated at the broad end of the egg, and that this cavity progressively enlarges as the egg increases in age. We further know that the foetal chick progressively approaches the folliculus aeris, that the glaire or albumen is progressively drawn towards, and taken from, the narrow end of the egg, and is the pristine and most important food of the fœtus. These circumstances indicate that the narrow end of the egg inherits a power which does not exist in its broad end, and that this power has an attractive influence; and hence that there exists in the egg either a polarity, or something of a polar nature, and that this polar influence is the probable cause of the peculiar arrangement of the bloodvessels, which ramify in the membranes of the primordium.

On the fifth day of hatching, the various structures of the chick already noticed are more fully developed. The rudiments of the toes are now recognised. At this period, the heart retains its actions for a longer period, when cold water is applied to the outer surface of the egg-shell, than on the preceding day, and these actions, when rendered quiescent by cold, can be reproduced by heat with greater facility.

At this period of hatching, the folliculus aeris is much enlarged, the yolk has a muddy appearance, and the colour of whey; the albumen lies under the yolk, and is so thick and tenacious as to appear like a firm jelly. The chick is fixed to the yolk and respiratory membrane by bloodvessels, and the respiratory membrane slides over the inner surface of the chorion, and hence enables the chick to lie uppermost in every position of the egg. The surface of the membrana vitelli, which lies uppermost, is not so vascular or so thick as its other parts, but the inner surface has throughout a beautiful reticulated appearance.

At this period of hatching, the auricles of the heart of the chick are not serrated at their margins, and the heart has the shape represented in figure 19.

FIG. 19.



On the sixth day of hatching, the chick is, with the exception of the abdominal opening, fully developed, and moves the several parts of its body, and the coccyx in particular, very frequently. The body lies nearer the folliculus aeris, and the albumen or glaire of the egg has a less muddy appearance.

At this period of life, reiterated experiments prove that when the actions of the heart cease to exist by cold, they can be reproduced by heat at 104° Fahrenheit, and that these reproduced actions are not so readily evolved, nor so long in duration, as on the preceding inquiries.

On the seventh day of hatching, the chick is much larger than on the preceding day. The walls of the thorax are now so thick and opaque, as to prevent the actions of the heart from being readily seen. The eyes are now completely formed.

The chick lies nearer the broad end of the egg, and is progressively approaching the folliculus aeris.

On the eighth day of hatching, the chick is about one inch in length, from the head to the tail, and lies under the folliculus aeris. It has still an opening into the abdomen.

The bloodvessel which passes from the chick towards the broad, and runs in the respiratory membrane towards the narrow end of the egg, contains blood of a bright scarlet colour; and the other bloodvessel, which runs from the chick in a contrary direction, contains blood of a dark vermilion hue, and pulsates. These circumstances are better recognised at this than at any former period of life.

The albumen of the egg is again perfectly transparent, and is much diminished in quantity. It is now placed at the narrow end of the egg, a very small portion of it being in contact with the chick.

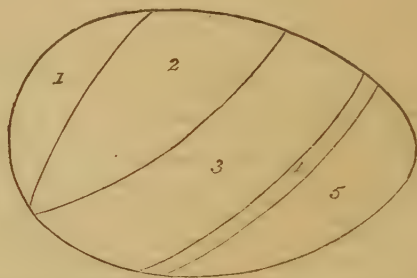
On the ninth day of hatching, the chick is more perfect in its several structures; a white limey spot is now seen at the point of its beak.

On the tenth day of hatching, the chick lies close under the folliculus aeris, at the broad end of the egg, and moves its head, wings, legs, in fact, its whole body, with facility; and from these motions the liquor amnii has an undulating motion similar to the ebbing and flowing of the tide, and to respiration. The cutis anserinus of the chick is now completely developed.

The albumen of the egg is now much less in quantity, has a pure amber colour, is more glutinous than in a new laid egg, and is placed at the narrow end of the egg. It seems to adhere to the membrana vitelli, and where it is adherent, the membrane has a lighter colour, and appears less vascular than at any other part; and between these parts, a dark-coloured and vascular portion of membrana vitelli, like a belt, is seen. The yolk of the egg does not, as yet, seem to have decreased in magnitude, and become less in quantity.

Figure 20 represents the relative positions of the parts now noticed.

FIG. 20.



1, Folliculus aeris. 2, Chick. 3, Yolk. 4, Belt. 5, Albumen.

On the eleventh day of hatching, the chick is about two inches in length, and has a ridge formed by the roots of feathers, extending from the crown of the head, along the spine to the coccyx. The chick now opens and shuts its beak very frequently.

Reiterated experiments prove that the actions of the heart are as much influenced by heat and cold as at any former period of life. At this period of life, I accidentally noticed that the body moved as if the animal breathed. This respiratory action is perhaps the motion recognised at the twenty-seventh hour of hatching. It is similar to the motion noticed in the gills of fish, and in the nymphæ of the dragon-fly.

On the twelfth day of hatching, the skin of the chick is covered with the roots of feathers, and surrounded with liquor amnii, which is clear and colourless. The yolk of the egg is not apparently the least diminished in magnitude, but is very soft to the touch, and is somewhat of a fluid consistence.

On the thirteenth day of hatching, the chick is thickly covered with feathers. The albumen of the egg is now about the size of two kidney-beans, and is quite transparent. The yolk, when its membrane has a whiter colour than its other parts, has a wheyish colour.

Several white, flaky substances, of an earthy or limey nature, are now seen lying in the folds of the membranes. These white substances increase progressively in size and number, and become more consistent as the chick advances in age. But more of this hereafter.

On the fourteenth day of hatching, the chick lies embedded, as it were, in the yolk, which has not, as yet, diminished much in magnitude. The albumen, on the contrary, is small in quantity. The amniotic fluid is likewise much diminished in quantity, and, when mixed with cold water, it makes the water muddy. The blastoderma is now the largest membrane

in the egg, and has the shape of a double nightcap, with the contents of the egg lying into its duplicature. Its external portion constitutes the respiratory membrane.

A convolution of intestine, about two inches long, now hangs out of the abdomen of the chick, and has two short diverticula lying before it, as represented in figure 21. This intestine has the artery of the respiratory membrane passing behind, and the vein before it.*

FIG. 21.



On the fifteenth day of hatching, the albumen of the egg is about the size of a cherry, and lies, as already stated, at the narrow end of the egg.

When we, at this period of hatching, put an egg into cold water, and stop the actions of the heart of the chick, and afterwards restore these actions by the gradual application of warm water, we notice that the membrana vitelli corrugates into folds in the cold, and dilates and becomes smooth in the warm water. This circumstance was noticed in the description of the anatomy of the egg.

At this period of hatching, the abdominal opening of the chick exhibits the same appearance as described on the preceding day. The two diverticula already noticed are now each about one-eighth of an inch in length.

On the sixteenth day of hatching, the chick extends from one end to the other of the egg, and is completely covered with feathers. It lies across the yolk, as represented in figure 22. The yolk still retains its original size, but is apparently in a semi-fluid state.

At this period of hatching, the chorion is easily separated into five laminae, and has a more opaque white than at any former period. The respiratory membrane is readily detached from the chorion, and the liquor amnii has a slight muddy appearance, (this appearance is perhaps accidental, for it is not invariably seen.) On the surface of the yolk, a small quantity of albumen is seen adhering to its surface, and around this albumen the surface of the yolk has a wheyish colour, as represented in the following figure, and nowhere else.

FIG. 22.



1, Albumen. 2, Whey-coloured yolk.

On the seventeenth day of hatching, the albumen of the egg is not one-third the size it exhibited on the preceding day; but the yolk does not appear diminished from its original magnitude. It is, however, very soft to the touch. Large flakes of whitish earthy or limey matter, at first recognised on the thirteenth day of hatching, are now seen lying under the respiratory membrane, and above the bloodvessels which pass from the umbilicus of the chick. These limey flakes have no communication with the intestines of the chick, and hence do not proceed, as Harvey states, from that canal. They seem to be produced from the liquor amnii.

At this period of hatching, all the intestines are drawn into the cavity of the abdomen, and the umbilical opening is now about a quarter of an inch in diameter.

On placing the egg with its contents in cold water, a quantity of air is recognised under the respiratory membrane.

On the eighteenth day of hatching, all the albumen of the

egg has disappeared, and the size of the yolk is now considerably diminished. Its whey-coloured portion is situated farthest distant from the abdominal opening of the chick, and the yolk itself is drawn close to that opening, and has its membrane corrugated, as represented in fig. 23. The bloodvessels of the respiratory and the other membranes enter the abdomen of the chick behind the yolk.

The white flakey matter is now very much increased in quantity, and the liquor amnii is proportionally diminished.

FIG. 23.

1, Umbilical opening.
2, Folds of the membrana vitelli.

On the nineteenth day of hatching, the egg-shell separates from the chorion with great facility, and the inner surface of the latter is soft and dry, like the cuticle of the human skin. The folliculus aeris is now very large, and the chick so much increased in size, as to occupy two-thirds of the cavity of the egg-shell. The yolk which fills up the other third of the cavity is now about half its original magnitude, and lies close to the umbilical opening of the chick, which it seems to fill up. The limey matter, already noticed, is now much increased in quantity, and lies chiefly at the narrow end of the egg. Very little liquor amnii is now seen, and no air can now be discovered under or between the membranes.

On dissecting a chick at this period of hatching we discover a thin and clear mucous fluid, extending from the mouth along the oesophagus to the crop, where it becomes thicker in consistence, and has a dirty cream-colour. This thick mucus passes from the crop to the stomach, where it becomes curdled, and assumes a whiter colour. At the pyloric orifice of the stomach this curdled matter becomes more fluid, and in the duodenum is mixed with bile. It then has a yellow colour, and passes along the alimentary canal, and in its course becomes more fluid. It does not, however, extend as far as the rectum, for that viscus is entirely empty.

This dissection proved that the illustrious Harvey was in error respecting the limey flakes, already noticed, being the feculent matter of the chick.

On the twentieth day of hatching, the chick removes its head from between its legs, forces its beak into the folliculus aeris, and begins to breathe and chirp. The yolk of the egg has now disappeared, and is lodged within the abdomen of the chick, and gives to it a large appearance. The bloodvessels of the respiratory membrane are, however, still as large and numerous, and as replete with blood, as at any former period.

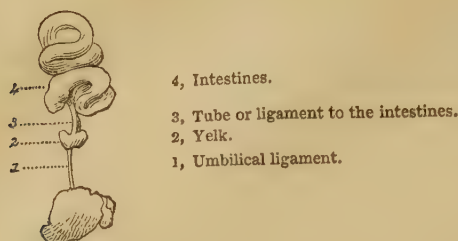
About the beginning of the twenty-first day of hatching, the chick bursts the egg-shell, and escapes from its foetal habitation. Its umbilical opening being now closed up, and the trunks of the allantoid vessels obliterated, nothing remains in the shell but the membranes and the limey flakes.

On dissecting a chick at this period, we find the yolk of the egg lying in the cavity of the abdomen, having the stomach and the greater portion of the intestines lying before it, the liver a little above its anterior part, a fold of intestine with the two diverticula already noticed above, and extending behind it. The yolk is about the size of a large Windsor bean, is enclosed in its capsule, which is very vascular, and is fixed by three bloodvessels, and to the umbilicus, in the following manner:—One bloodvessel runs from its inferior and posterior part to the posterior part of the spine, and joins the aorta. Another bloodvessel runs to the surface of the intestines, then through the mesentery to the inferior surface of the liver, and terminates in the vena cava. The other bloodvessel, which is the largest of the three, runs from the posterior and inferior part of the yolk, over the posterior surface of the stomach, then between the lobes of the liver, and terminates in the vena cava. Between the two bloodvessels which terminate in the vena cava, the gall-bladder is situated. The attachment to the umbilicus is by ligament formed from the obliterated bloodvessels.

The yolk in the abdomen, on the second day of life, is about the size of a small Windsor bean. On the third day it is about the size of a large field-bean; on the fourth day, it is about the size of a small field-bean; on the fifth day, it is about the size of a green pea, and has a lobulated shape; on the sixth day, it is about the size and shape of the following figure—

* Dr. Harvey says, "about this time the chick has a huge belly, as if it laboured of a hernia."

Fig. 24.



the umbilical ligament being about half an inch in length. On the seventh day, the yolk is still smaller in size, and has something of the same shape; its umbilical ligament is now about a quarter of an inch in length. On the eighth day, the yolk has nearly disappeared, and its bloodvessels become ligamentous; for these vessels undergo similar changes to the yolk.

Beyond the eighth day of life I did not carry my inquiries; but from what is stated in the *Philosophical Transactions* for 1822, p. 377, it seems that the yolk does not disappear entirely before the sixteenth day of life.

About the third day of life, we notice a tube, or something like a tube, extending from the yolk to the intestines, about half an inch in length. This tube probably exists at a much earlier period of life; but its textures are so delicate, that I was unable to discover them before this period. The tube is very conspicuous on the seventh day of life, and seems to give passage of the yolk to the intestines.

The stomach of the chick is very large on the first and second days of life. On the first day it contains a curdy substance, enclosed in a thin, delicate membrane. On the second day this substance is completely digested, and replaced with grains and small stones.

On the second day of life I drowned a chick, and five hours after death I exposed the heart, and on pricking its surface with the point of the scalpel, I noticed that the ventricles had a slight, and the auricles a strong, contracting and dilating power still existing in them. I likewise noticed that the pulmonic auricle and pulmonic ventricle had a greater amount of moving power in them than the cavic auricle and aortic ventricle. Fourteen hours after death I repeated these experiments, and noticed that the ventricles had lost all their moving power, and that the auricles still retained that power, but in a very slight degree,—another proof that each cavity or viscus of the heart has an action of its own.

At this period of life I drowned several chicks, and soon afterwards endeavoured to restore them to life by warm air, and by water heated to 104° Fahr., but was unable to succeed in my object.

During this investigation, I tried the following experiments:—

I placed a number of fecundated eggs under a clucking hen, when the moon was at her full, and noticed that these eggs were hatched about twelve hours sooner than eggs set under a hen at any other period of the moon's age.

I placed a number of unfecundated eggs under several clucking hens, and after allowing them to remain under the hens, some thirty, some thirty-five, and some thirty-eight days, I examined them, and noticed that no change had taken place in any of them, except a loss of weight. I then employed these eggs in making custards and puddings, and discovered that they were as fresh and sweet as new-laid eggs.

Unfecundated eggs are less liable to become addled than fecundated eggs.

Being unable to procure any double-yelk'd eggs, I can make no remarks upon them.

An egg loses about one-sixth of its weight during incubation.

I took several eggs which had been under clucking hens, five, six, ten, thirteen, and twenty successive days, and weighed each of them when warm. I then exposed them to the air for several hours, and when cold, weighed them again. I then placed them for one minute into boiling water, and weighed each of them when hot, and after they had become cold I again weighed each of them, and found that the weight of each egg never varied, dead or alive, hot or cold.

From what has now been stated, the following conclusions may be entertained:—

That a certain amount of heat causes the vital entity to un-

fold all the organs and textures of the body, and afterwards to perform their respective functions.

That this amount of heat coincides with, and, in fact, constitutes, the temperature of the blood of the producing and produced animals, and is the energizing agent in their economy.

That the several organs and textures of the body are progressively unfolded, of which some are unfolded prior to the existence or development of any action in the *punctum saliens* or heart, and others subsequent to that development.

That the several structures—solids and fluids—of the body owe their production and existence, not to the influence of any particular structure or function, but to the energized condition of the plastic principle inherent in the vital agent.

That the red particles or colouring matter of the blood owe their or its production and existence, not to anything inherent in or belonging to the egg, but to the energized condition of the vital agent. And from what has been quoted from the writings of Berzelius, Bostock, and Prout, we may infer that several other kinds or properties of matter existing in the animal economy owe their production and existence to the same influence or condition.

That heat modifies or changes the structures and functions of an animal invariably according to the amount existing in, or applied to, the surface of its body, and, consequently, that heat above or below the natural temperature of an animal, will produce corresponding changes in the composition of its body, and hence cause either an increase or diminution, suspension or destruction, of the vital functions.

That when cold suspends, but does not annihilate or destroy, the vital functions of an animal body, the several structures, solids and fluids, continue in a state of integrity, and the suspended functions can or may be reproduced or restored by heat corresponding with the natural temperature of the body.

That this reproducing or restoring power of heat exists in a greater degree during the generating process of the body than at any other period of its existence. And that although heat is merely the energizing and not the vital agent in the animal economy, a knowledge of its laws is of the utmost importance in the practice of medicine and surgery.

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ERRATUM.—Page 380, col. ii. line 36, for "connected," read "converted."

ON THE OBSERVANCE OF METHOD IN CONDUCTING POST-MORTEM EXAMINATIONS,

ESPECIALLY WHEN THEY ARE INTENDED FOR LEGAL PURPOSES.

By H. LETHEBY, M.B., Lecturer on Chemistry at the
Medical School of the London Hospital.

A VERY slight acquaintance with the practice of our criminal courts is sufficient to point out this very prominent fact, that of all classes of persons who may be called upon to give evidence, medical men generally cut the worst figure. They are so undecided in their manner; have always omitted so many important points of the inquiry; are accustomed to rely so thoroughly on the opinions of others; and, in short, give their testimony with so much qualification and confusion, that they are looked upon as a prominent and an easy mark for the very worst advocates. Now, the secret of all this appears to lay in one or other of three great deficiencies, as—1st, a want of a good medical knowledge; 2nd, a want of method or system in conducting the inquiry; or 3rd, a want of caution in forming an opinion, and of steadiness in asserting it. Omitting the first of these, which is, unfortunately, a far too frequent cause, but which cannot be discussed here, then the second assumes the greater importance, for it is out of this want of method that the third is sure to flow; it begets incaution and uncertainty in the manner of the witness, and is suggestive of all the subtlety and misconstruction with which the case is sure to be surrounded; and if it does not beget, it will favour, the development of the other bad but plausible elements of jurisprudence.

I have more than once seen a good and a clear evidence broken into pieces, and made altogether worthless, because the observance of some little point, remote enough in the inquiry, had been omitted. Let me take an instance:—A man dies suddenly, and circumstances seem to show that he had been poisoned; the medical attendant does not entertain a doubt upon the question; he had, in fact, made up his mind before the body was looked at, and, to his thinking, there was no necessity for examining the head, or the spinal cord, or even the heart, beyond taking a glance at its position. When, therefore, he gets to be questioned in the witness-box, he is com-

pelled to admit that he does not know anything about the state of the nervous centres, and is quite unable to say whether the coronary arteries were normal; whether the valves of the heart were healthy; whether there was any communication between its right and left sides; and he is, in fact, altogether unprepared to negative a supposition, that death might have been occasioned by any one of half-a-dozen natural causes which the sophistry of an advocate could easily invent, and as easily give probability to; and then comes the consequence,—that his evidence, though good in the main, and absolutely correct in its import, is, nevertheless, set down as nought, and he himself abused and grievously discredited.

Now this is not an imaginary or an overdrawn instance; for the daily and almost hourly practice of our courts is giving the reality to similar ones; and we may learn from them a world of profitable experience—as, not to be guided by premature opinion, nor to take anything for granted, and above all, to observe a method in conducting our inquiries.

Again, the law of evidence imposes upon every medical man the necessity of conducting his operations in such a manner as will enable him to take cognizance of every fact connected with the inquiry; and these, moreover, should be recorded exactly in the order in which they occur. In this manner, he will possess himself of all the information relating to the case; he will be able to meet the sophistry of an opposing counsel—to give his testimony clearly and distinctly—and to say with much confidence what has, or what has not, been the immediate cause of death.

A little attention to duties of this kind has led me to think, that almost every medico-legal inquiry may be profitably conducted, if it be followed out somewhat after this manner:—

1. Record the name, age, and sex, of the deceased.
2. Note the day and the time at which the examination is made, and set down the period which has intervened since death.
3. Direct attention, as early as possible, to surrounding circumstances, as to whether there is any weapon or trace of blood near, any cup or bottle likely to have contained a poison, or any evidence whatever in the position of things about the body to indicate a struggle or the cause of death.
4. Observe the position of the body. Is it in bed or on the ground; and how does it lie?—or is it suspended?—and so on.
5. Is the body naked?—or are the clothes on?—and are these disturbed or torn?
6. Notice the position of the limbs. Are they or the fingers bent, as if convulsions had preceded death? Open the hands, and search for anything which may have been torn from an opponent during the death struggle.
7. Observe the appearance of the countenance, as regards its colour and expression. Are the eyes open or prominent? What is the state of the conjunctiva and pupil? Is the mouth open, or is there any foam about it? Does the tongue protrude, or is it bitten? Smell the mouth, and notice the colour of the gums.

Connected with this part of the inquiry it may be said that the countenance will often give an important indication of the cause of death, and of some of the circumstances which immediately preceded it. Thus, as regards its colour, it is mostly livid after apoplexy and death from hanging or strangulation, and pale from hydrocyanic acid, the mineral acids, and the alkalies, as well as from most of the vegetable poisons, from blows upon the epigastrium, or injury to some vital organ. On the other hand, it may be either pale or red after poisoning by carbonic acid, alcohol, or opium, and some other poisons.

The expression of the face, too, is generally convulsive when there has been much struggle immediately before death, as during hanging, drowning, or poisoning by prussic acid, strychnia, and nux vomica; and it is often convulsed in cases of death accompanied by great hæmorrhage. On the contrary, there is more frequently a calmness in the expression after death from apoplexy, opium, carbonic acid, &c., while the features are pinched, and there is an anxiety in the look after the action of the metallic and most vegetable poisons.

The eye also is generally open, prominent, and glazed, after the effects of hydrocyanic acid, and prominent and injected after death from apoplexy and strangulation. Some authors, moreover, have described a suffused or even ecchymosed condition of the conjunctiva after death from arsenic.

The foam about the mouth is very characteristic of prussic acid, while the bitten tongue would indicate a great struggle or convulsive action immediately before death.

The gums put on a blue appearance after poisoning by lead; and the red or spongy gum, or even an ulcerative condition of the mouth, is often indicative of the action of mer-

cury. It must be remembered, however, that the same appearances, together with extreme salivation, have been produced by other substances, as iodide of potassium, colchicum, fox-glove, croton oil, and some other metallic and vegetable substances.

8. Proceed to remove all clothes from the body, and observe if there has been any evacuation just before death, either from the stomach, or rectum, or bladder, or if there has been an emission of seminal fluid. All of these appearances indicate convulsive action, and the latter, which is the common accompaniment of death from hanging, points to an irritation of the upper part of the spinal cord, and may serve to establish the fact of suspension before death, supposing that an opposite question were to arise.

9. Note the appearance of the body, whether deceased was fat or thin. Observe the colour of the skin, whether it is livid in any part, or if it presents any marks of violence, and if putrefaction has commenced. The colour of the skin is exceedingly pale when there has been much hæmorrhage before death, or after starvation, &c., and it acquires a yellow tint after poisoning by lead and copper; it is often ecchymosed or covered with purple petechiæ after arsenic, and some wasting diseases. The dependent parts are generally very livid soon after death by hydrocyanic and carbonic acids; and when there is any mark of violence, this should be accurately described, considering by what means it was likely to have been occasioned; whether it could have happened by accident, or by the hand of deceased, or by that of another person. In examining wounds about the throat, it is of great importance to notice on which side of the neck the wound is deepest, for this may indicate where the cut was commenced, and whether it was made from right to left, or from left to right; dissect them also to learn what parts have been involved in the division. If there is any mark of a cord around the neck, observe where the knot pressed, or where the cord was crossed; for one person would, in all probability, strangle another by crossing it behind, while in a case of self-murder it would most likely be crossed in front.

Lastly, it is of great consequence to know whether the wounds or bruises were produced before or after death, and although this cannot always be confidently stated, yet there are circumstances which will often furnish very important indication,—as the absence or presence of coagula in the wound, or of ecchymoses around it, or of infiltration of blood, fibrin, or serum, into the surrounding tissue; and I have noticed that most post-mortem wounds soon dry and discolour upon the edges, acquiring a brownish parchment-like appearance.

With respect to the evidence furnished by putrefaction, I shall have occasion to refer to this more particularly under the next head; but it may here be stated that most poisoned and plethoric bodies putrefy quickly, and especially those of persons who have died soon after a full meal; while, in the reverse cases, and after poisoning by arsenic, there is generally a delay in this process.

11. Can any opinion be formed as to the time which has elapsed since death took place?

This is often a very important question, and may involve an answer having a certain day, or even hour, for its limit. We shall find, however, that the post-mortem signs are not by any means so constant in their occurrence, or so conclusive in their import, as to warrant us in making, on all occasions, such a positive reply. Our evidence upon the subject may be collected somewhat after the following manner:—

(a.) Is there any warmth in the body?

I have not been able to get together very many facts connected with this as a sign, and my observations have been made chiefly upon subjects removed directly after death from the wards of a hospital into a dead-house, the temperature of which was about 50° Fahrenheit. I have found that adults cooled pretty constantly after this manner:—the extremities lost their heat very rapidly, sinking to the temperature of the room in less than three hours, while the surface of the trunk has felt warm, even up to the twenty-fourth hour; and at this time, a thermometer, placed either in the axilla or rectum, has generally stood at somewhere about 70° Fahrenheit. In fact, these parts have hardly ever lost the whole of their heat until after the lapse of thirty-six, or sometimes forty-eight hours.

There are many circumstances, however, which may modify this order of things, as, for instance, the body would have cooled faster had it been exposed to a current of cold air, or had it been immersed in cold water; also children and very thin subjects will cool sooner than adults, or corpulent ones. Again, when the body has remained in bed, or been well

clothed, and surrounded by bad conductors, the temperature is retained for a somewhat longer time.

(b.) Has the rigor mortis set in?

It most commonly happens that the limbs begin to stiffen in about two or three hours after death, and the rigor is generally firm and complete after the lapse of seven or eight hours. To this, however, there are occasional exceptions, as, for example, it is nearly always accelerated when the fatal event has been sudden, and when, immediately before death, there has been violent convulsive action, or a prolonged muscular exertion. In such cases the living spasm appears to pass at once into the dead rigor. Look, for instance, at the suicide, who is often found with the weapon firm in his grasp; and so with the murdered and the drowned, who frequently retain their hold of objects which had been clutched during the death struggle. Cases, on the contrary, will now and then occur, in which the rigor mortis appears to have been delayed for a very considerable period. Such, however, is rarely the sequence of sudden death, but it is, as far as my experience goes, indicative of some inflammatory action immediately before death. It has also been said that there is no cadaveric rigidity when life has been destroyed by lightning or by electricity; but I am not disposed to put faith in this assertion, for experiments on animals seem to show that a fatal shock will throw them at once into a state of extreme rigidity, out of which they pass in an unusually short time.

(c.) What is the condition of the cornea?

In general the cornea becomes slightly clouded after the lapse of nine or ten hours. In about sixteen this condition is still more evident; it then gets somewhat lax, is easily indented on pressure, and when this is made upon the side of the eyeball, the cornea becomes still more opaque. In about twenty-four hours it commonly acquires perceptibly greater laxity, and in forty-eight it may become quite flat, and so opaque, that the pupil can hardly be defined through it.

(d.) Has putrefaction commenced?

This is rather an inconstant event, and is liable to be interfered with by many modifying circumstances, such as the temperature of the room, the time of the year, the condition of the body, the cause of death, and whether it occurred soon after a meal or not, and so on. Nevertheless, we must attempt to set down something like an order for the time and succession of its several steps. In about eight or ten hours after death, the surface of the body, especially over the chest, and on the inside of the arms and thighs, puts on a marbled appearance, due to a turgescence of the superficial veins. In about sixteen hours, the dependent parts become livid or reddish-purple, and after the lapse of twenty-four hours, this lividity is generally very marked, and the marbling on the chest and arms begins to acquire a purplish tint. About the second day it assumes a brownish hue, and at this time the abdomen and groin show more evident marks of the putrefactive process, by acquiring a green colour. From this period it advances with more or less rapidity, according to attendant circumstances. In five or six days, the entire surface is ordinarily very green, and the venous marbling still strongly marked. About this time, in warm weather, the epidermis begins to loosen, and the fluids acquire great liquidity, and gravitate to the dependent parts, through which they readily escape: beyond this, the track of decomposition can scarcely be followed with any certainty.

While we are occupied in discussing the question which refers to the time of death, it may not be altogether out of place to refer to those evidences which prove that death has actually taken place, for there are several morbid agents which have the power of producing a state exactly simulating death, and it will devolve on the medical man to pronounce whether that state is apparent or real. The records of this country, but more especially those of France, where the burials are more hastily hurried over, show that numbers are annually consigned to a premature grave.

12. What therefore are the evidences which show that death has really taken place?

(a.) An absence of cardiac pulsation, and of the respiratory movements.

(b.) A loss of sensibility in the excito-motory system, as when the eyelids cease to wink on being touched, or the limbs and muscles to move on being pinched or pricked; one of the most powerful agents as a test of this function is galvanism, and I have found that the muscles lose their faculty of contracting under its influence in about three hours after death. Nyster has given results which appear to indicate a much longer persistence of this the last act of vitality; but as far as my experiments have gone, I am led to think that three hours is about the mean time of its duration.

(e.) The appearance of the rigor mortis, which generally sets in after about two or three hours.

(f.) The loss of temperature in the body.

(g.) The opacity or cloudiness of the cornea.

(h.) The lividity of the dependent parts, and the mottling on the arms and chest.

(i.) The setting in of putrefaction.

Of all these signs of death, the second merits the greatest consideration, because of the certainty of its import and of the early period at which it generally manifests itself.

13. Examine the head, and note if there is any bruise on the scalp; does the latter bleed freely as if its vessels had been congested?

14. Are the membranes of the brain natural, and is there any fluid upon or beneath the dura mater; note its quality and quantity: and when there is any blood, observe if it is coagulated or not. Are the vessels on the surface of the brain gorged or not; and is the blood liquid or dark?

All the considerations which arise from these inquiries will be well enough understood, but it is to be remembered, that apoplexy, and, according to Dr. Conolly, epilepsy complicated with mania, will nearly always produce an extreme congestion of the vessels of the brain, and even, in some instances, effusion of blood between the dura mater and arachnoid.

15. Remove the brain, and examine it by making a series of thin horizontal slices, until it reaches quite to the base; observe if there has been any softening, or are there any bloody points indicative of congestion; has any blood or serum been effused into its substance, or into the ventricles; and what is the condition of the choroid plexus.

If the brain has not been examined in this careful manner, difficulties may arise in after stages of the inquiry, for no person can pretend to say whether it was diseased or not.

16. Examine the calvarium and the base of the skull for any fracture.

Tredegar-square, April, 1846.

OBSERVATIONS ON ACUTE INFLAMMATION OF THE STOMACH AND BOWELS,

PRODUCED BY THE INTERMIXTURE OF VERDIGRIS WITH THE FOOD.

Remarks on the Medical Treatment and General Management of Coolie labourers emigrating from Calcutta and Madras to the Mauritius, British Guiana, and the West India Islands.

By T. MOORE, B.A., M.B., M.R.C.S., Surgeon 5th Infantry Regiment, Gwalior Contingent.

THE form of disease which was most prevalent amongst the coolies returning from British Guiana to Calcutta, at the expiration of their contracts of service, may be described as acute inflammation of the mucous membrane of the stomach and alimentary canal, which, in its symptoms, course, and termination, presented many of the characteristic features of acute idiopathic dysentery.

The cause of the outbreak of this particular form of disease, at the commencement of the voyage, was attributed at first to change of diet, change of climate, and to the noxious qualities of the Creek water, the vegetable and animal matters contained in which were at this time undergoing the process of putrefaction.

Although every precaution was taken to counteract the ill effects of these predisposing causes, the complaint did not seem to abate. For several successive days, numerous cases suffering from the same type of disease were brought aft for my inspection, by the sirdars. Perplexed as to the real cause of the disease, then so rife on board, I was descending the middle hatchway ladder to pay the morning visit to the patients in the hospital part of the ship, when I was stopped by two or three coolies, carrying plates loaded with cold rice, and a quantity of ghee. In reply to my questions, by what means they had obtained it, it appeared that this rice had been cooked one or two days previously, and was laid aside by them, as a reserve store, to eat in the middle of the night, or early in the morning, before the rations were served out. When thrown overboard, I examined the copper plates, which are invariably used by the natives of India, and found the surface coated with a green composition, evidently one of the salts of copper.

To neglect and slovenliness on the part of these return coolie labourers in cleaning their copper and brass utensils, was distinctly traced the immediate cause of the disease.

This greenish composition, or verdigris, when not visible on the surface, we seldom failed to detect under the rims of their

lotahs and thalies, in quantities sufficient to be scraped off with the edge of a penknife, and afterwards proved, by tests, to be the sulphate and muriate of copper.

This poisonous substance intermixing with their rice, fish, ghee, and pea-soup, produced, in the greater number of cases, a train of symptoms almost similar, and corresponding, in general, with the annexed abstract, which I have copied from the *Medical Register*, in which all the particulars were entered at the time of occurrence.

In the evening, or on the following morning, a few hours after having eaten a meal of rice and dholl, they came complaining of violent pains and cramps in the stomach and lower bowels, constant vomiting of greenish and yellowish-green bile.

When this was not ejected from the stomach, their sufferings from dry retching proved more severe; and the feeling of constriction in the lower part of the chest, and along the course of the oesophagus, more distressing. Every twenty minutes or half-hour they were necessitated to go to the chains, and endeavour to evacuate the bowels; but in the attempt no feculent matter was discharged: blood in small quantities, slimy mucous stools tinged with blood, shreds of lymph, and frothy, ashen-coloured secretions, were passed from the rectum, without affording to the patients the slightest relief.

The gripping pains in the loins and sacrum, at the navel and in the iliac region, the tenesmus, and the burning sensation they invariably experienced about the rectum and close to the sphincter ani, they have all described as producing exquisite torture; pressure made over the different regions of the abdomen, in the epigastrium, and over the transit of the arch of the colon, usually caused a pungent pain.

In the commencement of the attack, the symptoms were those of acute fever, pungent heat of skin, headach, urgent thirst, loss of appetite, prostration of strength, furred and clammy tongue, foul taste in the mouth, rapid, small, and wiry pulse, varying from 120 to 140 beats per minute.

In those cases where the form of attack was more rapid, more aggravated, more formidable in its symptoms and progress, (from the quantity of verdigris mixed with the food, and taken into the stomach, having been in greater proportion,) the depression of the vital powers was more marked; the features of the patient were distorted; his whole frame seemed to writhe under the pain; the pulse was so rapid, and at the same time so weak as scarcely to be felt; the skin became cold; the extremities benumbed; the secretion of urine in a few cases was suppressed, in others it was retained in the bladder. The treatment which proved most efficacious in arresting the progress of these symptoms, and removing the disease, consisted in administering immediately an emetic of twenty grains of ipecacuanha, and one grain of tartar emetic, and ordering the patient to drink copiously of barley or congee water. In six or eight hours afterwards, ten, twelve, or fifteen ounces of blood were taken away by venesection, according as the strength of the patient and the state of the pulse indicated. In the evening, another emetic of ipecacuanha alone was given; and when practicable, the patient was placed in a bath of warm salt water; but whenever this was rendered impossible, from the rolling and lurching of the vessel in heavy, squally weather, blood was abstracted from the epigastric and infra-umbilical regions, by means of cupping, and warm stupes were afterwards applied for several hours to the abdomen. Castor-oil in large doses, repeated according to circumstances, proved the safest and most efficacious purgative in carrying off the feculent matter lodged in the intestines.

Under this mode of treatment, with few exceptions, the violent character of the original symptoms has been subdued; the acuteness of the fever has been checked in the very onset; the pulse has become fuller, less wiry, less frequent; the torturing pains in the abdomen have been partially, in some cases, completely, removed; the incessant discharges of slimy, bloody mucus from the intestinal canal have, in a great measure, been checked.

So far, the treatment pursued in this the first or acute stage of the disease, has proved singularly successful; but in almost all the cases which have come under my observation, the mucous discharges from the intestinal canal have continued frequent, generally six or eight motions in the twenty-four hours, accompanied by tenesmus. In this sub-acute form of inflammation of the mucous membrane, our chief reliance in the treatment was placed upon opium and its different preparations, combining forty drops of the tincture with fifteen grains of rhubarb, or half a drachm of Gregory's powder; quarter-grain doses of the opium in powder, combined with two grains of ipecacuanha, and three grains of blue pill, given every second hour. After each pill, an ounce of chalk mixture was ordered.

In addition to these internal remedies, much benefit was derived from the application of small mustard cataplasms, or blisters, to those parts of the abdomen where the greatest amount of pain on pressure was seated. The diet in each case was restricted to arrow-root: rice, dholl, ghee, salt fish, articles of daily food, were strictly prohibited; and when the condition of the patient admitted, port wine, mixed with the arrow-root, was at once prescribed.

In the majority of cases, the acuteness of the symptoms once removed, a favourable termination of the case has taken place in five or six days: the convalescence of the patient has been established satisfactorily on the eighth or tenth day. In others, whose constitutions have received a more severe shock, recovery has been more protracted; whilst, in a third class, the disease, slow in yielding to the influence of medicine, and resisting those remedial measures which proved successful in the two former classes, has ultimately assumed all the characters of chronic dysentery.

On the 20th of June, 1843, when we crossed the Equator, in west longitude 28° 45', seven weeks' sail by the day from Demerara, the sirdar ran to the cabin, to inform me that one of the stoutest coolies on board was seized with violent cramps in the stomach, cramps in the limbs, frequent vomiting and purging of blood; he was so ill that he did not think he could live half an hour. He had been slightly ill in the course of the day, from gnawing pains in the stomach, but made no complaint until the frequency of the purging attracted the attention of his relatives.

His sufferings from pains in the stomach, in the intestines, and at the anus, were excruciating; his features were distorted; pulse small, frequent, wiry; thirst urgent; constriction of throat and chest distressing; in fact, the symptoms presented in this case were the same as those already recorded, but in their most aggravated form.

Conjecturing, from the suddenness of the attack, from the general features of the complaint, and from a corresponding train of symptoms observed in parallel cases at a previous time, I did not hesitate to express to my worthy friend, the captain of the vessel, an opinion as to the probable cause; and immediately commenced an inspection of his brass and copper utensils. On the internal surface, there still remained a coating of verdigris, sufficient in quantity to indicate the immediate cause of the attack, and more than sufficient, if mixed with food, to produce a similar train of symptoms in many other cases.

The same line of treatment, so strikingly successful in former cases, was pursued in this, but not attended with the same good results. The treatment advised by those who have written on the subject was next resorted to, but without avail; the relief afforded was merely temporary; the disease was beyond the reach of medical skill; the case ran its course rapidly, and terminated fatally.

In the post-mortem examination, we found on the internal surface of the stomach, from the cardiac to the pyloric extremity, and for a short distance on the internal surface of the oesophagus, near its termination in the stomach, extensive and deep-seated inflammation of the mucous membrane and subjacent tissues; the shades of red varied in different parts from a bright vermilion, or bright scarlet, to a deep red or violet colour. The patches of dark red approaching to a brownish colour were comparatively small and circumscribed, situated in general beneath the mucous membrane of the under surface of the stomach. The mucous membrane corresponding to these patches was soft, tumid, pulpy, but not excoriated, and free from the appearance of having sloughed. At the pylorus, the membrane was intensely inflamed, glistening, tumid, from a quantity of serous fluid exuded beneath the sub-mucous cellular tissue.

In the duodenum, there existed the pathological appearances of a high state of inflammatory action: throughout the small intestines also we found decided traces of inflammatory action in the mucous membrane, although scattered irregularly over the surface. The mucous membrane of the large intestine presented, in like manner, an appearance of vascularity; in the rectum also, the inflammatory action had commenced, but was limited in extent.

Within the peritoneal sac, somewhat more than eight ounces of saffron-coloured fluid were found: the peritoneal coat of the small intestines—the jejunum and ileum, was numerously studded with minute circular dots, or specs, of a bright scarlet-red colour. On the upper surface of the arch of the colon, in its ascending and descending divisions, these inflammatory spots were extensively, but less numerously, scattered. Between the peritoneal and muscular coats of the stomach, an irregularly-shaped patch of effused blood was noticed, and

on the lateral and inferior surfaces of the same viscous, vascularity of the peritoneal coat, and sub-peritoneal exudations of blood and lymph, were traced to a short distance. The folds of the intestine were not agglutinated together by lymph, nor were there any traces of it in the peritoneal sac.

We need not a more demonstrative proof of the deleterious, poisonous, fatal effects produced by the intermixture of verdigris with the food, and its introduction into the stomach, than the case under consideration. The symptoms indicated poisoning; the inspection of the copper vessels confirmed us in the opinion expressed; the post mortem examination cleared away from our minds any doubt which may have existed.

In England, these cases are not often met with; the servants are careful, cleanly, and in general very particular in using copper vessels. Not so in India. In Calcutta, in particular, I have met with cases amongst Europeans, which in their symptoms bore so striking a similarity to those already mentioned, that little doubt has remained on my mind that the attack had originated in the intermixture of verdigris with their food, and its introduction into the stomach.

The Bengalee habouches, khansamahs, khitnudgars, and musalchees, to whom almost everything connected with the kitchen is entrusted, are not at all times very particular in cooking the Sahib's khana in bright, unstained copper vessels. I have little doubt that if more attention were paid by the inhabitants of Calcutta to the carelessness of their servants in this respect, and if the kitchen utensils were more frequently inspected by some trustworthy servant in the establishment, we should hear of fewer instances of several members of the same family being attacked on the same evening, or in the same night, with violent symptoms, resembling those of cholera or acute dysentery; fewer families (in consequence of a little precaution against such occurrences) would be placed in mourning, from some one member having fallen a victim to it.

Thus did this man elude the strictest vigilance on our part, disobey positive orders, and forfeit his life in consequence. It was now found necessary, to prevent a recurrence of similar cases, to substitute plates, bowls, and wooden platters, as many as could be collected in the ship, for these copper dishes. On board ship they are doubly objectionable; first, from the lazy habits of the coolies in neglecting to clean them for several successive days; and secondly, from the action of the muriatic acid contained in salt water on the copper, tending to produce a muriate of copper, a salt equally deleterious as verdigris.

The mortality amongst the coolies sent as emigrants from this port (Calcutta) to Mauritius, British Guiana, and the West India Islands, is caused principally by cholera and dysentery. The coolies are liable to be attacked by cholera from the time they embark on board the vessel at Cooley Bazaar, during the time the ship remains at anchor in the river, and during her passage down the river to the Sandheads, until she is cast off by the steamer. From this period it has been observed, not only by me, but by many other medical men who have had charge of these coolie emigrants, to decline, if not to disappear suddenly. On the third or fourth day, after quitting the Sandheads, when fairly in possession of a stiff sea-breeze, the ship appears to be totally freed from the noxious, pestilential, deadly influence of this disease.

A few solitary cases may occur in the interval of the three days, but the symptoms do not present the same virulence of character, nor rapid tendency to a fatal termination, observed in those attacked off Calcutta, and when treated promptly they generally recover.

Gwahar, India, 1846.

ON THE PRESENT STATE OF THE MEDICAL REFORM QUESTION.

By JOHN GROVE, Esq., Surgeon, Wandsworth.

WHAT are the present obstacles to medical reform?

- 1st. The opposition offered by the College of Physicians.
- 2nd. The impenetrability of the College of Surgeons.
- 3rd. The want of unanimity and determination among general practitioners.

The opposition offered by the College of Physicians to an extensive and salutary reform in medicine, possesses features of particular interest to an observer, and stimulates reflection in the thoughtful. If we go back to the time of the foundation of the College of Physicians in 1518, we find that the Bishops of London and the Dean of St. Paul's had at that time the power of granting licences to practise medicine, that other

bishops claimed the like privilege, and that there was such a host of incompetent practitioners, that Linacre, to rescue the public from the dominion of quackery, and the well-educated practitioners from association with such men as quacks under the same honourable title as they themselves possessed, "suggested the foundation of a college, to be composed of men professionally capable of determining upon the qualifications of the various candidates, and the degree of their fitness to undertake the medical care of their fellow-subjects."

In 1518, the College of Physicians was incorporated under a charter which gave them the exclusive privilege of admitting persons to practise, and the power of examining prescriptions.

We learn that the result of this was a great diminution in the number of practitioners, and that the dignity and emoluments of the profession were greatly augmented.

Let us now examine the relative position of the College of Physicians, and how it is fulfilling the duties required by the charter. In the course of a century after its foundation, a body of men, named apothecaries, had acquired (for the times) some respectable knowledge of the practice of medicine, and in the reign of James I. they were incorporated under a charter, which gave them the power, as apothecaries, to examine all who practised the art and mystery of apothecaries, as to the capability and due performance of the duties they were called on by their profession to fulfil.

Now previously to the formation of this body under Act of Parliament, the members of it must have been practising medicine to its fullest extent without any licence; they did so under the eyes of the College of Physicians; and though not unnoticed by them, were certainly unchecked in their career. The apothecaries were now becoming what the physicians had been a century before; they were men who knew the properties of the drugs and chemicals they prepared; they knew also how to use them as remedies in disease; their profession became a lucrative one; and they found it necessary, for their own benefit, as well as for that of the public, to exclude all those who were incapable or unfit to exercise their art and mystery. The only real difference which existed between these two bodies of men—the physicians and apothecaries, was, that the former excelled in a knowledge of the dead languages, and had more money in their pockets. In this, as in all professions and trades, there must be an aristocracy, not only of government, but of wealth. With this I do not quarrel. The question which naturally arises is, why did not the College of Physicians endeavour to make the apothecaries a branch of their institution! It might have been an inferior branch, and still not have taken from the dignity of the College; besides, what better school at that time could have been imagined for good physicians, than that in which the apothecary was being brought up! In the earlier years of his professional career, he became familiar with the implements of his profession, and the mode of using them; he acquired much practical knowledge as to their powers, and in after years he came to know how and when they were to be applied: in fact, his knowledge of medicines was extensive, and he knew, in the majority of cases, how to use them. Of course, I allude to the well-educated apothecaries.

If the welfare of the public had been the chief consideration with the College, which it should have been, according to the terms on which they received their Charter, they would (if a lower grade of practitioners must exist) have secured to themselves, as they could have done, the power of licensing men, who, though with knowledge below their own standard, might still have possessed professional acquirements quite compatible with the safety of the public; and I cannot but express it as my firm conviction, that an apothecary, with ordinary ability, having practised his profession for ten or fifteen years, is much more capable of treating disease than a young physician. If the College had then established an examination for graduates in medicine, and after a time had admitted them as physicians, when they should have proved themselves worthy, either by great attainments or great practical experience, there need have been but one faculty of medicine having its grades; the College would have lost nothing in dignity; it would have gained much in general esteem, infinitely in utility, and enormously in revenue. This, it appears to me, is a subject worthy of consideration at the present crisis.

The origin of the College of Surgeons bears so close a resemblance to that of the Apothecaries' Company, that it is unnecessary now to enter on the history of its establishment. I will only repeat what Mr. Lawrence says in his Oration, that "the College of Surgeons in England owes its origin to a charter granted by George III., in the year 1800."

The impenetrability of the College of Surgeons, so great an

obstacle to medical reform, is unwarrantable, and not to be endured with patience. Our position, with regard to this institution, is of a different nature from our position with regard to the College of Physicians. We are legally, and to all intents and purposes, surgeons.

If the examiners have tested the candidates as they ought, are the latter unfit to become *real* members of the fraternity?

Upon what do the Council pride themselves as superior men, that general practitioners (as they are called) are unfit to be associated with them? Is it on their knowledge? They have tested us by their own attainments, and signed a deed to certify that we are not wanting. Is it on their practical skill in surgery? We answer, that there are but few operations which are not performed equally well by general practitioners as by pure surgeons. Mr. Lawrence, in 1827, said, "I meet with none better acquainted with disease and its treatment, than those who, after a good education, enjoy large opportunities of observation as general practitioners." It may be as well to remark, that general practitioners, whose diplomas bear date within the last ten years, have received a superior education in comparison with those to whom Mr. Lawrence alluded, and we may therefore safely include nearly all the general practitioners of the present time in his category. When it is considered that surgery in its highest branches, medicine in its intricacies, and the delicate manipulations of the accoucheur, are daily practised with the greatest skill, and to the utmost satisfaction of the public, by these men, shall we any longer submit ourselves to unworthy rulers, or yield to an ignominious banishment?

Let us not, however, take our style from a late Address; contempt and ridicule should not escape our lips—our bearing should be characterized by firmness, not tinctured with obstinacy; clothed with dignity, not powdered by vanity. We are evidently now in a position, not to take, but to set, the example.

Let us inquire how far the Council are justified in holding their office.

In section seven of the by-laws of the College of Surgeons, we read, "That no member of the Council whose professional practice is not confined to surgery, shall be elected as a member of the Council." Can the members of the Council make oath that they observe this by-law? I say that the very purest surgeon in existence will prescribe for any internal malady, from a stomach-ach to a fever.

By-law iv., section 7, says, "Every member of the Council shall, prior to his admission, subscribe his name to a copy of the by-laws, and of the ordinances, in testimony of having engaged himself to the observance thereof, and upon his neglect or refusal so to do, his election shall be void."

The intention of this law is evidently that, if any member of the Council shall fail to observe the by-laws, his election shall be void. I say, then, according to their own laws, the Council is a defunct body.

Section viii., law 2.—"Any member of the Council who shall not confine his professional practice to surgery shall be liable to removal from the Council." To whom is this Council amenable? They cannot all expel themselves, yet they are all liable to be expelled.

Section xviii.—"Rights of members." "The College will at all times protect and defend every member who may be disturbed in the exercise and enjoyment of the rights, privileges, exemptions, and immunities acquired by him as a member thereof." It would be very interesting to know what are the rights, privileges, and exemptions we have the power of exercising and enjoying.

Section xxvi., law 2.—"All investments shall be made in the name of the Royal College of Surgeons in London." Of what does this Royal College of Surgeons consist? A Council, fellows, and members. It is a curious anomaly that we, the mass of that College, have not a single voice in the management of those investments which are made in our name.

Since we are driven from the doors of our own legal home, since we are denied a voice in the disbursement of our own funds, the question arises—What are we to do? Whatever we do must be done quickly, with determination, with unanimity. A parliamentary inquiry into the management of the College, as proposed by Mr. Wakley, on the 15th of May, 1845, would go far to bring the foregoing particulars prominently before the public, in a more tangible and enlarged sense, and would fully expose the absurdity of an institution governed by laws to which its rulers are in no way bound, and which they do not observe.

As to the justice, practicability, and public advantage of the one-faculty system of medical government, there cannot be a doubt.

It now remains to show upon what grounds it may plausibly be demanded, and practically carried out.

I believe it has been clearly shown, that the College of Physicians had power to license all persons to practise medicine within a certain jurisdiction; that while having that power, a medical body grew up, and obtained a charter, permitting them to practise quite independently of the College. I believe it has also been clearly shown, that the governing body of the College, as at present constituted, has committed suicide with the very instruments destined to annihilate the bulk of the members. At the present time there is no real distinction between the physician and the apothecary, or the surgeon and the apothecary, except that the apothecary practises both arts, (or, as they are sometimes styled, the science of medicine, and the art of surgery.) The public acknowledge, and the physician and pure surgeon cannot deny, that the apothecary performs his duties with great skill and address. The apothecary, then, clearly is universally acknowledged to be capable of performing all the duties required of the physician, all required of the surgeon, for the community at large. If the pure surgeon be honestly attached to the principles he maintains, he can have but a limited sphere of utility in comparison with the apothecary; ay, so limited, as in such a comparison to be hardly worthy mention: for if the pure surgeons could all be swept off to-morrow, I very much doubt if, in a professional point of view, the country would long have any real cause to regret their departure.

Let me ask the surgeons, let me ask the physicians, with these facts before them, why the former should not admit us on an equality with themselves! why the latter should not recognise us as an integral portion of their body? Have we not all studied under equally competent masters? Have we not all consulted the same authors, ancient and modern? Do we not all read the same journals of science and literature? Where then, I ask, is the intellectual obscurity with which we are taunted, that we cannot avail ourselves of the objects of our inquiries? We are, I say, perpetual students in the theatre of Nature,—we are incessant workers in her laboratory of art.

In the inquiry proposed by Mr. Wakley, we have the elements of all that is good in medical reform: its principles have to be developed, its details canvassed, and I feel convinced that every man who does not exert himself to the utmost in securing an Act of Parliament founded on this basis, will have to regret (if any other measure be adopted) that he has lost a golden opportunity, and will ever be reproached, by the succeeding generations of his calling, with wanton indifference, or a littleness of mind, which could so exalt trifling obstacles into an impregnable barrier between his petty prejudices and an enlightened policy.

Wandsworth, March, 1846.

ON A NEWLY-DISCOVERED CHARACTERISTIC OF ALBUMEN,

WITH PARTICULAR REFERENCE TO THE POSSIBILITY OF ITS BEING
MISTAKEN FOR CASEINE.

By J. UNDERWOOD, Esq., Colchester.

IN Number 24, vol. ii., of THE LANCET for 1845, (new series,) there is an article, by Dr. Ure, upon the potato malady, and to the following paragraph, extracted therefrom, I would beg to call particular attention, as it is very likely to mislead those who are not conversant with the late discoveries in organic chemistry.

"Liebig imagines the essence of the disease to consist in the conversion of the albumine, a usual constituent of healthy potatoes, into caseine—a principle which, by its great instability of composition, is supposed to cause the potato to putrefy rapidly. I have subjected this opinion to the test of experiment. Perfectly sound potatoes, as also diseased ones, were sliced or grated, and separately digested in a very dilute alkaline ley at a blood heat. The infusions, when cool, being filtered and faintly acidulated with dilute acetic acid, afforded respectively a like proportion of caseine-looking flakes. It would thus appear, from this mode of testing, as prescribed by Dumas, in the seventh volume of his 'Traité de Chimie,' that sound potatoes contain as much caseine as unsound."

But I suppose Dumas and Ure, both of them, forget that Mülder, of Amsterdam, some time back, discovered that when either albumen, caseine, or fibrine were dissolved in caustic alkali, these solutions precipitated, upon the addition of a little excess of acid, a substance in appearance identical with caseine, but differing chemically therefrom in being a compound simply

of carbon, hydrogen, nitrogen, and oxygen, while caseine is a compound of carbon, hydrogen, nitrogen, oxygen, and sulphur. To this substance he gives the name of protein, supposing that it is the common fundamental principle of albumen, caseine, and fibrine, which it forms by uniting with certain small quantities of sulphur, or sulphur and phosphorus, and which latter bodies are separated by the alkali, and retained in solution. When the protein is precipitated by an acid, the precipitate obtained therefrom by Ure was not caseine, but the protein of Müllder; or we are justified in supposing this to be the case till Ure or Dumas shall have proved by ultimate analysis that it is not.

There is another test for albumen to which Ure doubtless did, or at any rate ought to have had recourse, though he does not tell us so—that is, the supposed property of all albuminous fluids to coagulate by heat; and were this characteristic universal, it would be a good test; but I find, that when once we have dissolved albumen in caustic alkali, we are enveloped in many difficulties, from which time, perseverance, and experiment only can liberate us. I trust, ere long, to be able to do this; but for the present, I would only state my results as far as they go. I find, that when thus dissolved in certain proportions, it entirely loses the property of coagulating by heat, and that in proportions where it does not lose this property entirely, it does so to a great extent. A quantity of albumen is left in solution after all has been coagulated that heat will render insoluble, and protein is precipitated from this solution upon the addition of a slight excess of acid.

I think, therefore, that until the various properties of albuminous fluids can be fixed by definite laws, the conflicting statements of Liebig and Ure must fall to the ground, and we must seek elsewhere for the grand fundamental cause of that change which has plunged many parts of our own, together with our sister country Ireland, into a state of destitution and want, than in the conversion of the albumen into caseine.

I trust that these remarks will throw the path open for other experiments, and that others will follow it.

High-street, Colchester, March, 1846.

WESTMINSTER MEDICAL SOCIETY.

APRIL 4.—MR. HANCOCK, PRESIDENT.

CASE OF INSANITY OF FIFTEEN YEARS' STANDING, WITH EFFUSION BENEATH THE DURA MATER, AND THE FORMATION OF NEW MEMBRANE.

MR. FISHER related the following case:—

W. P.—, the son of a gentleman of fortune, at the age of eight years, then at Winchester School, received a severe concussion, by the blow of a cricket bat or ball, followed by immediate symptoms of insanity, from which he recovered for a time, but soon after was brought to London, labouring under aberration of mind, and then came under his (Mr. Fisher's) care for the first time. He recovered, and went into Devonshire with his friends, had a relapse, and was placed under private medical care for a period of eight years. He was then brought to town, and again became Mr. Fisher's patient, labouring under the same malady. The history given of him during the eight years was, that he had had occasional attacks of insanity, lasting two, three, four, and five months, with considerable lucid intervals. He was then sent a short distance into the country, for a period of five or six years, and for the last two years and a half, to Messrs. Stilwell's establishment, Hillingdon. It was remarked that each attack increased in duration and violence, and there was generally a lapse of eight or twelve months between them. He was a fine, handsome, healthy, muscular young man; to a common observer, merely weak in intellect, and childish in manner; loquacious, but without delusion; his appetite voracious. He was fond of reading the lighter works of literature; played well at chess, billiards, and whist, and was capable of great bodily exertion, frequently, when in health, walking twenty miles a day. He had a religious turn of mind, would write sermons, and had a most retentive memory. During his insane attacks he would repeat passages from Scripture for many successive hours, and quote poetry. When in health, he was amiable and kind-hearted, and very susceptible of the tender passion.

The premonitory symptoms of each attack were marked by fulness of habit, lowness of spirits, sullen, dogged manner, and loss of appetite; pugnacity, and cruelty to animals, of which, at other times, he was fond. The last insane attack commenced in May, 1845, and continued, with occasional intervals of a few days' tranquillity, until the middle of December, a

period of seven months, when he rapidly recovered, and, from extreme prostration, he resumed his usual fullness of habit.

January 3rd, 1846.—His last illness commenced with a violent pain over the forehead, accompanied by a sense of weight, lowness and depression of spirits. He was cupped, and took calomel, with aperients.

5th.—Vomiting came on, with increased pain in the head. Mustard poultices and blisters were applied to the stomach; and calomel was frequently given, with relief to the sickness. Cold lotions were applied to the head. During this period the mind was perfectly clear.

9th.—He became so drowsy that it was almost impossible to rouse him, and when this was effected, he relapsed immediately into a comatose state. When conscious, he complained of great pain in the head. All his symptoms indicated great congestion of the brain, for which active treatment was resorted to.

13th.—The patient was, in every respect, worse. The right eye turned outwards, and the eyelid dropped down, the will having little power over it; the pupil more dilated than the left, but no paralysis of the muscles of the face.

17th.—The symptoms had all been alleviated by cupping, leeching, and calomel, and he appeared to be doing well.

20th.—The right eye had recovered from its paralytic state, and the pain in the head was much relieved, but coma continued, and he was with difficulty roused to take food and medicine.

23rd.—The mercury appeared to be affecting his gums; the symptoms slightly improved. He could get out of bed without assistance, and knew the persons about him.

26th.—He changed for the worse, became feebler, and slept constantly. He continued slowly to sink, and died on the 30th, at the age of twenty-three, not having been sensible for the last thirty-six hours.

Post-mortem examination, twenty-four hours after death, by Messrs. Stilwell and Fisher.—Upon sawing through the cranium, the instrument perforated the dura mater, and two ounces of blood escaped, which were caught in a glass; upon the removal of the calvarium, the dura mater, the pia mater, and arachnoid, were found highly injected. The whole right hemisphere of the brain had the appearance of a bladder of fluid lying under the dura mater, and from it ten measured ounces of grumous blood, containing a clot and some red blood, escaped. The whole of the brain was then removed, and brought to town with the calvarium, and examined, without minute dissection, by Dr. Marshall Hall, Dr. Sayer, and himself, (Mr. Fisher.) The right hemisphere of the brain was rather less than the left, and its surface was of a deeper colour than usual. The arachnoid could be distinctly traced, from convolution to convolution, over the whole surface of the cerebrum. No effusion had taken place in either of the ventricles. The left corpus striatum, and the left thalamus, were larger than the corresponding parts on the right side. The medullary and cortical substances of cerebrum and cerebellum were well defined and perfectly healthy. It was suggested that the dura mater should be minutely examined by Mr. Lane and Dr. Sayer, and it was taken away by the latter gentleman, Mr. Lane being out of town. It was, without any dissection, examined by Dr. Sayer; and the impression on his mind was, "that the longitudinal sinus was in an abnormal condition; that a gradual separation of the laminae of the dura mater had taken place, to the extent of several inches on the right side of the falx, by which a large pouch had been formed, capable of containing many ounces of venous blood." The membrane was returned the same evening, Feb. 1st; and on the 22nd of March it was very minutely examined, and carefully dissected, by Mr. Hancock, in the presence of Mr. Hird, Dr. Sayer, and Mr. Fisher. The true nature of this membranous pouch then became apparent, and Mr. Hancock gives the following description of the appearances observed:—"The preparation shows a large cyst, formed evidently of adventitious membrane, situated between the layers of arachnoid, and extending the whole length of the right hemisphere of the brain, which has been removed, together with the arachnoid and pia mater. This cyst also extends from the falx major laterally to the portion of the dura mater covering the outer border of the cerebrum. It does not communicate either with the superior or inferior longitudinal sinuses, the former of which has been laid open to prove this fact; neither does it communicate with the lateral sinuses, but appears to be the result of abnormal action. The bones of the cranium are much thinner than natural, at no part being more than a quarter of an inch thick, but in places consisting of merely the two tables: there is an evident bulging of the right parietal

bone, towards its anterior and inferior angle, and here the diploe has been entirely absorbed by the continued pressure of the cyst within. The right half of the frontal, and the occipital and squamous portion of the temporal bones of the same side, have been subject to a similar action. It appears that the whole brain must have been pushed over to the left side, and that considerable pressure has been exerted on the left parietal bone, which, towards its anterior and inferior angle, is in places almost deprived of its diploe, although not to the extent of the opposite side; neither does it bulge, as in that situation. The left half of the frontal and occipital bones appears to have escaped this pressure. When the calvarium is measured internally, there is an addition of half an inch in favour of the right side. The left portion of the lesser wing of Ingrassias, and the corresponding anterior clinoid process, are reduced to the thickness of a sheet of writing paper, almost to a cutting edge."

Mr. FISHER remarked, that cases of the formation of these cysts, or adventitious membranes, under the dura mater, were not uncommon. MM. Andral and Foville had noticed them, the latter in the 11th vol. of the "*Dictionnaire de Médecine et de Chirurgie*," under the head "*Meningite*," and other French pathologists, as one of the forms of "*apoplexie des meninges*." Mr. Prescott Hewett, the curator of St. George's Hospital Museum, had brought this subject before the Medico-Chirurgical Society, and had published cases in the *Transactions*. He had shown to him, Mr. Fisher, four specimens, put up by himself and Sir B. Brodie, in the St. George's Museum. It had been demonstrated that these membranes were supplied with secretory and absorbent vessels, which facts accounted for the occasional attacks of insanity in this patient. It was always remarked, that when he became plethoric, the attack came on, and upon his losing flesh and becoming very thin, his reason returned. The cause during life was considered hereditary, his father having been insane from an injury of the brain, resulting from a fall from his horse, two years before the birth of this son. The result of this investigation could not be otherwise than satisfactory to the family of the patient; it tended to do away with any impression with regard to hereditary predisposition to insanity, as it took us back to the accident when at school, as the exciting cause.

Mr. STILWELL, under whose care the patient had been, said that he had had only one maniacal attack during his stay at the asylum at Hillingdon. This attack lasted seven months, and came on at the expiration of two or three years from his admission. The attack was of the usual kind, and was treated by quiet, occasional doses of calomel, and mild aperients, with large doses of henbane.

Mr. HEWETT had seen many such cysts as that before the Society. They were by no means commonly associated with insanity, nor were there, indeed, any symptoms during life which were certainly indicative of their presence. In some they were accompanied by symptoms of apoplexy; in others, of softening of the brain; in others, again, of large and extensive effusions of blood into the structure of the brain. Two years since, a man was admitted with fever into St. George's Hospital; the fever soon became typhoid, and the patient paralyzed. Under the use of calomel, and cupping, he partially recovered, but relapsed in a month, and died. Over each hemisphere of the brain was a cyst as large as the one before the Society. Several cases similar to Mr. Fisher's were in the museum at St. Bartholomew's. With respect to the situation of these cysts, all writers previous to 1834 had described them as situated between the dura mater and parietal arachnoid, but since that period, it had been demonstrated that they were situated between the two folds of arachnoid—the parietal and the visceral.

Dr. SAYER read a case from Andral to show that that great authority had considered these cysts to be situated between the dura mater and arachnoid.

After some observations from other speakers, having relation to the difficulty of explaining the mode of formation of these cysts, and of their exact situation, the Society adjourned.

MEDICAL SOCIETY OF LONDON.

MARCH 30TH, 1846.—MR. DENDY, PRESIDENT.

NATURE AND TREATMENT OF PURPURA.

A DISCUSSION took place on the nature and treatment of purpura hæmorrhagica, arising out of the narrative of a case of this disease by Mr. STEPMAN, in which the patient, a boy of about ten years of age, had all the hæmorrhage arrested on his mouth becoming slightly affected by the action of mercury.

The questions discussed were—What is the essential nature of purpura? What is the best treatment?—which elicited the following opinions:—

1st. That purpura in general resembles scurvy, and consists essentially of a depraved state of the circulating fluid, in which there is a deficiency of fibrine. Taking this view of the subject to be correct, after attention to the state of the primæ viæ, citric and other vegetable acids were considered as most likely to be productive of benefit.

2nd. That the blood was not in itself diseased, but was sufficiently decarbonized, and the disease, treated with reference to these points, was simple and easily cured.

To these views of the pathology and treatment of the disease, exceptions were taken by some speakers. In the hands of one, purpura had invariably yielded to the employment of purgatives followed by chalybeates, particularly the acetate of iron. Cases were also related in which purpura was attended by a plethoric or congestive condition of the vessels, and yielded to the influence of small bloodlettings, when all other modes of treatment had been ineffective.

The PRESIDENT regarded the discussion as exhibiting the fact of the presence of two distinct and different conditions of the system in cases of purpura. The essential character of the disease consisted in an increased or a diminished action of the capillaries. The tonic plan of treatment was usually required; but the remedies must depend on the condition of the patient.

BRITISH MEDICAL ASSOCIATION.

EXETER HALL, APRIL 7, 1846.

A MEETING of the Council was held this evening, when the following resolution was carried unanimously:—

Resolved,—“That in consequence of the extraordinary attendance of the Council this evening, and the importance of the propositions discussed, it is the opinion of this meeting that the Council should be adjourned to TUESDAY, the 14th instant, at half-past seven o'clock precisely, when the presence of every member of the Council is *specially* invited.”

The members did not separate until a late hour.

UNUSUAL MARK (NÆVUS?) ON THE NECK.

MR. GEORGE HARVEY, Surgeon, of Castle Hedingham, has forwarded to us the following statement for publication:—“On Friday, Feb. 6th, 1846, between seven and eight P.M., I was summoned in haste, to attend M. E.—, in labour with her second child. This event had not been expected to take place before the beginning of March. On arrival, I found the membranes had just ruptured; the os uteri was fully dilated, and the breech pressing on the perinæum. Two moderate pains expelled the child, which never breathed, but merely gave two or three convulsive gasps, and died. Whilst endeavouring to restore animation, I observed a bright-red mark, extending completely across the upper and fore part of the neck, from one angle of the lower jaw to the other, exactly as though produced by strangulation with a cord, except that the mark was not continued round to the back part of the neck. This mark was not like a bruise or ecchymosis, but was of the vivid red colour of arterial blood; it was not raised above the surface, but had very much the appearance of a recent excoriation, so much so, that on first touching it, I expected to find my finger stained with blood, but the epidermis was in no part broken or abraded. This mark was most clearly defined in front, where it was about a quarter of an inch in breadth; at the sides it was more diffused, particularly on the left, extending down towards the clavicles. The face was not swollen, neither were the veins full, as though an obstruction existed to the return of blood to the heart, but the external jugulars, below the mark, were both filled with dark blood. Had this mark been caused by strangulation, the jugular, below the stricture, would probably have been found empty, and the face turgid. The funis was of the usual length, and not coiled, either around the neck or any other part, but perfectly free. I have, hundreds of times, seen the funis coiled round the neck of the child, but have never once known it to produce the slightest bruise or mark of any kind. On examining the part on the following morning, with a powerful lens, I could discover no bloodvessels ramifying, either over the surface or around the edges, as commonly seen in a true nævus maternus. The placenta was thrown off spontaneously immediately after the birth of the child.”

THE LANCET.

LONDON, SATURDAY, APRIL 11, 1846.

WE are authorized to state, that no memorial has yet been addressed to the Crown, by the COUNCIL of the COLLEGE OF SURGEONS, on the subject of a SUPPLEMENTAL CHARTER. There have been repeated discussions in the Council relative to the provisions which it might be considered prudent to embody in such a charter, but we believe that all the more important questions are still left undecided.

We are also enabled to state, that no reply has yet been received from the Council by the COMMITTEE OF ASSOCIATED SURGEONS, sitting at the FREEMASONS' TAVERN.

Whenever the provisions of a Supplemental Charter are considered by the SECRETARY OF STATE, that minister must, inevitably, be strongly influenced in his views by the important memorial of the Bristol Association of Surgeons, signed by upwards of a thousand members of the College, and by other documents of a similar description.

It will be seen, by a notice in our advertising columns, that a meeting of the COMMITTEE OF ASSOCIATED SURGEONS is to be held at the FREEMASONS' TAVERN, this evening (SATURDAY, April the 11th), at seven o'clock. Instead of conducting the proceedings *in secret*, we observe, with much satisfaction, that the attention of the members of the profession generally is solicited on the occasion. It is time that something decisive should be determined on the subject of Medical Reform, or that the agitation in relation to it should be altogether relinquished. If the profession cannot agree amongst themselves on the provisions of a Bill for their own government, one of two things must happen;—either there will be no legislation on medical affairs; or, if there be, owing to the dissensions in the profession, it may be conducted by the legislature in hostility to medical interests.

HONEST, straightforward men are aghast at the trickeries exposed by our lifting the veil from the proceedings of the medical section of the Royal Society. It is evident, that for many years the doings of the physiological committees—that department of the Society which bears most directly upon the medical profession—have been conducted in the lowest spirit of partizanship. The committees are of comparatively recent date. They were first instituted in 1832. The Duke of SUSSEX, the then president, in his anniversary address, pointed out the probable benefits of the said committees in the following glowing terms:—

"It has long been the custom of many foreign societies, and particularly of the Academies of Science and of Medicine at Paris, to require written reports upon every paper submitted to them, from a committee of their members. As the persons who are selected for this duty are veterans in their respective sciences, who have earned by their labours an European reputation, the reports which are thus produced prove often more valuable than the original communications

"upon which they are founded; and the collections of them, as is well known, form a most important part of the stock of modern science. Many other advantages have also been found to result from the adoption of this practice. The decisions of men who are elevated by their character and reputation above the influence of personal feelings of rivalry or petty jealousy, possess an authority sufficient at once to establish the full importance of a discovery, to fix its relations to the existing mass of knowledge, and to define its probable effects upon the future progress of science. They thus operate as a powerful stimulus to the exertions of the genuine cultivators and lovers of science, who feel assured that their labours will be properly examined and appreciated by those who are most competent to judge of their value; while, at the same time, they tend to keep under the obtrusive and turbulent pretensions of those who presume to claim a rank as men of science, for which they possess no just title or qualification.

"It was from a conviction that many similar advantages would result from such a system of reports in the Royal Society, that the members of the Council were induced to agree to its adoption; and it is to be hoped that when a long experience has given to such a plan a more complete organization, and has shown the practical extent to which it can be conveniently carried, it will then become a permanent law of the Council."

Let us test the promise by the performance. It will be found mere Dead-sea fruit, fair to the eye, and ashes to the lip. We speak not of the committees generally, but in particular of the Physiological Committee, composed as it is, almost exclusively, of our medical brethren.

Have the expected advantages been realized in the proceedings of the Royal Society? Can it be said that they have been realized in the department of physiology? Can it be said of the authors of the recent physiological reports that they are men "elevated by their character and reputation above the influence of personal feelings of rivalry or petty jealousy?" or that their decisions have been such as to induce a confidence, on the part of scientific men, "that their labours will be properly appreciated by those who are most competent to judge of their value?" The doings of the physiological referees furnish but sorry answers.

We might disinter some of the rubbish presented to the Society and inserted in the *Transactions*, either from dulness or favouritism; but let it remain inlumed; we prefer to speak of the men of mark and likelihood, who have received contumelies where they had a right to expect favour and distinction.

We have, on former occasions, mentioned the name of Dr. GRANT. We did so, because he is at once the most eloquent, the most accomplished, the most self-sacrificing, and the most unrewarded man in the profession. We again ask, on what principle of propriety or justice it is that his name has never, during the eighteen years he has passed in the metropolis, been placed on the Council of the Royal Society, while others, every way his inferiors, have again and again been elected? Why, too, has his name never appeared on the physiological committee, when that name for honour and reputation would carry respect and esteem with it wherever science is known? The true answer to these queries would be overlaid with meanness, sycophancy, and unjust neglect.

We mentioned, too, the name and labours of Dr. M. HALL.* In the face of all Europe we ask, what valid scientific reason can be given for the rejection of his second memoir? None, we venture to say, but the most petty and contemptible. Personal piques, not scientific merits, were the aids in that discreditable decision. The influence of a secretary—of a man who never advanced the science of physiology by a single step, who in all probability never made an original experiment in his life, rudely and unjustly shut the *Philosophical Transactions* against his labours. For ten years they have remained so. Falsehood respecting him was permitted to pollute the pages of the *Philosophical Transactions*, and one of the secretaries of the Royal Society wrote, upon the face of that returned Memoir, in reference to some experiments on the tortoise, quoted from Redi—"WOULD THEY LIVE AFTER THEY HAVE BEEN MADE SOUP OF?" The miserable scoffer will live in this vile anecdote when nothing of him but the name and this act are had in remembrance; the name will be gibbeted to the deed. Such was the reward and countenance afforded to a man of true genius, who, through Mr. LAWRENCE, generously offered to the Society, without any reward, to relinquish practice entirely, and devote himself for five years to the advance of physiological discovery. It will be some time before the Royal Society has to spurn such another offer.

But time might have been expected to allay the rancour and appease the malice which could effect these things. Not so. Five years afterwards, when, on the proposition of Sir BENJAMIN BRODIE, the Physiological Committee agreed to recommend the Council to award Dr. M. HALL a Copley medal, (not a Royal medal, as has been stated,) undue influences interfered to divert the medal, so recommended, to Professor McCULLAGH, for a paper on the "wave theory of light." Ought this to have been? Ought the Royal Society to have been, and to be, degraded into an arena for the exhibition of personal envy and malice? Very recently, it did so happen, that a lawyer, from known personal feelings, blackballed another at one of the inns of court. The meanness which could allow personal feeling to operate in a purely professional matter was promptly and severely reprobated by the whole legal profession. And thus it ought to be with the members of our own faculty; we should then be had in greater honour.

Dr. LEE's case is equally flagrant. We understand that the Council has refused to revise the scandalous proceedings of the committee extraordinary, upon which we commented last week. In the case of Dr. HALL, the recommendation of a committee was unceremoniously overruled. In the case of Dr. LEE, the recommendation of even a committee formed out of order by a mean trick, is held to be inviolate. Dr. LEE protested against the proceedings of this pretended committee, and Mr. LAWRENCE, the chairman to one of the meetings, moved their repudiation, but in vain. Properly considered, the whole affair is as grossly insulting to this person as it is unjust to Dr. LEE. It is incredible that he should have so far stultified himself as to put the illegal recommendation for the Royal medal to the next meeting for confirmation. But

though the Council have refused to retrace their false steps, they have humbly confessed their error by resolving to print, in the next volume of *Transactions*, different regulations respecting the future awards of medals, though this is in contradiction to the regulations sanctioned by her Majesty. But will a loophole for the future be a veil for the past? We have heard, too, that the Jesuitical dogma has been broached by the heads of the Society, that whatever the doings of the Council, however unjust, partial, and flagitious, once promulgated, they are to have the force of law to the Fellows; and they are told they are in honour bound to lick the rod that injures them. This would, indeed, be in the school of Loyola,—to uphold the dishonour, instead of the honour, of the Society.

But what ought to be done to purify our first scientific institution, so jobbed and so abused? Will the Physiological Committee, which has caused the Society to stink in the nostrils of all decent people, be allowed to remain unreformed? Will the medical section of the Royal Society still be marred by the exhibition of scientific Jesuitry, of partisanship, of petty cliques, of favouritism, of selfishness, of mean cringing, of want of sympathy with real genius, of private enmities and other baleful feelings, which degrade both the men and the profession? If the individual, who might almost be called the medical portion of the Royal Society, be indissoluble, the Marquis of Northampton should resign, and repudiate his acts. If he does not the one or the other, the blame and discredit will be divided between them. One thing is very certain, that suspicion will hover about the proceedings of the Society for some time to come, and every step will be narrowly watched. When medical men see, that of six Royal medals in physiology, the award of one only has been perfectly satisfactory, they will for the future ask, not *who* obtained the Royal medal? but, *what* was it obtained for? The professional eye, once awakened, will be keen enough for the detection of injustice; and when injustice is done, a Royal or a Copley medal will be a very poor *Ægis* to ward off the deserved punishment.

The above article was in type when we received the following letters from Dr. ROGET and Mr. NEWPORT. The statements contained in them will be fully noticed in the next LANCET.

THE PROCEEDINGS OF THE ROYAL SOCIETY.

(LETTER FROM MR. NEWPORT.)

To the Editor of THE LANCET.

SIR,—In the leading article of the last number of your journal, on the awarding of the Royal medals, there are some statements in the remarks you have thought fit to make which are calculated to inflict serious and unmerited injury on the reputation of an excellent and strictly honourable man, Dr. Roget, and also on my own repute.

For these reasons only am I now induced, most reluctantly, to trouble you with this reply to the misconceptions likely to be promulgated through the weighty influence of your editorial authority.

The medal which the Royal Society honoured me with, was delivered to me at the anniversary meeting, on the 30th of November, 1836. Consequently, the paper by Dr. Hall, in 1837, did not come within the cycle of that award. Of the comparative value of the papers which *did* come within that cycle, (which includes a previous paper by Dr. Hall,) I, of course, cannot offer an opinion. The value of the different papers, as you properly remark, is judged of by individuals, according to the estimate which they form of the comparative value of any communications to the *Transactions of the Royal Society*, "and to the degree of their knowledge of various collateral facts."

* We find we committed the error, in our last, of supposing that Dr. HALL's first memoir on the reflex function of the medulla oblongata and spinalis, which was published in the *Philosophical Transactions*, did not appear within the three years in which the Newport medal was awarded. It did appear within the cycle, and should have had the medal, had justice been the rule.

Allow me, then, to inform you, Sir, that the proof sheets of Dr. Roget's "Bridgewater Treatise" were *not* corrected, as you state, on rumour, by me. But if you turn to the preface of the first edition of Dr. Roget's work, you will there find it duly acknowledged that the "proofs" were corrected by Mr. Children, a gentleman who has always stood high in the estimation of the public. To this I may add, that Dr. Roget never requested any such aid from me. Consequently, I was not rewarded for such service, as you intimate, also on rumour; nor, I may further state, for any personal reason or obligation whatever, either with reference to the gentleman named, or to any other member of the Council, or of the Committee, of the Royal Society, by having the Royal medal adjudged to me.

At the time of the award of the medal, in the middle of November, 1836, I was residing in the country, at a great distance from London, and I had not had any communication with Dr. Roget, either directly or indirectly, for at least four months. Neither did any rumour ever reach me, or, so far as I am aware, any of my friends, that it was intended that the honour of a Royal medal was to be bestowed on me.

After the award had been made, and before it was announced to me, questions were raised within the Council of the Royal Society—as is now well known—by parties who were immediately interested in the adjudication. Those questions were considered by the Council, and the original award was confirmed.

When the medal was delivered to me, at the anniversary meeting, before a full assemblage of the Fellows, by the President, his Royal Highness the late Duke of Sussex, who had taken a lively interest in the inquiry, his Royal Highness, in his speech on that occasion, with reference to those questions, made use of the following words:—"I take this opportunity of stating to you, in the presence of the Society, that, in the investigation which was gone into in the Council respecting them, you came off with great honour."

In addition to this, I may further state, that during that meeting of the Royal Society, and before his Royal Highness had made these remarks, Mr. Herbert Mayo, who sat next to me, and who, as I was told, had been the means employed by the agitators of the questions in bringing the award of the medal to the reconsideration of the Council, congratulated me on the result, and also assured me "that I came off with great honour."

This acknowledgment, from one who had taken an active part in the proceedings before the Council, was as honourable to its author as it was consolatory to my own feelings.

These statements, I trust, Sir, will be sufficient; and I have no doubt that your sense of justice will secure for them a place in the next number of your widely-circulated journal.

I remain, Sir, your very obedient servant,

GEORGE NEWPORT.

Upper Southwick-street, Cambridge-terrace, April, 1846.

THE PROCEEDINGS OF THE ROYAL SOCIETY.

(LETTER FROM DR. ROGET.)

To the Editor of THE LANCET.

SIR,—I trust you will allow me to point out a few of the inaccuracies, as to the matters of fact, which are stated in your leading article of last Saturday; the inferences your informant has deduced from them being thereby wholly vitiated.

Dr. Hall's paper, read to the Royal Society on the 2nd of March, 1837, was never "blackballed as unworthy of publication;" it was withdrawn by himself previously to any decision by the Committee of Papers on the question of its being published. Its removal from competition for a medal was the act of the author, and not of the committee. He is completely mistaken in imagining that I was opposed to the insertion of his paper in the *Philosophical Transactions*, or that I in any way contributed to its being withdrawn. There is no expression, in my abstract of it, that can be construed into a "sneer," as stated by your informant. Nobody, except him, considers the Copley medal "an inferior honour" to the Royal medal: it is, on the contrary, always esteemed as the highest honour which the Society can confer.

The Council adjudged the Royal medal, for 1836, to Mr. Newport, not on any representation of mine, but solely on the intrinsic merit of his various papers in the *Philosophical Transactions*, and in accordance with the recommendation of a committee specially appointed to report to what paper on animal physiology that medal should be awarded. That committee consisted only of Mr. Green, Dr. Holland, Mr. Lawrence, and Mr. Mayo; they made their report to the Council, and the substance of that report is printed in the "proceedings" of

the Society. I was not included in that committee, and, of course, took no share in its proceedings. Mr. Newport did not correct any portion of my "Bridgewater Treatise," excepting only some descriptions relating to minute points of entomological anatomy, which he was so obliging as to furnish, and on inserting which I have invariably cited him as my authority.

Dr. Grant did not refuse to correct the proof sheets of my "Bridgewater Treatise," nor was he ever asked to correct them. While it was in the press, being then in familiar and unreserved intercourse with him, I allowed him to see some of the proof sheets of that work, in which he professed to take great interest, and respecting which I naturally wished to have the benefit of his suggestions; but I never gave them to him for the purpose of correction. During the printing of the first volume, I received private information, that, unknown to me, he had been representing me as making improper use of his lectures in my publication. I immediately wrote to him, requesting to know whether the report I had heard was true; and, if so, what were the grounds of his complaint, which had reached me thus circuitously. In his answer, he admitted having made the accusation, and mentioned a passage in one of my last proof sheets, which he alleged I had taken from his lectures without acknowledgment. In my reply I showed him that he was wholly mistaken in his assumption of originality, and that I had only stated what had previously been published in the works of other anatomists. I, at the same time, offered to make the fullest acknowledgment of any views or modes of illustration which he might claim as being originally his, if he would only have the goodness to point them out to me; for I was most anxious to render to him, as to everybody else, all the credit that was due. I gave orders to suspend the printing of my work, and I kept the types standing for above a week, in the expectation of receiving an answer to my letter; but no answer ever came.

With respect to the proceedings of the Committee of Physiology, it is probably from the erroneous notion that I am the secretary of that committee, which I neither am, nor ever was, that I have been singled out as a prominent object of attack, amidst the unfounded charges made on that body, of which I am only an individual member. As to Mr. Beck's paper, it so happens that it never was in my possession, and that I have given no opinion concerning it.

I am, Sir, your obedient servant,

Upper Bedford-place, April, 1846.

P. M. ROGET.

ADVERTISEMENT EXTRAORDINARY.

AFTER announcing, last year, that they should institute no further prosecutions, the following notice will be read by the profession with feelings of astonishment. The Society have, of late, abandoned their duty in a most disgraceful manner:—

"THE SOCIETY OF APOTHECARIES, anticipating the probability of a change in the laws which regulate the practice of Physic and Surgery in this country, were unwilling, while the Medical Bill of the Secretary of State for the Home Department was still before Parliament, to have recourse to proceedings of a penal character for enforcing an observance of the 'Act for better Regulating the Practice of Apothecaries throughout England and Wales.' Sir James Graham, however, having intimated that it is not his intention to re-introduce any similar measure at present, and it appearing that numerous individuals are entering upon the practice of medicine who have given no evidence of their possessing the requisite skill and ability for such practice, to the serious risk of the public health, and to the discouragement of a zealous course of study on the part of medical students, the Society of Apothecaries deem it to be their duty to give this public notice, that they will use their utmost endeavours to secure to all classes the full benefit of the provisions of the Apothecaries' Act, and that upon being furnished with the names of individuals alleged to be practising as apothecaries without having submitted themselves for examination and obtained the certificate of qualification required by law, accompanied by adequate proof of such illegal practice, the Society will forthwith institute the necessary legal proceedings for the punishment of the offenders.—By order of the Master, Wardens, and Court of Assistants,

"ROBERT B. Upton, Clerk to the Society.

"Apothecaries' Hall, April 7, 2846."

We advise the members of the profession not to allow this to be a mere idle announcement on the part of the Society, but to supply them with adequate materials for work, in prosecuting the host of quacks that now infest the community.

HOSPITAL REPORTS.

UNIVERSITY COLLEGE HOSPITAL.

PERICARDITIS.—By JOHN TAYLOR, M.D., Professor of Clinical Medicine in University College, and Physician to University College Hospital, London.

CASE 29.*—A slender man, of irregular habits, and delicate health, after exposure to cold, suffered from cough and dyspnoea; three months later had anasarca; on admission, double friction sound over the heart; no pain or palpitations; dulness over all the left back and middle third of the right; anasarca; albuminuria; death.—Post-mortem examination: effusion of recent lymph into the pericardium; hypertrophy, with dilatation, of both ventricles of the heart; old adhesions of the right pleura, and some serous effusion; abundant serous, and a little fibrinous, effusion into the left pleura; serous infiltration of the tissue of the lungs; granular kidneys; enlarged liver; redness of the peritonæum, with effusion of serum and lymph.—Remarks: pericarditis revealed by physical signs only; signs of hypertrophy of the heart; of pleuritis and engorgement of the lungs; transmission of rhonchi through fluid in the pleura; evidence of Bright's disease; causes of the renal disease; of the hypertrophy of each ventricle of the heart; of the disease of the lungs; of the anasarca; characters of the anasarca in renal disease; great importance of avoiding cold in disease of the kidneys, heart, or lungs; causes of the pericarditis, pleuritis, and peritonitis.

RICHARD W—, aged thirty-three, admitted Nov. 21st, 1843. He is a man of short stature, and slender conformation; he was apprenticed to a bookseller, but has latterly been occupied as an engraver; his employment requires him to spend a considerable part of the day in a stooping posture; he is single, of very irregular habits of life, and has been accustomed to take very considerable quantities of ardent spirits, and sometimes also of other fermented liquors; he has occasionally, however, abstained completely for some time from such liquors, and for the last four months has taken no alcoholic liquors; he has always had sufficient food and clothing; he is generally possessed of high spirits, but for the last eighteen months has been rather the reverse; he has travelled a good deal, having spent a considerable time in Ireland, some time in France, and upwards of three years in Russia. With the exceptions just mentioned, he has been chiefly in London for the last nineteen years, during the last three of which he has been in close, damp, and confined lodgings. His parents are dead; his father died at the age of thirty-eight; his mother at that of thirty-three; he believes that they both died of phthisis. His health has generally been indifferent, and until the age of fourteen he was very delicate; he became more robust between the ages of fourteen and twenty-one years. During this period he had some disease of the liver, for which he was salivated; he has had syphilis twice, and underwent a course of mercury for each attack. When in Russia, he had an attack of "putrid fever," in the depth of the winter, from which he recovered in two months; has never had rheumatism. He dates the commencement of his present illness from his having slept, one night last May, with the windows of his bedroom open, he having an attack of gonorrhœa at the time; he took cold from this exposure, began to cough, and in less than a week his breathing became difficult, and he began to suffer from sickness. These symptoms continued until about three months ago, when his head and face swelled; he became thirsty, and lost his appetite and strength; a week later his legs also began to enlarge. These symptoms compelled him to leave his employment. He obtained medical aid at this time, and was salivated, but without benefit. About five weeks ago, he was recommended by a medical man to drink broom tea, after the use of which for a fortnight, the swelling of the face and legs was much reduced, and he passed more urine. This improvement induced him again to resort to a diet of animal food; but the œdema and dyspnoea increased in extent and severity. About a fortnight ago, he consulted Dr. Bright, who prescribed for him, and recommended nourishing food. He appears to have taken additional cold by going out; for, a day or two afterwards, his cough became more violent, but he did not expectorate; his breathing became more embarrassed, and he suffered from a sense of suffocation on assuming the recumbent posture; the œdema of the lower extremities also increased. He continued in this state up to the time of his admission, principally remaining in a sitting pos-

ture, and obtaining but little sleep. Since the commencement of his illness, his bowels have been more or less constipated; he has also suffered from tenesmus; he was bled from the arm twelve or thirteen days ago, and the blood drawn was buffy; he was also salivated about the same time. On admission, skin rather dry; great prostration of strength and restlessness; the face is somewhat puffy; the lower extremities are œdematous, and the marks of his clothes are left upon his forearms; he sleeps badly; has no headache; the countenance is expressive of anxiety; the lips and cheeks pale; the respirations are frequent, short, and about forty per minute; has some pain in the back of the chest, and frequent violent paroxysms of short, dry cough; no expectoration; percussion elicits a dull sound in the middle of the right side of the posterior part of the chest in particular; the sound on percussion is uniformly dull over the whole of the left side posteriorly; a muco-crepitant rhonchus and ægophony are heard in the middle of the right back, and a muco-crepitant rhonchus over the whole of the left back; he has no pain or palpitation of the heart, nor syncope; a muffled and almost continuous friction sound is heard most distinctly opposite the base of the heart; a creaking sound opposite its apex; the sounds of the heart appear healthy; pulse 110, small and weak; there is a pulsation at each side of the root of the neck; mouth dry; tongue furred; breath offensive; appetite tolerably good; some thirst; no nausea or vomiting; the abdomen is enlarged, and evidently contains fluid; the right and left hypochondria are tender on pressure; bowels open; the liver appears to be somewhat enlarged; urine pale, scanty, acid, specific gravity 1014, and albuminous; the coagulum, after twenty-four hours' standing, occupying one-fourth of the volume of the liquid. To take four grains of calomel immediately, and a dose of house physic an hour afterwards; to take, likewise, a pill every eight hours, containing two grains each of blue pill and of squill powder, and one grain of powdered digitalis. A blister to be applied between the shoulders.

Nov. 23rd.—He complains much of a sharp catching pain under the right breast. The impulse of the heart is extended, but feeble; a creaking sound is heard opposite its apex; pulse very feeble, 120 per minute; mucous and muco-crepitant rhonchi are heard over the right back, and in the right inframammary region; and in these situations the vocal resonance is much increased. To apply six leeches over the heart, and to take the pill every six hours.

24th.—The cough was more distressing during the night, and he obtained no sleep. The difficulty of breathing appears more urgent; the pulse is very feeble, and the friction sound less distinct.—Eleven A.M.: To take the eighth of a grain of muriate of morphia twice a day.—Three P.M.: The lips are now livid; his sight appears failing, and he no longer recognises those who are around him. He has been slightly delirious for the last hour or two, but appears sensible when spoken to. The oppression of the breathing seems to have increased; pulse 130; specific gravity of urine 1015, and more albuminous. He was seen by Dr. R. Quain about eleven P.M., and some brandy was ordered for him; but he died about five A.M. on the following day.

Examination of the body seven hours after death.—*Exterior*: The veins of the extremities were very obvious, and those of the neck and upper part of the thorax much distended; the lower extremities and the upper ones also, in a less degree, were œdematous.—*Chest*: The pleuræ pulmonalis and costalis on the right side were adherent in nearly their whole extent; there was a small quantity of fluid in the right pleural sac. On the left side, the visceral and parietal pleuræ were adherent posteriorly. The left pleura contained a considerable quantity of fluid, and some effusion of recent lymph, especially in the fissure between the two lobes. The right lung was firm; broke down readily beneath the fingers; much frothy fluid exuded from incisions made into it. The left lung was full of the same frothy fluid as the right one, and broke down readily under pressure. At its upper part there was a hard cicatrix; there was some emphysema, chiefly of the upper part of the lung.—The pericardium contained about one ounce of fluid, and adhered to the heart on the greater part of its extent; and when detached, the heart was seen to be covered with recent false membrane. The walls of the left ventricle were thicker and firmer than natural; its capacity was enlarged. The lining membrane, valves, and orifices, were healthy. The capacity of the right ventricle was increased, and its walls were thickened; the valves were healthy. Each of the four cavities of the heart contained a fibrinous concretion, and some black coagula. The large venous trunks were much engorged with dark blood. The intestinal portion of the peritonæum was redder than

* I am indebted to my colleague, Dr. Thomson, for permission to publish this case. The report is taken from the Fellows' Clinical Prize Reports for the Winter Session of 1843-4, by Mr. Fred. Wm. Marshall.

natural; and the folds of the intestines were connected by a number of slender bands of fibrine. There was some effusion of serum into the cavity of the peritonæum.—The *liver* projected four inches below the margin of the ribs; but was otherwise healthy.—The *spleen* was rather large and soft.—The *left kidney* was smaller than natural; its capsule separated readily, and its surface was smooth, pale, and mottled with greyish spots. The surface of the *right kidney* was paler and more mottled than that of the left one. The upper part of the kidney was separated, by a constriction, from the rest of the organ, from which it differed in being harder and paler. The cortical substance of both kidneys was atrophied, and contained granules. The right kidney was much smaller than the left one.—The head, stomach, and intestines, were not examined.

SUMMARY OF THE CASE, WITH REMARKS.

Symptoms, diagnosis, and morbid appearances.—*Heart* :

1. The existence of pericarditis in this case, also, was revealed by the physical signs alone. There was neither pain, palpitation, nor any other symptom, to draw attention to the heart. The friction sound was double: it appears to have been most distinct about the base of the organ, and to have had a creaking character at the apex. The day before death, the rubbing sound was observed to be less distinct, which agrees with the soft adhesions afterwards found in one part of the pericardium, and the fluid effused in the rest. The natural sounds of the heart are stated to have been healthy.

2. The hypertrophy, with dilatation of both ventricles, was pointed out only by the increased space over which the impulse was felt. To the dyspnoea, and extreme prostration of strength, and the consequent languid contractions of the ventricles, we must ascribe the feebleness of the impulse, and also of the pulse at the wrist. Notwithstanding the hypertrophy of the heart, the valves were healthy.

Lungs and pleura.—1. From the presence of soft lymph in the left pleura, there had probably been some inflammation, as well as dropsical effusion; but it was not indicated by pain or any other prominent symptom.

2. The copious effusion of serum into the left pleura was the cause of the universal dullness on percussion over the left side of the back of the chest; and the more trifling amount of effusion into the right pleura corresponded with the smaller extent of dullness on the right side, and with the ægophony.

3. The extensive effusion on the left side did not intercept the transmission of the rhonchi, produced in the lung, to the surface of the chest.

4. The history shows that there had been bronchitis of some duration, and there was some emphysema. The bronchitis had experienced an aggravation, probably at the commencement of the last illness, hence the increased dyspnoea, much of the serous effusion, the orthopnoea, and the sanguiniferous engorgement of the lungs. The latter affection, with the bronchitis, was the source of the mucous and muco-crepitant rhonchi heard especially on the right side.

Abdomen.—1. There was a trifling amount of peritonitis, shown by the increased vascularity of the membrane, and the soft coagulable lymph. This inflammation had no doubt supervened in the last period of life, and appears to have given rise to no obvious symptoms.

2. The description given of the kidneys proves them to have been affected with one of the various chronic forms of Bright's disease. Each of them was atrophied as a whole, and the cortical portion in particular; they were pale and mottled, and there was a granular deposit in the cortical part. Add to these appearances, the symptoms observed during life, and the evidence is complete. The urine was pale, its specific gravity low, and when tested by heat and nitric acid, it deposited a flocculent precipitate, amounting, after twenty-four hours' repose, to one-fourth of the bulk of the fluid operated upon. There were, likewise, a cachectic and pallid aspect of body, and anasarca, commencing in the face and upper extremities, and afterwards extending to the lower extremities.

Causes and Pathology.—1. The history exhibits to us abundant cause for the general ill-health and the renal disease. The patient was born of consumptive parents; his appearance was indicative of a scrofulous constitution, and his health had been delicate. His habits were very irregular, for he had twice had syphilis; was accustomed to drink hard; had been wandering in different climates, and probably had been exposed to considerable atmospheric vicissitudes. During the last three years, he had occupied damp lodgings. In addition to the syphilis, he had had liver disease and putrid fever, and, for one affection or another, had been salivated five times before his admission into the hospital.

2. The duration and the causes of the hypertrophy with dilatation of the left ventricle of the heart, are equally uncertain. There had been no rheumatism, no valvular disease, nor previous pericarditis. We do not know whether the renal disease or the cardiac enlargement began first, and consequently we cannot determine whether either of these affections caused the other. The causes among which we may seek for the origin of the cardiac enlargement are, the renal disease, the intemperate habits of the patient, and the pulmonary obstruction. It is not stated whether, in his wanderings, the man had taken much, or severe, or up-hill exercise on foot.

3. The enlargement of the right ventricle was no doubt occasioned by the habitual pulmonary obstruction, and the two affections were proportioned in amount to each other.

4. The first chest symptoms succeeded the application of cold six months before the patient's admission, and every subsequent aggravation of them was referable to the same cause. There probably occurred, in succession, bronchitis, emphysema-pulmonum, obstruction to the circulation through the lungs, with accumulation of blood in the branches of the pulmonary artery and venous system generally, and, consequent on this, the serous effusion into the pleura, and into the cellular tissue of the lungs. The same obstruction to the circulation, co-operating with the renal disease, would determine the production of the anasarca, which made its first appearance only three months before death; for it may be presumed that the affection of the kidney was of older date than this. The dropsy commenced in the head, face, and upper extremities, and not until a week afterwards extended to the lower extremities. This order of progression of the anasarca, from one part to another, very rarely, if ever, occurs in dropsy occasioned by simple obstruction in the heart or lungs, and apart from disease of the kidneys.

5. We may learn from this and similar cases in which the heart, lungs, or kidneys are singly or unitedly diseased, the great importance of avoiding exposure to cold. Patients may go on with one or other of these affections, often for a long time, without much inconvenience; but let a cold be taken, and the pulmonary circulation be further embarrassed, and dropsy commonly follows, which, in its first or in subsequent attacks, similarly induced, becomes complicated with various secondary affections, and life is speedily terminated. In this, as in very many other diseases, it is not only wiser, but much easier, to prevent mischief than to remove it.

6. The recent inflammations, the pleuritis, and pericarditis, were in all probability mainly, if not entirely, induced by the renal disease. It is uncertain at what precise time any of them began; there was no proof that there was any additional immediate cause for them,—such as further exposure to cold,—and even if such a cause were known to have been applied, the whole history of such cases would compel every reflecting observer to attach to it a very secondary importance.

NEW RESTRAINTS FOR QUACKS.

(NOTE FROM DR. ROBERT BARNES, NOTTING HILL.)

To the Editor of THE LANCET.

SIR,—A case which has recently occurred in this neighbourhood, of a fatal pleuro-pneumonia, treated by a druggist having no other qualifications than his impudence and freedoms from the qualms of conscience, and which case became the subject of an investigation before a coroner's inquest, prompts me to make a few remarks on the feasibility of putting a stop to such criminal rashness in ignorant persons.

Without entering into the question of the means of providing against this offence in any new medical law, I wish to offer a suggestion as to the facility of abating the nuisance by the means which the actual position of the law places at our disposal. The most efficient weapons, I apprehend, are, the registration of births and deaths, and the coroner's court. If these were properly worked and aided by the vigilance of medical men in bringing to light all cases in which death occurred in the absence of proper medical assistance, a heavy blow would be struck at illegal practice. Why should not the registrar, on being requested to register a death, make it a rule to inquire if the deceased person died under medical treatment? and this being the case, who was in attendance? It would thus be ascertained whether the deceased died under the care of an illegal practitioner. The public safety requires that every such case should be made the subject of inquiry before a coroner. In order the more effectually to carry out this plan, the registrar should be furnished with an authenticated list of all qualified practitioners in his district, and on receiving information of a death not attested by one of these, he should

immediately give notice to the constable of the parish to inquire into the circumstances attending the death. If a system of this nature were vigorously acted upon, quacks and other illegal dabbles in medicine, though deterred by no sense of the criminal responsibility they incur by tampering with the lives of their fellow-creatures, yet, having before their eyes the ever-impending terrors of a coroner's inquest, would feel it prudent at least to circumscribe their operations.

I have the honour to be, Sir,

Your most obedient servant,

Notting-hill, March, 1846.

ROBERT BARNES, M.B.

SUGGESTIONS ON THE MEANS OF EFFECTUALLY CHECKING UNQUALIFIED VENDORS OF MEDICINE.

(NOTE FROM H. C. BARNARD, ESQ., SURGEON, HEREFORD.)

To the Editor of THE LANCET.

SIR,—As I, in common with the greater number of general practitioners of this country, look upon you as our champion and well-wisher, and as I think you may be the means of rendering us an important service, doubtless you will do so, if you approve of it, by using your efforts to have some measure of the following kind carried into law, and which would effectually protect us against prescribing druggists, and other unqualified practitioners:—"That from and after the passing of this act, any person not qualified to do so (agreeably to an act passed in the 55th year of the reign of his Majesty King George III., entitled, 'An Act for the better regulating the practice of Apothecaries throughout England and Wales'), who shall sell or cause to be sold to any sick person, or to any one, for the purpose of administering to such sick person, any drugs or medicines, for the professed object of relieving such sick person of their sickness, unless such drugs or medicines are prepared after and according to the authority and direction, in writing, of some person licensed to give such authority and direction, in writing, by 'The Royal College of Physicians of London,' or 'The Royal College of Surgeons' of London, shall, upon conviction before any magistrate or justice of the peace for the city, borough, or county in which such offence shall be committed, of so selling, or causing to be sold, such drugs and medicines, for the purpose and object above named, forfeit a sum not under forty shillings, nor more than twenty pounds: the one-half of such forfeited money to be paid to the person who shall give the information that shall lead to such conviction. That all money paid for the drugs and medicines thus unlawfully sold shall be returned to the person who had paid it, by the person convicted of having sold them."

The only College of Physicians I have named is that of London, but perhaps it would be better to name a few others,—such, for instance, as those named in Sir James Graham's bill of last session. I have mentioned the College of Surgeons, on account of the "pures" of that college, who think it beneath their dignity to sell medicines.

I think it a very hard thing that a person (without a licence) selling a hare, or pheasant, which are not likely, by their use, to injure the persons eating them, may be convicted, in a penalty, by a magistrate, for so doing, and that a person (without a licence) selling medicines that may poison his fellow-creatures, should escape free.

Though I may have worded the above clause in an inefficient manner, you will clearly see my meaning, that of trying to put a stop to the wholesale murder and ill-treatment of the "public," by unqualified practitioners, and the wholesale robbery of the qualified ones by them. By your early attention to the above, you will much oblige,

Your obedient servant,

Hereford, March, 1846.

HENRY C. BARNARD.

EVOLUTION OF HEAT, AND ITS CONNEXION WITH ELECTRICITY.

To the Editor of THE LANCET.

SIR,—I have observed, in THE LANCET of February 7th, some remarks on certain effects of electricity, by Mr. Hill, of Filey, to explain the production of which, he would assume the specific heat proper to the body, under examination, to have been evolved. Mr. Hill states, "there can be no other source from which this heat can have been derived," an assumption which is, in my opinion, negated by the very fact (if it be a fact) upon which his arguments are based—that is, the materiality of the electric fluid. Now granting

this materiality, we have no other alternative than to assign to it a similar constitution to all other species of matter that fall under our observation, and that constitution is, that it is composed of ultimate molecules or atoms, which atoms are not in contact, but have their spaces occupied by combined heat. Thus, the fluid possesses a specific heat, as well as the body subjected to its influence, and I think it quite as probable, nay more so, that the evolution of heat is caused by the neutral compound of the two electricities not possessing so large a capacity for heat as either when uncombined. I do not pretend to say that, in this manner, the effects cited by Mr. Hill are produced; that point I leave for others more versed in electrical science than myself to determine. However, I think the above remarks will disprove the statement of Mr. Hill, that the fluid itself cannot be the original seat of the heat involved.

ELECTRON.

PAULUS ÆGINETA.

To the Editor of THE LANCET.

SIR,—I am not unwilling to do business with your correspondent, "a Country M.D.," but considering the heaviness of the article, and the very remote probability of the work being ever completed, I could give very little above the price of waste paper—ninapence or tenpence is the outside I could venture for clean copies not written in.

Your obedient servant,

A LONDON BOOKSELLER.

ANOTHER SHE-QUACK.

MRS. GALLIER's pretensions (see p. 390) grow pale before those of the present practitioner, who thus announces herself:—

"By her Majesty's Royal License (!) and Authority.

DOCTRESS SMITH,

(Daughter of the late John Smith,)

A VERY LEARNED AND EMINENT PHYSICIAN,

Who was born in Gloucestershire, and after an expensive education at the English Universities, travelled into foreign countries for further improvement, at last he returned back to England, where the said Doctress Smith was born. The Doctor was universally beloved for the many extraordinary cures performed there, and through this daughter having natural and extraordinary genius, and her father taking the utmost care and delight to improve her, especially in the most useful remedies,

SHE CURES THE FOLLOWING DISORDERS

Hysteric Fits, Deafness, if the drum of the ear is not hurt or broken, the Stone and Gravel, Scald Heads, Rickets in Children, Scurvy, Black and Yellow Jaundice, Flux in Old and Young, Disorders in the eyes, King's Evil, Scurvy in the Gums, Piles, Cancers, White Swellings, Ruptures, Nervous and Bilious complaints, Agues cured in a short time, Worms, Asthmas, and shortness of Breath, Paralysis and various complaints incident to Women and Children, is celebrated for curing Worms of all sorts in old and young, Rheumatism, Rheumatic Gout, and can tell peoples disorders at first sight, takes none in hand that she cannot do good to. Her medicines are made from roots and herbs, so that no person need be alarmed to give them to the youngest infant or pregnant women.

A. Brown, High Street Printing Office, Deptford."

EXCLUSION OF MEDICAL PRACTITIONERS FROM THE TRUSTEESHIP OF THE BRITISH MUSEUM.

To the Editor of THE LANCET.

SIR,—I have had much pleasure in reading some remarks which you have lately been pleased to make with regard to the Royal Society. This satisfaction has been much increased from your observations having attracted public notice, and having found their way into some of the daily journals.

Whilst you are so zealously endeavouring to reform those public institutions, the fellowship of which is almost the only acknowledgment of talent scientific men meet with in this country, allow me to remind your readers of the trusteeship of the British Museum.

From the great and increasing importance of this institution, and from the close connexion which it has with natural history, physiology, and other sciences brought to

their present advanced state, and even now chiefly cultivated by the members of our profession, one would naturally suppose that eminent scientific medical gentlemen had a considerable share in its government.

The machinery by which it is governed gives ample opportunity for such arrangement. The trustees are forty-eight in number; one portion being *ex officio* members of the board, and consisting chiefly of the law officers (!) of the crown, whilst the others are elected by these. And who are elected? One looks in vain among this number for Faraday, Grant, Owen, or Marshall Hall.

To the shame of the country, and to the great disadvantage of the institution, be it said, the elected are almost as unfit for the office as the electors—men eminent, no doubt, for rank and station, but whose engagements of a political and civil nature must prevent their attending to their duties, even if fitted for them.

If, Sir, you would use your extensive influence in bringing this subject before the public, you would be conferring a still further benefit on the profession.

Your obedient servant,
MEDICUS.

THE ETIQUETTE OF THE PROFESSION.

To the Editor of THE LANCET.

SIR,—There will exist but few of your readers whose attention, ere this, has not been drawn to a letter in your last number from Mr. Beecroft, of Hyde, the merits of which, if correct, (and there is little reason to doubt it,) will speak for themselves. I cannot refrain from expressing the opinion, that were those members of our profession who had, in like manner, suffered from the unprofessional conduct of their brethren to possess a column in your journal, wherein their grievances would find insertion, the effect of a few examples would be salutary indeed, and produce more real good than any new legislative enactment, much as it may be required. The axe must be applied to the root of the present evils, which, I contend, do not owe their existence to the laws regulating the practice of medicine or surgery, though much, by alteration, may be done, as a help to general improvement.

I remain, Sir, your obedient servant,
Taunton, March, 1846. A SURGEON.

THE SYDENHAM SOCIETY.

To the Editor of THE LANCET.

SIR,—As the 1st of May is now coming on, will you permit me, through your columns, to call the attention of the Council of the Sydenham Society to your review of their last annual report.

Surely, Sir, if even in the report of such a Society we may not look for "high literary" character, we ought to have something like common sense; if we may not expect good writing, we may hope for good grammar; if modesty is too much, method may surely be attempted; if the council cannot exhibit good taste, we may trust they will show good temper.

I hope the council will take in good part the hints you have given them, and that this year's report will be both readable and worth reading.

I remain, your obedient servant,
A SUBSCRIBER TO THE SYDENHAM SOCIETY.

P.S.—As I am a novice in such matters, perhaps you will kindly inform me whether it is the more usual for officers of societies to read their reports sitting, or standing? Also whether it is usual to write reports on the backs of notes and such-like scraps of paper? And whether such societies provide stationery for their officers?

CORN CUTTING AT BATH.

To the Editor of THE LANCET.

SIR,—Having failed to get inserted in your periodical a paragraph that I forwarded to you (some fortnight ago) in consequence of its having been written anonymously, I will now, with your kind permission, embody the same in a different form, trusting that it will prove efficient for the purpose intended. On a former occasion, then, after having commended you for the able part you had taken in defence of our profession, by so admirably venting your just indignation on empirics, I begged to assure you, that honour towards the medical profession, and hatred towards every species of

quackery, were the only incentives to this production; also that there were parties in several towns which had taken the prefix of doctor! to their names, and purposed to cut corns, &c., (of this I had a knowledge from the conspicuousness of their huge zinc plates sported upon their doors, with Dr. —, Chiropodist, written thereon, and never was the title more prostituted)—that to these unworthy, self-dubbed doctors, the resident medical men lent themselves, from the fact of their names and signatures occurring in newspapers, to the effect, that Doctor so or so has attended me, and he is extremely clever; that this version of mine was to have been considered an epitome—but that all the advertisements tended, more or less, to demonstrate to the gullible public, the unworthy doctorate's scientific qualities in the art of cutting corns "without loss of a drop of blood!" Here I must fain ask, what are the motives of the medical gentry in question? Do they wish to see their names in print, so as to inform the invalids who arrive where they (notorious men!) live?—or do the very unworthy corn-snappers introduce them to their patients, as one good turn might deserve another? I have, for my own part, read the most valuable books on surgery, and I cannot for a moment conceive what mystery there is in doctoring a corn,—I should suppose a medical man might ease his own corn,—indeed, the whole of it is empirical fuddle.

Further, I should like to know at what college or university in Europe the degree of M.D. is conferred upon candidates for cutting corns, bunions, and defective nails?

Let all persons be respectable in the sphere of life in which they move; this, I think, will apply both to the *corn graduates* and other parties; and I do sincerely hope that before any of the *medical men* (resident in any town whatsoever, and being connected in the manner previously specified) present petitions in London, praying that their honourable college will endeavour to do this, that, or the other, that they individually take into consideration the honourable example they present to their College, by lending their names to prostituted titles and quackery. Taking my leave of them whom the cap fits, with the quotation,—

"Hic murus aeneus esto
Nil consine tibi nulla palestere culpa,"

I remain, Sir, yours very respectfully,
Bath, March, 1846. SAMUEL SAMPSON FAULKS.

CORN CUTTING AT HULL.

A correspondent has thus addressed us:—Allow me to intrude upon your notice an old copy of the *Hull Advertiser*, containing the advertisement of a "corn doctor" who honoured this town with his professional services for a period of three months, or more, towards the conclusion of last year, when, during his stay, an advertisement (similar to the one in the newspaper that I send) appeared every week, with letters from the first medical men in the town. The consequence was, that the public were completely deceived, and the "corn doctor" reaped a golden harvest. I understand, from good authority, that he was in the habit of receiving nearly ten guineas a day for extracting corns! Such things must give the public a very poor opinion of our profession.—I authenticate my note, and am, your obedient servant,

Hull, Feb. 1846. AN OLD SUBSCRIBER.

DR. LAYCOCK ON THE REFLEX FUNCTION OF THE BRAIN, IN REPLY TO "VINDEK."

I ATTEMPTED to maintain a very plain and intelligible proposition in the correspondence on the reflex function of the brain, from which "Vindex" has made the extract that he adverts on in THE LANCET of April 4. The proposition was this:—that the cerebral nerves of special sense are "incident excitator" nerves, and that the portion of the encephalon situate above the tubercula quadrigemina is subject to the laws of reflex action. The terms "brain" and "cerebral ganglia" were used by me, in the passage he quotes, to designate this upper portion of the encephalon, and to distinguish it from that lower portion which forms a part of the "true spinal system." Now I think I could not say, with any degree of propriety, that the common lumbricus had an optic, auditory, and olfactory apparatus, or was endowed with hemispherical ganglia. In the sense the term brain was used by me, the earthworm, I again assert, has no brain.

No useful analogy can be drawn between the supra-oesophageal ganglion of the lowest articulatula and the cephalic ganglion of the highest. In my humble judgment, they are as widely removed from each other as the highest from the lowest ver-

tebrata. There is, I think, as great a difference between the cephalic ganglion of the social hymenoptera and the supra-oesophageal ganglion of the lumbricus as there is between the encephalon of man and of the lamprey. In one or two genera of annelida, there is a mode of reproduction by spontaneous division, as in the nereis and nais. In these examples, we have a spinal ganglion metamorphosed into a "brain." If "Vindex" will have it, that the supra-oesophageal ganglion is a "brain," I do not desire a stronger anatomical proof of my views than this; while the facts I stated in illustration remain uninfluenced, although the proposition be granted. The headless wasp angrily attempts to sting—the headless scolopendron threateningly erects its tail—both minus their "brain." I might add, that the tail of the earth-worm, when severed from its "brain," will attempt to flee from irritation.

I am defied (the phrase is "Vindex's," who seems to be quite a fanatic in physiology) to bring proof that the decapitated frog or turtle exhibits acts characteristic of the emotion of fear. On this point, I need only refer "Vindex" to Van Deen, Volkmann, and other vivisectionists, for the most conclusive experiments. I here subjoin a short account of an experiment very recently published; for if the entire removal of the cerebral lobes be not exactly analogous to decapitation, it is sufficient for my argument:—

"Experiment 1.—In a frog, I removed the cerebral lobes with great care, and observed the phenomena. * * * * On being irritated, it moved with great vigour, and gave every indication of recognising the stimulus. When laid upon its back, it immediately turned upon its face, and then croaked distinctly. When seized by the foot, it struggled much to be relieved, and on being free, leapt to a distance. On irritating the integuments of its left shoulder, it immediately removed the instrument with its left foot."*

I readily declare that I am not a vivisectionist. I have not the slightest taste for experiments on living animals. I have, however, very carefully perused the works of Van Deen, Stilling, Volkmann, Budge, and other German physiologists, and compared the details of their numerous researches. In my judgment, the accounts of the results they obtained from vivisections, especially of frogs, perfectly harmonize with each other, with the experiments on the articulata, and with the laws of ganglionic development. The whole affords the most ample and irrefragable proof of the truth of my proposition, "that the cerebral ganglia (or even the encephalic) are not necessary to the production of emotional movements."

Having given this ample response to "Vindex," I can take no further notice of communications like his. They are offences against good manners and sound ethics; they retard the progress of science, and they waste valuable time. Writers on subjects of this kind may be reasonably expected to display so much courage, as to append their names to their communications; and so much good taste, as to write like gentlemen.

York, April, 1846.

QUACKERY AT CHELTENHAM.

To the Editor of THE LANCET.

SIR,—While you are upon the subject of quackery, it is to be hoped you will give the parsons their due; in this locality they are as busily employed in propagating empiricism as they ought to be in inculcating truth. Many times has it fallen to my lot to hear it said, "This ring was given to me for the cure of rheumatism, by the Rev. Mr. —," (the clergyman of the parish or district;) and mesmerism and hydropathy are publicly and extensively practised by many of the clergy in this neighbourhood, one of whom was not ashamed to lend his name in corroboration of the veracity of a number of fictitious cases of water-cure, which were published a short time since; though, in spite of these efforts, hydropathy has drawn its last gasp here, both establishments being closed and their owners departed. Homeopathy is now the rage instead, and a canny Scotsman, with a long and almost unpronounceable Christian name, stands a chance of picking fees out of a good many pockets, under the auspices of a Rev. Mrs. —, whether with the sanction of her husband or not we know not, but quite sure are the medical practitioners here that there are no more active advocates of quackery than the clergymen of Cheltenham. Inclosing my address,

I am, Sir, yours obediently,

Cheltenham, April, 1846.

O. O. O.

* Dr. Paton "On the Perceptive Powers of the Spinal Cord, as manifested in Cold-blooded Animals." *Edinburgh Medical and Surgical Journal*, April, 1846. (The current number.)

THE QUACKS AND THEIR ABETTORS.

To the Editor of THE LANCET.

SIR,—Your animadversions on the surreptitious practices of advertising quacks have already worked their good effects. Even the corn-cutter of Charing-cross has abandoned the "Locock puff," and the universal sympathy heretofore enlisted in behalf of Lady Dick will soon cease to exist, for all mention of her ladyship's bunion has been withdrawn from public notice. The amicable relation of T. J. Pettigrew, Esq., F.R.S., with Mr. Solomons, has been dissolved by mutual consent; and Mr. P.'s paroxysm of enduring gratitude to his "good friend, Dr. Blundell," for having mentioned the amber lenses, will hereafter be faintly remembered as a mere matter of history. Still, in the country newspapers, the system continues rife. In the last number of the *Salopian Journal* appear these outrageous specimens:—

"CAUTION! All others are fraudulent imitations! Mr. Thomas's *Succedaneum* for filling Decayed Teeth. Messrs. Howard and Thomas supply the loss of teeth upon their new system of SELF-ADHESION, which has obtained the approbation and recommendation of the following eminent physicians and surgeons:—Sir James Clark, Bart., Physician to her Majesty; Dr. Locock, (!) Physician-Accoucheur to her Majesty; Dr. Ferguson, Physician-Accoucheur to her Majesty; Dr. Bright, (!) Physician-Extraordinary to her Majesty; Sir B. C. Brodie, Bart., Sergeant-Surgeon to her Majesty; Sir Astley Cooper, Bart., Sergeant-Surgeon to her Majesty; R. Keate, Esq., Sergeant-Surgeon to her Majesty; Dr. Merriman, Physician to H.R.H. the Duchess of Kent; Sir C. M. Clarke, Bart., M.D.; Sir Matthew Tierney, Bart., M.D.; Dr. Chambers; Dr. Paris; Dr. Johnson; Dr. Conquest."

What a delicate compliment must this convey to Mr. Nasmyth, the Court dentist!

Then follows a more humble attempt, but more mischievous, perchance, in its tendency, in glorification of green ginger wine!

(N.B.—What quantity was sent for analysis?)

Shrewsbury, November, 1845.

"SIRS,—Having been favoured with a sample of your *Original Green Ginger Wine*, I have taken some pains to test its chemical and medicinal properties; and from the result of my experiments and observations, I should say that in both these respects (!) it comes nearer to *Foreign wine* (!) than any other with which I am acquainted; and I shall certainly" (mark this, gentle reader), "and I shall certainly bear in mind to recommend it to those who may need a cheap and grateful cordial and stomachic well suited to many cases of indigestion. [! !]"

"I am, Sir, your obedient servant,

HENRY JOHNSON, M.D.

"Senior Physician to the Salop Infirmary."

Only imagine, Sir, dyspeptic invalids, on the faith of this "Senior Physician to the Salop Infirmary," resorting to green ginger wine for the cure of their maladies! A solicitor, for a less glaring offence than this, would be struck off the rolls.

Your faithful servant,

London, April, 1846.

MEDICAL NEWS.

INTERFERENCE WITH COUNTRY PRACTITIONERS.—

A correspondent at Stonehouse, Devon, complains loudly of two circumstances which have greatly aggrieved the medical practitioners of this vicinity. The first is, that acting upon a recommendation from the Poor-law Commissioners, the guardians of the parish of East Stonehouse have elected a parish surgeon for life, who was not only nearly a stranger to the place, but had to procure his own release from the duties of churchwarden and surgeon, which he was professedly performing in another part of the county. The second grievance (and that which we consider by far the more heavy) is, in the words of our correspondent, "the fact of myself and the other practitioners of this town being most unjustly dealt with by the surgeon and assistant-surgeon of the Royal Marines, at this division, they taking upon themselves to subvert the old order of things as connected with the accouchements of the married women of the corps, by insisting that, in future, if any of them should employ any private practitioner in their labours, they not only should be deprived of the money derived from a fund of their own providing, and which formerly was borne by the Divisional Fund, but that they should be denied any medical advice or medicines in any future illness, either for their wives or children. In the first place (he adds),

we consider it an absolute infringement on the liberty of the subject, as it has hitherto been considered the indisputable right of all females who are likely to become mothers, of having the selection of their own medical adviser, not subjecting themselves to be obliged to employ a young unmarried man, perhaps, not so fully experienced in this branch of the profession. Within the last twelve or fourteen months, I may safely aver I have lost at least half my midwifery practice, and I attribute it *entirely to this act of intimidation*, which has been, and is still, constantly put in force against the different parties who go to the infirmary for medical advice. When it is ascertained that any of them are pregnant, the language addressed to them is, 'Have you engaged any one to attend you in your confinement? If so, you may go to the same party for medicines!'"

EXCLUSION OF A MEDICAL STAFF FROM A HOSPITAL BOARD.—On Friday, March 27th, the general quarterly meeting of the governors was held at the Worcester Infirmary, when, after an apparently stormy discussion, it was moved and carried, (a contemporary says *unanimously*), that the rule which at present specified that all subscribers of one guinea might attend any committee or governors' meeting, and vote, "should not apply to general or quarterly meetings; and further, that in the sentence 'the physicians and surgeons have a right to attend all boards,' the word 'boards' be expunged, and 'special, general, or quarterly meetings,' be substituted." (This resolution will have to be confirmed at the next meeting of the governors, due notice to be given by advertisement of its proposal.)

The proposer of the above resolution also expressed an intention to move that the rules for the guidance of the medical attendants of the Worcester Infirmary should conform with those in force at similar institutions in other towns; at present the regulations at Worcester did not compel the physicians and surgeons of the Infirmary to attend there at stated times.

MEDICAL PETITION TO PARLIAMENT.—On the 26th of March, a petition from Limerick, for the better regulation of medical charities, was presented to the House of Commons.

INSOLENCE PROBABLY CONTAGIOUS.—A correspondent makes the following appeal:—Allow me to call the attention of the authorities at the College of Surgeons to the insolence exhibited towards the students by the servant who registers them at the college.

His insolence to myself (I enclose my name and address) was alone sufficient to justify a reprimand from his employers, and I am sure that the students generally will feel much obliged to the authorities by their endeavouring to insure a manifestation of civility to those persons who are preparing to become members of the college.—Yours obediently,

University College, March 30th.

C. J. S.

SIR HARRY G. SMITH, who commanded the British and native troops in the late action at Ullawul, and the right wing of the army in the subsequent engagement at Sobraon, is a son of the late Mr. John Smith, surgeon, of Whittlesea, Cambridgeshire, and brother to Charles Smith, Esq., captain of the Whittlesea troop of yeomanry.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.—A half-yearly General Court of this Society was held on Wednesday, the 1st instant, at the Gray's-inn Coffee-house, Holborn; Martin Ware, Esq., Vice-president, in the chair.

On reading the minutes, it appeared that two very gratifying benefactions had lately been received. One of them was a legacy, announced by T. A. Stone, Esq., of fifty pounds, bequeathed by the widow of the late Matthew Baillie, M.D., formerly president of this Society. Through the liberality of William Hunter Baillie, Esq., son and sole executor of the testatrix, this sum had been received free of legacy duty. The other was a donation, presented through Sir B. C. Brodie, Bart., of fifty guineas, from Lord Denman. His lordship, it will be remembered, is the son of the late Thomas Denman, M.D., who was one of the original founders of the Society.

At the recommendation of the Court of Directors, it was unanimously resolved, that William Hunter Baillie, Esq., be elected an Honorary Member, and that Lord Denman be invited to become a Vice-patron of the Society.

The Annual Dinner of the Society is to take place next Saturday, the 18th instant, at the Freemasons' Tavern; and the Chairman of the Stewards' Committee, Mr. Probert, drew attention to the great importance of notice being given by those who intend to be present. The arrangements have been made in the best possible manner, and a full attendance of the members and their friends is expected.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted members on Friday, March 27th, 1846:—C. J. Ax-ford, J. A. Woolfryes, C. H. Collins, S. F. Palmer, C. F. Palmer, C. U. Cay, T. S. Bourne, G. H. Jenkins.

APOTHECARIES' HALL, LONDON.

Names of gentlemen who obtained certificates to practise as apothecaries, on Thursday, March 26th: Thomas Coulson, Quorn, Leicestershire; Frederick Hooker, Marder, Kent; Thomas Skeffington Bourne, Coventry, Warwickshire; John Baker, 13, Castle Street, Finsbury. —Thursday, April 2nd, —James Wright, East Bridgeford, Notts; George Holland, Stickney, Lincolnshire; Thomas Alfred Blomfield; Philip Pitt Nind, India; William Bourne, Derbyshire; Frederic Septimus Tate, Portsmouth; Horace Henry Button, Eisleham, Suffolk; Francis Drake Walrond Wheaton, Devonshire; Edward Cousins, Edmonton, Middlesex.

CORRESPONDENTS.

A Constant Reader.—The address is, Manchester-square.

In reply to several correspondents who have asked when there is to be a general meeting of the NATIONAL ASSOCIATION, we are only enabled to state, that it was announced in the *Transactions*, about a month since, that a general meeting of the Association would be held on the 17th of April, at seven or eight o'clock in the evening; but as no subsequent advertisement of such a meeting has appeared, we suppose that the intention of holding it is abandoned. It may not be inconvenient or improper to hold meetings of the committee in the evening; but a General Assembly of the Association ought, certainly, to be held at a period of the day when surgeons could arrive in London from the country by the early trains, attend the meeting, and return home by the evening trains. We cannot believe that the committee will persist, in opposition to the feelings of the members of the Association who reside in the country, when they again call a general meeting, in convening that meeting at night. The injustice of such a proceeding is too obvious for comment.

The letters of Mr. Septimus Rodick and M. D. W. were received too late this week for further notice, the present number being published on the day preceding Good Friday.

If R. J. finds, in the journals in question, any articles, abstracts of which would prove of use or interest to medical readers, we shall be happy to receive them from him for publication in THE LANCET.

Non-Medicus.—Medical advice can never be satisfactorily given to a patient whose case the prescriber does not personally investigate. Probably a ten minutes' consultation with the nearest respectable practitioner would procure for our correspondent the explanation which he desires.

A Militia Medical Officer.—A new Bill on the subject will be introduced into Parliament. What plans will be adopted after that measure has become law, it is impossible to say at the present moment. Guessing on the subject would be useless; equally useless would it be at this time to make official inquiry into the matter.

Mr. Bernard.—The printer's address, on the pamphlet, is Richard Kinder, Green Arbour Court, Old Bailey.

Will Vinder, (Leeds.) authenticate his report of physiological experiments, by naming the parties by whom, and the dates and places at which, they were performed?

Z. W. D., (Whitehall-place.)—The mere act of reading, while walking, demands much greater attention, and greater steadiness both of the eye and the hand, than does reading while in repose, and consequently entails a greater expenditure of nervous agency. If, in addition to this mere act, the reader also thinks of what he is reading, a still further expenditure of nervous power takes place, and one very distressing to the economy; for that portion of the nervous system presiding over motion is actively exerted at the same time with that portion connected with the mental powers, and the results are, inefficient supply of nervous agency to each, and exhaustion to both. We cannot here find space for entering further into the subject; but we should be sorry to believe that the really studious give way to the practice of reading while walking. As to its wisdom or utility, it is about on a par with reading at meals—a habit scarcely less reprehensible.

If *A Reader* desires to be plundered, and perhaps half killed, he may apply to some of the advertising scoundrels he has named; but if he desires to be cured, and his peace of mind restored, he will go to a regularly qualified member of the medical profession.

We beg Mr. Thomson, of Aberfeldy, to accept an apology for his contribution not having been before noticed. It had been unfortunately mislaid, but is now with the printer, for publication on the earliest available occasion.

A Birmingham Student.—Dr. M. Hall's work on "Diseases and Derangements of the Nervous System," is the work which should be studied to master the subject.

ERRATA.—In Mr. Page's report of "A case of Tetanus treated by Aconite," at the Cumberland Infirmary, published last week, at page 396, in lines 23 and 68, the word "chronic" was misprinted for *clonic*. In Mr. Redford's communication, page 367, col. ii., line 4, for "flexuses," read "plexuses;" lines 22 and 23, read, "At length Mr. Beck, a gentleman unconnected with the Royal Society," and place a period after the name of Mr. Owen.

Communications have been received from—Dr. Alderson, (with a case by Mr. Hardy, Hull); Mr. Robins; Mr. Jones; Chirurgus, (with specimens); Mr. Acton; Jus; Dr. Corbet; Dr. Ormerod; Dr. Davis, (Hertford.)

LECTURES
ON
PLETHORA AND ANÆMIA,
AND ON
SOME FUNCTIONAL DISORDERS DEPENDENT
UPON THE STATE OF THE BLOOD.

DELIVERED AT THE LIVERPOOL NORTHERN HOSPITAL, SESSION 1845-46.

BY JAMES TURNBULL, M.D.

PHYSICIAN TO THE HOSPITAL.

LECTURE V.

Treatment of anæmia.—Origin of the iron of the hæmatosin.—Action of chalybeate tonics twofold.—Researches of Andral, Simon, and others, in regard to the increase of globules from the use of chalybeates.—Comparative effects of the different preparations of iron.—Effects of quinine and other tonics; of stimulants and antispasmodics.—Regulation of the bowels; diet.—Modifications of the general plan of treatment.—Where the digestive organs are prominently deranged.—Treatment of pyrosis, gastrodynia, irritative dyspepsia.—Treatment of relaxation of the bronchial mucous membrane.—Palpitation of the heart; nervous irritability; neuralgic pains.—Irregularity of the catamenia.—Edematous effusions.

THE treatment of anæmia comprises the adoption of every measure which can improve the general health and strength of the patient, and tend to increase the quantity, and improve the quality, of the blood. The vegetable bitters, the sulphate of quinine, and most tonic medicines, which increase the appetite and the digestive powers, are of service; but there is one class of medicines—viz., the preparations of iron—which have a more direct and powerful effect than any other, in increasing the quantity of that constituent of the blood which is deficient in anæmia. Iron, either in the metallic or oxidated state, forms the chief part of the hæmatosin, which is contained within the external envelop of the red globules. It is to the iron of the hæmatosin that the bright-red colour of the globules is owing; and it is a singular fact, which has been proved by analysis, that in anæmia the deficiency of the red particles is in close relation to the diminished quantity of iron in the blood. Becquerel and Rodier found, that while the mean quantity of iron in 1000 grammes of calcined blood from individuals in health, and corresponding with 141.1 of globules, was 0.565 of a gramme, the quantity in thirty-one cases of anæmia, with 94.7 of globules, was only 0.366 of a gramme in the same quantity of calcined blood.

The preparations of iron seem to act in removing anæmia in a twofold manner. First, by their tonic properties, which they possess in common with the vegetable bitters, and several of the metallic tonics, such as the preparations of zinc and silver, all of which prove of service in anæmia, by increasing the digestive powers, and promoting the due assimilation of the food taken. Iron acts in addition in a more direct manner, by mixing with the chyle elaborated from the food, which thus becomes more highly charged with the principle which is chiefly concerned in the formation of hæmatosin. The iron of the hæmatosin is derived from our food, small quantities of this metal being found in many kinds of vegetable food which we are in the habit of using.* It exists also, in small quantity, in animal food; not, however, as a part of the cellular and fibrinous tissues which constitute meat, but as forming a constituent of the blood, some portion of which must always remain in the capillary vessels. There are also small portions of iron in milk and in eggs. It is from these sources that the iron of the blood is derived; and as it scarcely enters into the composition of any of the solids of the body, the only purpose which it seems to serve, is the absorption of oxygen at the lungs, the transportation of it to the capillaries, and the excretion of carbonic acid. It appears not improbable, that deficient power of separating the iron from the food, and taking it into the circulation, may in some cases be connected with the origin of anæmia. Be this, however, as it may, there can be no doubt that the administration of iron in a form in which it can be readily absorbed by the stomach and intestines is the most effectual means of increasing the quantity of globules, and removing the pallor and the functional disorders of anæmia. That the quantity of the globules is increased by the administration of the preparations of iron, has been proved by several observers, from analysis of the blood

in anæmia before commencing, and after giving iron for a considerable time. In one case of chlorosis, before giving iron, Andral found the proportion of globules only 49; but after giving it for some time, the quantity rose to 64. In another patient, who continued the use of this medicine for a longer period, the proportion at the first bleeding was only 46; but under the use of iron it afterwards rose to 95. Simon has also given the case of a chlorotic girl, in whom the blood contained, of globulin, 30.860, and of hæmatin, 1.431. This patient took two ounces of the tincture of muriate of iron, and sixty-four grains of metallic iron, during a period of seven weeks, commencing with the day of the first venesection. The blood, when analyzed the second time, contained, of globulin, 90.810, and of hæmatin, 4.598. He observes, that the changes in the condition of the patient kept pace with those of the blood. Before, she was pale, and her lips colourless; now, she presented a really blooming appearance. Similar results have been obtained by Herberger and others. (See Simon's "Chemistry.")

These facts show very clearly the direct and powerful effect which this valuable medicine possesses in changing the state of the blood. In some cases, it seems to be a matter of little moment which of the preparations we employ, for even when taken in the metallic form, it is acted upon by the secretions of the intestinal canal, and a portion dissolved and absorbed into the blood. In the state of soluble salt, it is, however, most readily taken up, and is most active. The sulphate of iron is one of the most useful and active preparations, and it may be given in the form of pill, with a bitter extract, such as that of gentian, or a sedative, such as hyoscyamus or opium, or with an aperient powder or extract, such as aloes or rhubarb, or with any of these combined. It may also be given in solution, with a bitter infusion, to which a little sulphuric acid has been added, to hold the iron in solution; or it may be exhibited in combination with the sulphate of magnesia or potass, the solution being acidulated with sulphuric acid. It may thus be given in combination with several of the medicines required in anæmia; and from this circumstance I have used it more frequently than any of the other preparations, and I have also found it one of the most efficient. The sesquioxide of iron is a convenient form when we have to treat anæmia in children, to whom it may be given with compound cinnamon powder, or with rhubarb, or mercury with chalk, where the secretions are deranged. I have also given it to adults, along with confection of senna, bitartrate of potass, and sulphur. This combination possesses several advantages, inasmuch as it increases the secretions from the skin, kidneys, and intestinal canal, whilst it exerts a tonic effect by the introduction of iron into the system. The compound mixture of iron is a good preparation. It is milder than the sulphate, but it scarcely equals this, and the tincture of the muriate, in efficacy. This last preparation is one of the best, but it does not admit of being administered in so many forms as the sulphate. Several of these preparations seem to me to be often given in larger doses than is necessary, where we wish to obtain little effect beyond the absorption of the iron, which they contain, into the blood. This observation applies especially to the sulphate and the muriated tincture, the astringent properties of which, along with the irritation produced by large doses, may, in many cases, rather tend to prevent absorption. The regeneration of the globules, when much diminished in quantity, must require a considerable time, and it has appeared to me that this object might be best attained by giving moderate doses, at short intervals, for a long period. That the efficacy of the preparation is not in proportion to the quantity of iron it contains, is proved by the fact, that many mineral waters are very powerful, though they contain less than a grain in the pint. I have several times given with good effect a grain or two of the sulphate of iron, with aloes, in the form of pill, twice or thrice a day, whilst at the same time I have exhibited, as often, a mixture containing the citrate or some other preparation. In this way the sulphate has been exposed to the absorbent action of the whole intestinal mucous membrane, whilst the absorbent power of the stomach has been exerted upon the other preparation in solution. The preparations made from combination of iron with the vegetable acids are less efficient than those with the mineral acids, and Dr. Williams observes that the citrate and tartrate are more tardy in their operation. These are, however, milder in their action, and they may therefore be commenced with as a preparation for the others, which are more powerful, when there is great sensibility of the stomach, or of the system generally; for we not unfrequently find that the stronger preparations of iron, when first admi-

* See Pereira "On Food and Diet," p. 70.

nistered, increase all the anæmic symptoms, especially those referrible to the stomach and head. The potassio-tartrate of iron may be given, along with the bitartrate of potass, when there is cedema of the ankles, or of the cellular tissue generally, and when we wish, therefore, to produce a diuretic effect. The iodide of iron is a preparation which combines in some degree the properties of iodine with those of iron, though the latter predominate. It seems to promote the secretions more than any of the others, and it sometimes acts as a diuretic. Where it has not proved too stimulating, I have found it one of the best tonics in the anæmia of phthisis. It may also be given in all cases of anæmia combined with enlargement of the glands, as well as where the tonsils are enlarged. In cases of chlorosis, with much torpor of the system, and where none of the symptoms, referrible to particular organs, are very prominently marked, it is often speedily efficacious; and from having found it cause the return of the catamenia in cases of amenorrhœa, where other preparations of iron had been used for a considerable time without effect, I am disposed to think that it may exert a directly stimulating action on the uterus. Dr. Williams states, that in many comparative trials he found the iodide of iron, in solution with syrup, the most speedily efficacious of the preparations of iron, and that by its use he has seen females restored from extreme pallidity to a rosy hue of health in less than three weeks.

There are other tonics which are useful in anæmia, such as the vegetable bitters, gentian, cascarella, calumba, &c., which may be given in conjunction with iron. In many cases, too, where there is much irritability of the system, the preparations of iron cannot at first be borne, as they cause heat of skin and thirst, or sickness, or headache; and when this occurs, it is necessary to promote the secretions, and to give the vegetable tonics with sedatives, in order to prepare the system for the exhibition of iron. Quinine is very useful in many cases; it seems, however, to act more through the nervous system, and less directly upon the blood, than chalybeates, and it does not continue to produce a beneficial effect during so long a period. It is most useful in the anæmia from lactation and from profuse menstruation, and in some of these cases it may be given in solution along with sulphate of iron and sulphuric acid. In most cases of profuse menstruation the preparations of iron are hurtful, and in these, quinine and the shower-bath are preferable.

When there is much depression or irritability of the nervous system, we must administer stimulant and antispasmodic, or sedative medicines; such as carbonate of ammonia, camphor, valerian, hydrocyanic acid, and hyoscyamus. The carbonate of ammonia is exceedingly useful in equalizing the circulation, which is very often irregular in anæmia, and in restoring the temperature of the extremities when they are cold. The use of these medicines will be more particularly noticed in connexion with the treatment of the symptoms which arise from derangement of the various functions.

It is a most important matter that the secretions from the intestinal canal, the kidneys, and the skin, should be restored to a healthy condition; for it is probable, that in the great majority of cases of spontaneous anæmia, in restoring these we at the same time remove the cause of the disease. Aloes is the aperient which has been found most generally useful in anæmia, as it evacuates the bowels without weakening the system so much as most other purgative medicines. Where, however, the secretions are much deranged, some mercurial medicine should be exhibited at first. A few doses of blue pill, with colocynth, rhubarb, or aloes, may be given each night, and a saline aperient in the morning. When the skin is dry, and the patient does not perspire, an occasional warm bath is of use. Where, however, the skin is rather soft and relaxed, the shower-bath, followed by friction, will be of more service.

The other general means consist of attention to diet, which should be light and nourishing, and formed in part of animal food. Mutton or beef should be taken once or twice a day, and Dr. Hope recommends that it should be slightly underdressed. Regular exercise, so as not, however, to fatigue the patient much, should be taken in the open air; and cheerful occupation of the mind and change of air are most desirable auxiliaries. Wine is often beneficial at an early period, and ale or porter may also be given after some progress has been made in the treatment—when the more urgent symptoms are removed, and the powers of the stomach in some degree restored.

This general plan of treatment requires considerable modification to render it suitable to those cases in which some particular function of the economy is more especially deranged; and we have now to point out the treatment necessary for some of the more prominent and urgent symptoms of anæmia.

Our plan of treatment should be, in general, regulated chiefly by the state of the digestive organs, as it is through this medium that we act upon the deranged condition of the blood. When the tongue is pale and clean, without redness at the point, and there is only weight and uneasiness during digestion, with or without eructation, but without sickness and vomiting, and the extreme sensibility of the nerves of the stomach, we may commence with the compound iron mixture, or with the muriated tincture in a bitter infusion, or with pills with the sulphate of iron, constipation being, however, in all cases, removed by some of the means that have been pointed out. In many such cases the preparations of iron in a short time remove the dyspeptic symptoms. In those where the sensibility is greater, where there is severe pain after taking food, and occasional sickness and vomiting, and when there is an extremely anæmic state, it will be well to lessen the sensibility, and restore, in some degree, the tone of the stomach, by sedatives and stimulants, combined with the vegetable bitters, before exhibiting any of the preparations of iron. The infusion of calumba may be given with carbonate of ammonia, or with soda and hydrocyanic acid, or with tincture of hyoscyamus or the muriate of morphia. The addition of compound tincture of cardamoms, or of some other aromatic tincture, will also, in many instances, prove useful. In this way we shall gradually lessen the sensibility of the stomach, and prepare it for the milder preparations of iron, or for the sulphate, which, in these cases, may be given in the form of pill with hyoscyamus and aloes, and in this way its action will be exerted less upon the stomach than upon the intestinal canal.

Where there is pyrosis, a similar plan of treatment must be adopted, but the secretions from the liver and intestinal canal must be more freely promoted by rhubarb, magnesia, or carbonate of soda and mercury with chalk, or by colocynth and blue pill at night, followed in the morning by a draught with the infusions of senna and gentian, and the sulphate of magnesia, or tartrate of potass.

In the cases of gastrodynia, with pain of neuralgic severity occurring at intervals, especially after taking food, hydrocyanic acid and the muriate of morphia are the remedies most generally useful. The nitrate and the oxide of silver are also of service; and a plaster of belladonna applied over the stomach will often remove, and will almost always relieve, the pain; belladonna, in fact, affords relief from almost all the neuralgic pains of anæmia, and is a most valuable remedy. Stimulating liniments, blisters, and the external application of croton oil, and tartar emetic, may also be tried when the pain is severe and obstinate; but leeches, though they may occasionally give a little temporary relief, should never be employed, unless there be some inflammatory irritation of the mucous membrane.

When there is irritative dyspepsia, with redness at the tip of the tongue, thirst, feverishness, and pain or rather soreness at the stomach, it sometimes becomes necessary to apply a few leeches, and even to repeat the application in order to prepare the stomach for tonics. The nitrate of potass, and the muriate of ammonia, when given in these cases along with hydrocyanic acid, produce a feeling of coolness at the stomach, and assist powerfully in removing the inflammatory state of the mucous membrane. These medicines may be given at first in water, and afterwards in infusion of calumba or quassia, until the stomach can bear the milder preparations of iron in solution, or the sulphate in the form of pill. Milk and farinaceous food constitute the most suitable diet in the early stage of these cases.

When, from the severity and persistence of the pain at the stomach, or from the occurrence of hæmatemesis, we have reason to suspect the presence of ulceration of the gastric mucous membrane, our treatment will not differ materially from that recommended for gastrodynia. Chalybeates should still, if possible, be given, and counter-irritation should at the same time be employed. Sulphate of iron, given according to the formula of Dr. Abercrombie, is, perhaps, the best remedy we possess; two grains of the sulphate of iron to be taken three times a day, in combination with five of aromatic powder and one of aloes. Much will also be gained by attention to diet, which should be easily digestible, and at the same time nourishing.

In cases where there is relaxation and increased secretion from the bronchial mucous membrane, the combination of the mineral acids with the other tonics is desirable. I have occasionally found the tincture of cubebs useful in checking the secretion, and have been in the habit of giving it, combined with oxymel of squill and compound tincture of camphor. Counter-irritation should also be used; and the following is the formula I employ:—One drachm of croton oil, with four

and a half of olive oil, and half a drachm of cajepout oil, made into a liniment, and rubbed upon the chest twice a day.

Little modification of the general plan of treatment is required for palpitation of the heart, and for anæmic pulsation of the aorta. The removal of any complications connected with the digestive organs, and the use of chalybeates, are generally sufficient to take away these symptoms. The compound galbanum pill may be given to remove flatulence; and when the circulation is feeble, with disposition to faint, the carbonate of ammonia, with valerian or ether, will counteract this, and tend to restore the circulation in the extremities.

When the nervous system is in a very irritable and easily excited state, so that the slightest noise is sufficient to startle the patient, camphor, in combination with the extract of hyoscyamus, will be found serviceable, or the carbonate of ammonia may be given with tincture of valerian in camphor mixture or a bitter infusion. Sulphate of quinine in solution, along with sulphuric ether, may also be found of use. The vertigo, noises, and headach, are in general removed only by degrees, in proportion as the quality of the blood is improved, and unless unusually severe, they do not require any special treatment. It has been already observed, that in some cases the preparations of iron increase the head symptoms, and when this occurs to any considerable extent, or when the pain in the head is unusually severe, or the vertigo so great as to endanger the patient falling, we must proceed, in the exhibition of chalybeates, in the same gradual manner as where there is much irritability of the digestive organs. These symptoms of congestion are too often treated by depletion with leeches, which frequently increases the pain and feeling of giddiness, and necessarily proves always more or less injurious in a state of anæmia, owing to the removal from the system of a portion of all the constituents of the blood. In these cases, if the symptoms are urgent, or if a mild stimulant plan of treatment with purgatives, and followed by the cautious use of some of the preparations of iron, do not remove the unpleasant symptoms, a blister should be applied to the nape of the neck. This will seldom fail to give relief, and it is the remedy best suited to these cases, as it removes congestion of the vessels by producing depletion, without, however, taking from the blood the part which is deficient in anæmia. I may also observe, that in all cases of congestion, and even acute inflammation, occurring in anæmic persons, we should be sparing in the use of bloodletting, general or local, which is the most direct means of lessening the globules; and we should give the preference to the application of blisters, which, in anæmic individuals, are scarcely less efficacious than bloodletting, and produce depletion by removing from the blood the liquor sanguinis, without affecting the globules, which are already deficient, and can, in many cases of spontaneous anæmia, be renewed only slowly and with difficulty.* A spirit lotion is a suitable application in cases of pain in the head from anæmic congestion or neuralgia.

The periodic neuralgic pains of the face are to be treated by the external application of belladonna, and by quinine, and the carbonate and other preparations of iron. The pains in various parts of the body, in the spinal column, and in the nerves issuing from it, are to be treated by stimulating and anodyne liniments, the belladonna plaster, and, occasionally, blisters.

We have still to notice those cases of anæmia in females where suppressed, irregular, or scanty menstruation, forms a prominent symptom. The secretions from the intestinal canal having been first evacuated by means of mild mercurial medicines, the bowels are to be kept open once or twice daily by means of the aloes and myrrh, or compound aloetic pill, or by the compound decoction of aloes. Dr. Ashwell regards the combination of cordials with aperients as important, and recommends the following draught to be taken twice or three times a week:—Powdered rhubarb; carbonate of magnesia; of each half a drachm; aromatic confection, one scruple; cinnamon water, nine drachms; compound tincture of cardamoms, one drachm. He recommends that the sulphate of iron should be taken three times a day, in the dose of one or two grains, combined with extract of hop, aromatic confection, and a single grain of poppy or hyoscyamus extract. I frequently prescribe pills made with sulphate of iron, powder or extract of aloes, and extract of hyoscyamus, of each, one scruple, divided into twelve pills, and one taken three times a day. The superior efficacy of the iodide of iron in many of these cases has been already adverted to. From half a drachm to a drachm of the syrup may be given three times a day in water, or in infusion of quassia.

Where other preparations of iron have been injurious, Dr. Ashwell has found the carbonate in the following combination agree with the patient: Carbonate of iron, eight grains; powdered ipecacuanha, one grain; mercury with chalk, two grains. This powder to be taken once or twice a day. He also recommends, when the general health is somewhat restored, the use of the mustard hip-bath, or the local salt shower-bath, or the injection into the vagina of a drachm of liquor ammonia to a pint of milk. Where the uterus has seemed to require to be stimulated, after the restoration of the general health, I have in many cases found effectual, a draught with turpentine and castor oil.

The slight œdema of the ankles and of the cellular tissue generally, which is occasionally met with in anæmia, and chiefly in that form under consideration—viz., chlorosis,—requires that the treatment should have especial reference to this complication. In these cases, there is, for the most part, considerable fullness of the vascular system, and the diminished proportion of globules is perhaps as much the effect of retention in the blood of the fluid part, from deficient excretion from the skin or kidneys, as from absolute diminution of the globules; at all events, the deficient excretion seems to be the cause of the anæmia. Our first object must be to increase the secretions from the bowels, the kidneys, or the skin, or from all of them, so that the specific gravity of the liquor sanguinis may be increased, and the natural relations between this fluid, the chyle, and the fluid of the globules, restored. The aperient best suited to these cases is the compound powder of jalap, alone or with calomel, or the bitartrate of potass. The potassio-tartrate of iron may also be given, along with the bitartrate of potass, to act as a diuretic. The sulphate of magnesia or of potass, given along with sulphate of iron, will act upon the bowels and kidneys, besides introducing iron into the system. Where the bowels have been very obstinate, I have combined a small quantity of elaterium with the sulphate of iron and aloes, in pills. The restoration of the healthy action of the skin is of the first importance in these cases, and the cutaneous transpiration should be promoted by baths, friction, and exercise. A few warm baths will cleanse the skin and prepare it for the excretion of the perspiration, which must afterwards be kept up by friction of the surface and exercise. In several cases of chlorosis I have seen a single warm bath completely remove the œdema of the ankles.

THE ALKALOID SALTS, AND THEIR RELATIVE INFLUENCE ON THE ANIMAL FRAME.

By Messrs. T. and H. SMITH, Edinburgh.

It has often occurred to us, that a great deal of error exists among medical men, and that their ideas are exceedingly vague, regarding the effects on the action of medicines produced by peculiar states of combination, but more especially in the case of the more active vegetable alkalis. For instance: when a salt of morphia is used, one person prefers a muriate, another, a sulphate, and a third thinks that an acetate can alone secure the desired effects of the drug, unaccompanied by the idiosyncratic or disagreeable after-effects so apt to occur in some constitutions.

We think that the most proper way to arrive at a clear understanding of the real influence caused by the acid in a powerful vegetable salt,—say an acetate, or sulphate of morphia,—is to take into account the equivalents of its proximate constituents. Let us, for example, take the muriate of morphia. The equivalent of morphia itself, like most of the active alkaloids, is very high, being close upon 300. The equivalent of muriatic acid is only thirty-seven, being about a tenth of the equivalent of muriate of morphia; and as the medium dose of this last is only about the eighth of a grain, a single dose can only contain about the eightieth of a grain of muriatic acid. As the equivalent of acetic acid is fifty-one, and that of sulphuric acid forty, the argument applies with equal force to sulphates and acetates. Now is it not unreasonable, and as much an outrage upon common sense as the wild doctrines of homœopathy, to suppose for one moment that it can be of the least possible consequence to the patient whether the salt given be an acetate, a muriate, or a salt of any acid whatever? It may be said, that by the combination a peculiar change is produced, analogous to what occurs when a strong mineral acid is neutralized by an alkali, where the characters of both constituents are destroyed, and a new substance, possessing entirely new properties, produced. We do not think this is the case, in so far as medicinal action is concerned. We do not know a single fact sufficiently strong to give the least countenance to such an opinion. The only result, we conceive, that can take place, by combining the alkaloid with an acid, is to obviate

* See "Observations on the Use of Blisters, &c.," by James Turnbull, M.D., LANCET, Sept. 28th, 1844.

any impediment to its complete and quick action on the nervous or absorbing surface with which it is brought into contact. It is certain, that in the case of acetate of morphia, where, perhaps, this preference has been more shown, and the propriety of which has been less called in question than in any other instance, there must be some fallacy in the circumstances supposed to prove its superiority over the muriate; for there can hardly fail to be as much muriatic acid in the stomach, in the greater number of cases, as would be sufficient to decompose the acetate—a consequence resulting from its acid being so far behind the muriatic in strength of affinity; so that, although the acetate be the salt taken, the action on the system is that of a muriate, and not of an acetate.

In fixing our choice on the salt deserving of preference, the reasons on which we should found our judgment should be of a description somewhat like the following:—Which is the most readily and easily prepared? which is most readily got in a state of purity, and sufficiently soluble? and which is least liable to change or decomposition? Taking these characters for guides, in the case of the morphia salts, the muriate ought decidedly to get the preference. In the case of the quinine salts, the sulphate should be preferred, for on account of its sparing solubility on crystallizing, the greater part of the impurities are left behind in the abundant mother liquid.

It has also occurred to us, that it might be advantageous to medical men to suggest, that in administering externally some of the alkaloids, such as aconitina and veratria, in the form of ointment, the activity of the remedy would be more effectually secured by dissolving them in a few drops of a weak acid, such as the acetic, before mixing them with the ointment. In this way their absorption is more effectually secured, and disappointment in the result less likely to happen. In the case of aconitina, we have in this way proved on our own persons its increased activity; and if we mistake not, there is a fact of a similar nature in Dr. Fleming's lately published essay on "Aconitum."

Duke-street, Edinburgh, March, 1846.

CASE OF HYDATIDS OF THE UTERUS COINCIDENT WITH PREGNANCY.

By GEORGE YEATES HUNTER, Esq., Surgeon, Margate.

On Monday, March 30th, about six o'clock P.M., I was called to Mrs. B—, aged 23, in labour with her second child, Mr. W. H. Thornton, my assistant, who was engaged to attend, being absent.

On examination per vaginam, I found the os uteri dilated, and the head presenting; but the presentation was by no means distinct, and was ascertained with some difficulty, because a soft pulpy mass (evidently not the placenta) intervened between the presenting part and my finger.

After a few pains the membranes ruptured, at which time I heard a very peculiar crackling noise, and on again examining my patient, the infant's head had passed below the pulpy mass, which was now beyond my reach. The labour progressed very favourably, and the child, which was small, was born in less than two hours after my arrival. Mr. Thornton had arrived just before the child was born.

After waiting some time, it became necessary to remove the placenta. When the hand was introduced for that purpose, the uterus was found distended by what afterwards proved to be hydatids, measuring about three pints. They were in clusters, like bunches of grapes, some of them being the size of hot-house grapes, but others, and by far the greater number, of the size only of the common blue cluster grape.

When the placenta was detached, we found it lobulated, and of an average size; the hydatids appeared to have been attached to a part of its margin, as well as to the uterus. I have preserved a great portion of these hydatids and the placenta, of which I mean to make a preparation, for presentation to the College of Surgeons, should they think it worthy of a place in their museum.

The patient is going on very well; no untoward symptoms have yet shown themselves.

I am well aware that hydatids in the uterus have sometimes been met with, but I never saw, nor heard of, a case in which they were found in the pregnant uterus. I have shown the hydatids in this case to my medical friends in this neighbourhood, who consider the case unique and interesting.

It should be remarked, that there were in the above woman's case, no unusual symptoms during the progress of her pregnancy. I shall endeavour to keep this patient in view, for the purpose of ascertaining whether or not other hydatids are formed, either during, or in the absence of pregnancy.

Cecil-square, Margate, April, 1846.

ON THE CAUSES, PATHOLOGY, AND TREATMENT OF DEFORMITIES IN THE HUMAN BODY. (WITH CASES AND ENGRAVINGS.)

By JOHN BISHOP, ESQ., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, SURGEON TO THE NORTHERN DISPENSARY, LATE SENIOR SURGEON TO THE ISLINGTON DISPENSARY, ETC.

NO. IV.

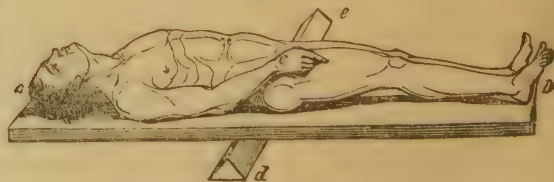
MECHANICAL CAUSES OF DISTORTION.

Effects of occupation.—Lateral deformities of the spine referrible to the necessity of the body obeying the laws of equilibrium, and movement of bodies in general.—D'Alembert's principle.—Position of the centre of gravity determined; solution of the problem of the maximum base of support in a given position; effects of weight on the attitudes of the body; effects of the use of the common wooden-leg, and also of the improved wooden-leg.

AMONGST the numerous occupations tending to distort the spine, may be mentioned those of watermen, waiters, harp-players, porters, and the London milkmen, to which may be added unequal lengths of leg, wooden-legs, crutches, &c. In almost all cases of lateral curvature resulting from mechanical causes, the altered form of the spine arises from the necessity that exists for the maintenance of equilibrium in all parts of the body under every change of posture, or application of extraneous force. All attempts to restore the figure by any other method than that of counteracting the disturbing force that has given rise to the deformity, must therefore necessarily fail. This being the principle on which the theory of the causes and treatment of such distortions is founded, we should endeavour to obtain a clear notion of the conditions requisite for the equilibrium of the body under different circumstances. The various attitudes which the several parts of the body are compelled to assume, in order to keep it in a state of equilibrium in different positions, are all referrible to the place of the centre of gravity, which must always be situated in a vertical line, passing within the base of support. If this fact, together with the effects of extraneous forces acting on the body, had been sufficiently studied by surgeons generally, the methods now adopted for the cure of distortions of the spine would never have been introduced.

When the body is acted on by any extraneous force or forces, the conditions necessary for a state of equilibrium are comprised in the following theorem.* In whatever manner several bodies forming a system change their motions, if we conceive that the motion which each body, were it quite free, would have in the succeeding instant is decomposed into two others, of which one is the motion which it really takes in consequence of the mutual actions of the whole system, the second must be such, that if each body were impelled by this force alone, (that is, by the force which would produce this second motion,) all the bodies would remain in equilibrio. To find the distance of the head and feet from the centre of gravity of the human body in a horizontal position, it is merely necessary to balance the body placed upon a plane ab , on a triangular prism $d e$, as in fig. 1; then draw a line on

FIG. 1.



the plane close to the edge of the prism; again balance the body in another position, and draw a line as before, the vertical line passing through c , the intersection of these lines will pass through the centre of gravity. After the plan of Borelli, Weber balanced a plank across a horizontal edge, and stretched upon it the body of a living man; and he found, when the whole was in a state of equilibrium, (in which the method of double weighing was adopted,) by accurate measurements, the total length of the body—

* This is the celebrated principle of D'Alembert, by means of which all questions of motion are reduced to those of equilibrium. It supplies a direct method of throwing dynamical problems into equations, and the difficulty is thus reduced to the solving of problems in pure mathematics.

millimetres. in.
1669.2 = 65.30852

The distance of the centre of gravity below the vertex—

m.m. in.
721.5 = 28.406455.

Above the sole of the foot—

m.m. in.
947.7 = 37.310949.

Above the transverse axis of the hip-joints—

m.m. in.
87.7 = 3.454729.

Above the promontory of the sacrum—

m.m. in.
8.7 = 0.341519.

As the horizontal plane of the centre of gravity lies between three-tenths and four-tenths of an inch above the promontory of the sacrum, it must traverse the sacro-lumbar articulation, which is also intersected by the mesial plane, because the body laterally is symmetrical; but, in order to determine exactly the position of this centre, MM. Weber balanced the body on the edge of a triangular prism in the erect posture, and let fall a plumb-line on each side, immediately over the prism, as seen in fig. 2. In this manner they found that

FIG. 2.



the plane meeting the two plumb-lines would, like the two former planes, intersect the sacro-lumbar articulation; and consequently, the point where the two former planes meet the latter is the centre of gravity in man. It will also be observed, that the plane meeting the plumb lines bisects simultaneously the occipito-atlantic, the sacro-lumbar, the hip, knee, and ankle joints, and that consequently all the corresponding parts of the body are balanced upon the axes of their respective joints, and must therefore be in a state of equilibrium, wherein the least amount of muscular action is sufficient for their support. When a man stands erect, a plumb line passing through his centre of gravity will fall between his feet. It is a subject of mathematical investigation, when the feet are equally advanced and equally inclined, as in figure 3, to determine the angle abc , which they must form with the prolongation of

FIG. 3.



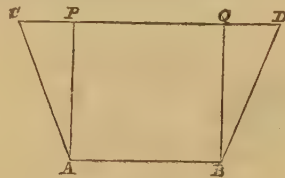
the line joining the heels in order to afford the greatest base of support. In general, where the legs are perfectly vertical,

it will be found that the line joining the centre of the heels is just equal to the length of the foot, and in this case the required angle will be 60° exactly. As the heels approach each other, this angle diminishes, and when they are close together, it is reduced to nearly 45° .*

Effects of attitudes.—In all persons, but more especially in those who are delicately constituted, the act of standing for lengthened periods in the erect posture is accompanied by a sense of weariness, and a new position is sought, which gives ease by the transfer of force from one set of muscles to another, as explained in No. 3; but this new position is such as is often prejudicial to the figure. If, for instance, one of the legs is flexed, the weight of the body is transferred to the other. To effect this, the trunk is rested upon the hip-joint of the supporting leg, for which purpose the pelvis must be inclined, so that the line passing through the axis of the hip-joints, instead of being parallel, becomes oblique to the horizon, and the whole trunk must so accommodate itself to this new position, as to bring all parts into a state of equilibrium, otherwise the person would fall to the ground! This attitude, which is so commonly assumed by young and delicate females, produces unequal pressure on the bones of the spine and intervertebral cartilages, and if continued for a long time, or frequently repeated, ultimately causes distortion, according to the examples already detailed in No. 2. The protrusion of the hip-joint of the flexed leg, the unequal height of the shoulder-joints, and the curved state of the spine, are effects which ought to be noticed and corrected before any bad consequences result. The mechanical analysis of the effects of standing on one leg will be shown, when the cases of unequal lengths of legs come to be investigated.

Effects of carrying weights on the head.—In Professor Andrey's "Orthopædia," published in 1723, we find the following plan recommended:—In order to induce a child to keep the head erect, "Lay upon the fore-part of the head anything that will

* It is evident that, if it were required to find the greatest base to oppose an overthrow from behind in the mesial plane, the feet must be at right angles to bd , and if to prevent a lateral overthrow, the feet must be in the line bd , produced each way. Hence it must be understood, that the maximum base found above is not always the most advantageous position to withstand a shock in one given direction.



Let $AB = AC = a$, $AP = x$, $\therefore CP = \sqrt{a^2 - x^2}$

To find the angle ACP when the area $ABCD$ is a maximum.

$$ABCD = 2 \triangle ACP + \square PB$$

$$= x \cdot \sqrt{a^2 - x^2} + ax$$

$$d. \text{Area} = dx \sqrt{a^2 - x^2} - \frac{x^2 dx}{\sqrt{a^2 - x^2}} + a dx$$

$$\frac{d. \text{Area}}{dx} = \sqrt{a^2 - x^2} - \frac{x^2}{\sqrt{a^2 - x^2}} + a = 0, \text{ when the area is a maximum.}$$

$$a^2 - x^2 - x^2 + a \sqrt{a^2 - x^2} = 0,$$

$$\therefore 2x^2 - a^2 = a \sqrt{a^2 - x^2}$$

$$\therefore 4x^4 - 4a^2x^2 + a^4 = a^4 - a^2x^2$$

$$\therefore 4x^4 = 3a^2x^2 \text{ or } x^2 = a^2 \frac{3}{4},$$

$$\therefore x = a \frac{\sqrt{3}}{2} = \text{Sin. } 60^\circ \text{ to rad. } a.$$

If A, B , coincide, the expression becomes

$$a^2 - 2x^2 = 0$$

$$\therefore x = \frac{a}{\sqrt{2}} = \text{Sin. } 45^\circ$$

easily fall off, such as a powder-box, or the like, and desire him to walk so as not to let it fall off. This may be made a sort of play to him, which he should frequently repeat; and it will be proper to reward him when he does right, by way of encouragement. Thus you will soon see the child hold his head upright; but you must conceal your design from him, if possible, which will make it succeed the better. It will be proper to have several children engaged in the same pastime, to raise an emulation amongst them, who shall do it. Children, when they are grown up, play at different sorts of games; propose this to them gravely, and tell them that the law of this game is, that whoever lets the box fall shall forfeit a pledge, which cannot be recovered again without undergoing a certain penalty, in the same manner as is usually done in other games. Thus, the child, by playing at this game frequently, will very soon acquire a habit of keeping his head straight."—Milkmaids who are accustomed to carry a pail nearly full of milk on their heads, and are proverbially upright, have been adduced by different authors as illustrations of the good effects produced by this method; but the real benefit is undoubtedly owing, not to the circumstance of carrying the weight, but to the necessity of maintaining a certain attitude, in order to prevent its falling; for we have seen in No. 2, that not only would any additional weight be injurious, but even the natural burden which the spine has to support—namely, the head, &c., tends to increase the distortion. Notwithstanding the advantage of carrying something on the head to correct a bad attitude acquired by standing awry, lounging, and other similar practices, it must be done with discrimination; for there are many delicate females who would soon become fatigued in so constrained a posture, and whenever weariness comes on, the exercise should be suspended. The duration of the exercise must, indeed, always be determined by the medical adviser, according to the health and strength of the individual. In all cases accompanied by softening of the bones, this plan is of course inadmissible.

Effects of carrying weights on the back.—When a weight is carried on the upper part of the back, there is a tendency to throw the trunk forwards: for example,—when a porter carries a burden, the attitude of the body must be accommodated to the position of the common centres of gravity of himself and his load. In figure 4, let G and L be the two centres of

Fig. 4.



gravity of the man and load, and g the common centre of the two; then, in order to bring this common centre into a vertical line passing through the base of support, it is obvious that the man must bend his body forwards.* In this case, the glutei muscles regulate the rotation of the trunk about the hip-

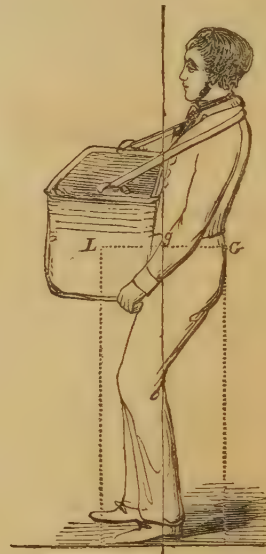
* Let the weight of the man equal W , and that of the load w , D = the length of the line Gg , and D = the line Ll ; then, as all the parts are in a state of equilibrium, we have

$$WD = wD.$$

But when the man walks with the load, the estimation of the force he expends to propel himself and the load forwards,

joints, whilst the extensor muscles of the trunk prevent the load from bending the spine too much upon itself. Notwithstanding this obvious and inevitable result, we find empirics recommending that lead weights should be carried between the shoulders by delicate females, in order to stretch the muscles of the back, and counteract the tendency to incline forwards. But, with such an object, the load should, in fact, be carried in front of the person, which would have the effect, not only of strengthening the muscles of the back, by bringing them into play, but also of throwing the trunk into an erect posture, provided the weight be adjusted to the inclination of the body. The attitude of corpulent persons, and of pregnant women, affords a good illustration of the effect of having the weight in front. But, to be more precise, suppose a weight to be slung from the shoulders in front of the person, so that its centre of gravity be far in advance, as in figure 5, and let G

Fig. 5.

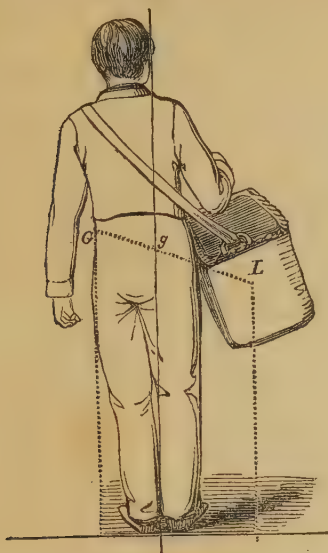


and L be the centres of gravity of the body and the load, and g the centre common to the two, as before,—in order that the body may be in an attitude to counteract the weight of the load, it must be thrown backwards. The flexors of the trunk will prevent its too great rotation about the hips, whilst the ligaments and articulations of the vertebrae preserve the figure of the spine, and counteract the pressure of that portion of the weight which is transmitted to it. Hence it is evident that, as the rotation of the trunk backwards is very limited, compared with its rotation forwards, we cannot support a weight in front anything nearly so great as one on the back. The same principles are applicable when weights act on the body on either side, as when they are placed before or behind; but, instead of the force acting in the mesial plane of the body, it acts perpendicularly to it. Such is the case when a weight is held hanging at the side in one hand, or when it is placed on one shoulder, or slung at the side from the opposite shoulder, as in figure 6.

A nursery-maid carrying a child on one arm, is a familiar example of a weight acting laterally. In all these cases the vertebral column is curved laterally, in order to throw a sufficient portion of the head and upper part of the trunk on that side of the mesial plane which is opposite the side on which the weight acts. By these means the convex side of the curve is on the same side with the load, and consequently the shoulder of the loaded side is also the higher. In the application of exercises with weights, to counteract lateral curvatures of the spine, when the nature of the case renders such a plan admissible, care must always be taken to ascertain the number of the curves, because, as we shall after-

becomes a problem much more difficult to solve, than in the above case, that simply of equilibrium whilst standing in a given attitude. The investigation of this subject will be found in Poisson's "Traité de Mécanique," tom. ii., and in the Messrs. Weber's "Mechanick de Gehwerkzeuge." The latter appears to have taken the most correct method of viewing the subject.

FIG. 6.



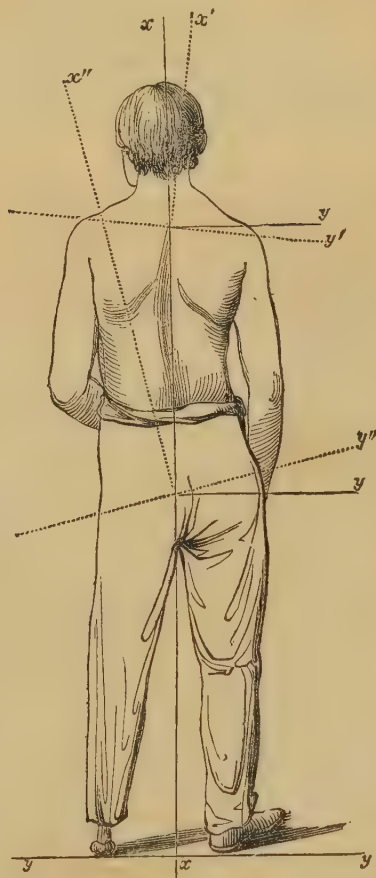
wards see, the determination of the part to which the weights should be appended, depends on the question whether the sum of such curves is an odd, or an even number.

Effects of wooden legs.—When an ordinary wooden leg is substituted for the natural leg, a system of actions is produced very different from that which originally existed. The wooden leg being incapable of movements of extension and contraction like those of the natural leg, the gait of the person in walking is entirely altered, and the centre of gravity describes a very tortuous path. The natural path of the centre of gravity in walking deviates but little from a straight line, (see "Cyclopædia of Anatomy and Physiology," article "Motion,") having, in fact, a slightly undulating motion, both vertically and horizontally. But, when a single wooden leg is substituted, as above mentioned, the effects will be as follow:—Suppose the left to be the wooden one, and the person about to take a step by lifting it from the ground, the natural leg being foremost, and supporting the trunk, while the end of the wooden leg is at its greatest distance on the ground, if the hinder leg were a natural one, it would be flexed as soon as it was raised, in order that, being thus shortened, it might swing freely past the other without any necessity for a lateral inclination of the trunk; but, as in this case it is inflexible, the body must either incline greatly towards the opposite side, to allow the leg to swing past in a nearly vertical plane, or else the end of the leg must describe a curve outside that plane. In both these cases the centre of gravity is thrown out of its normal course towards the right side. This is obvious from what we have just stated, when the left leg swings forward in a vertical plane; and it is no less true when its extremity describes a curve; for then the weight of the left leg is thrown so far out on the left side, that the equilibrium of the person can only be preserved by inclining his body on the right side. We will now suppose the wooden leg to have swung forwards, and in its turn become the supporting leg. When the right leg is lifted off the ground, it is flexed, and swings past the left in a nearly vertical plane, but the centre of gravity describes a curve round the end of the wooden leg, and though very slightly deflected from that plane, it is raised very much above its normal position. From this description it is clear that, in such a case, progression is effected by an unequal and dissimilar action of the legs. When the natural leg is the support, we see that there is a considerable deflection of the centre of gravity from the mesial plane, and but little from its ordinary horizontal position, whilst the contrary takes place when the wooden leg is the support; but these two effects by no means counteract each other, for the whole deflection in both cases is always towards the right side, and therefore must tend to produce distortion.

A second cause of deformity exists in the want of force in the wooden leg to propel the body forwards. The right leg begins to urge the trunk onwards by its extension, from the moment the centre of gravity has passed the vertical line through the ankle-joint, and continues to do so until it has attained its maximum of elongation; but, when the wooden leg has taken the place of the other, and the centre of gravity

has passed the corresponding vertical line, since this leg has no vital force, or power of extension, the body begins to fall down the curve described by its centre of gravity, and continues to fall, till the right leg again reaches the ground. The effect of these unequal actions is to twist the spine about its axis, and thus throw one shoulder in advance of the other, the right shoulder being foremost. In addition to this, the right leg always comes to the ground with a spring, but the wooden leg suddenly, so as to inflict on the hip-joint a considerable concussion, which is transmitted to the trunk. The step, too, is much shortened, for in ordinary walking the maximum length of the step depends on the height of the centre of gravity from the ground, at the instant when the hinder leg quits it; for the two legs with the horizontal distance between them form at this moment a right-angled triangle, of which the hypotenuse is the hinder leg. Hence it is obvious that the more the centre of gravity is lowered by the flexion of the forward leg at the moment the hinder leg quits the ground,—that is, the more the altitude of the right-angled triangle is diminished, the more will the base of it, or the length of the step, be increased; but, with a wooden leg this cannot take place, and therefore the length of the step is diminished. Hence it is that we never see a person with a wooden leg who has not a distorted state of the spine, at least after it has been used for any considerable time. Fig. 7 is a

FIG. 7.



case illustrating this fact, in which $x' y'$ and $x'' y''$ are the corresponding inclinations of the hips and shoulders to the vertical and horizontal directions x and y . The leg of the boy was amputated by the writer of this paper, about five years ago, on account of a scrofulous affection of the knee-joint, and the boy has been lost sight of until a very few days since, when the spine presented the appearance given in the figure.

It is clear, therefore, that a better mechanism than that of the common wooden leg is required to obviate the evils just enumerated. The rich may, it is true, have the advantage of an improved and more expensive kind of wooden leg, in which the power of the bending parts analogous to the knee, ankle, and toes, is so admirably imitated, that no apparent distortion of the trunk is produced. So well,

indeed, has this kind of artificial leg been adapted to perform the motions of the natural one, that it is impossible to discover any difference between them; but, at the same time, the cost of this substitute for the leg is, unhappily, altogether out of the reach of the poor. When we reflect that every person who is obliged to wear the common wooden leg, not only loses the power of quick walking, but becomes deformed, it is a matter of great importance that surgeons should be familiar with these consequences, more especially as it is too much the custom at our hospitals, as well as in private practice, for them to consider their duty at an end when they have amputated the limb, healed the stump, and directed the patient to an instrument maker: on the contrary, a very important duty still remains to be performed—namely, that of promoting the future welfare of the patient by prescribing a proper substitute for the natural limb; and the immense funds subscribed for the support of most of our hospitals would surely afford some small allowance to be appropriated for the purpose of supplying poor patients with such improved wooden legs, as would enable them to perform all the ordinary occupations of life without difficulty or distortion. This is a subject that army and navy surgeons, more particularly, would do well to take into consideration; since, with the assistance of such a wooden leg, soldiers and sailors might be enabled to discharge most of the common duties of the service, instead of being dependent, as they now are, from the moment they are deprived of a natural leg. When a person has occasion for the use of two wooden legs, the action being similar on both sides, no deformity of the trunk results, but the base of support at the lower end of the leg is so small, that progression is performed with great hazard of falling. Under these circumstances, the centre of gravity also moves in a series of arcs, instead of in nearly a horizontal line, and the velocity is mechanically restricted within much narrower limits than is the case with the natural legs.

TREATMENT OF BRONCHITIS IN INFANTS.— EMPLOYMENT OF BLISTERS.

By JOHN THOMSON, Esq., Surgeon, Aberfeldy, Perthshire.

I CAN bear testimony to the good effects of calomel and ipecacuanha in the treatment of bronchitis in infants, (as recommended by Mr. Miller, No. 26, p. 703, of the last volume of *THE LANCET*), in so far as the effects of these valuable remedies go; but they cannot be exclusively depended upon, even when assisted by the warm bath and leeches; and “the application of blistering plasters to very young children,” so much dreaded by Mr. Miller, is not only “a safe plan of proceeding,” but in many cases becomes absolutely necessary. Mr. Miller has taken eighteen months as the youngest age for an illustrative case, but has not favoured us with the result of his experience in the treatment of infants, as many days or weeks old, who are peculiarly liable to this disease, and not a few of whom die suddenly in consequence of its attack.

According to my experience, “a warm bath” in this disease, at any age, is strongly to be objected to, when “the bronchitic affection is very severe,” as its employment, however carefully conducted, is frequently followed by a general coldness of the surface, which increases the pulmonary congestion, instead of determining to the skin, while the process itself, stripping, &c., must be very distressing to the little sufferer, who frequently requires to gasp for breath.

I will now state my plan of treating this disease in very young infants. If the child were but newly seized, and is a good deal “stuffed in the breast,” pulse and breathing very frequent, and heat of surface much increased, I would adopt Mr. Miller’s plan so far as by giving calomel and ipecacuanha, of each a quarter to half a grain every three or four hours, to infants from two or three weeks to two or three months old; a grain of each to those from three to twelve months, less or more, according to the strength of the child and severity of the symptoms. Should the first dose produce vomiting, and several others be retained, so much the better; or occasional vomiting, when not severe, is rather in favour of than against the treatment, as much viscid mucus is discharged thereby.

As the cough, difficulty of breathing, and other symptoms, are generally worse toward evening and during the night, followed by a remission toward morning and during the day, the calomel and ipecacuanha ought to be given as above while the severity of the exacerbation continues; and from a third of a tea-spoonful to a full tea-spoonful of the following mixture, every two or three hours during the remission:—ipecacuanha wine, two drachms; antimonial wine, a drachm; solution of muriate of morphia, and tincture of henbane, of each twenty

minims; syrup of tolu, half an ounce; water, an ounce and a half: mix. The rectum should be cleared out with warm water-and-milk, and the child placed in bed, with its head and shoulders elevated, otherwise the efforts to cough and expectorate may never be effectually accomplished. The nurse should also lie in bed with it, especially during very cold weather, in order to maintain the proper degree of warmth, which is much better than heating the air of the room to the temperature frequently required. This plan will succeed in recent and not very severe cases, or in the first stage of the disease. But should the case become worse—face livid, eyes closed, breathing still more frequent, short, and gasping; nostrils widely dilated with each inspiration; heaving of the chest and shoulders; the air scarcely penetrating the bronchi, which are now filling fast with secretion, every expiration being succeeded by a distressful panting moan; inability to take the breast: these symptoms continuing without any intermission, —and which I call the second stage,—though it is still highly proper to continue the use of the calomel and ipecacuanha, nothing will save the child without blistering the breast. This can be done with perfect safety, while the loss of a very small quantity of blood would speedily produce a fatal termination, by prostrating what remains of the vital powers. I have several times seen fatal effects from loss of blood by leeches applied to infants under twelve months, in this and other diseases; while I have never seen any danger arise from blistering very young infants with the common cantharides plaster, applied to the bare skin without any interposing substance.

The “severe sloughing” and other mischief which sometimes take place, must be in consequence of culpable neglect in allowing blisters to remain on until they produce an “escharotic,” and not simply and solely a *rubefacient* effect. This can be effectually produced by leaving the common blistering plaster (spread thin on fine cotton or white calico, and its surface smeared with olive oil) on until the skin becomes red, which will happen in two, three, or four hours, according to the age of the child, strength and temperature of the skin. A soft warm poultice, in a muslin bag, oiled, ought then to be applied over the reddened surface for two or three hours, when the cuticle will be found elevated half an inch, and full of serous fluid, and great relief afforded to the little patient. The blistered surface must be dressed, until healed, with lard, fresh butter, or any simple unctuous substance, spread on very fine cotton. I have several times seen blistered parts “fester,” in consequence of the coarseness of the texture of the dressings.

The practitioner should not order a blister to remain on an infant for a definite period, but direct its removal as soon as redness is produced, which the nurse can easily ascertain by paring its edge occasionally. Many very young infants have I seen rescued from a speedy death, and others much relieved, by blisters thus managed. Of course, the acetum cantharidis has its advantages, but it cannot be applied under every circumstance.

As soon as the more dangerous symptoms have been subdued, the use of the above mixture ought to be resumed or commenced, and if given at bedtime, and during the night if required, it will procure rest and promote expectoration.

During the progress of this disease, when children are unable to take nourishment, and especially when young infants cannot take the breast, the use of bland enemata of warm water, milk and sugar, beef tea, &c., once or twice daily, in small quantities, so as to be retained for some time, will prove of much benefit, by assisting in removing offensive matter from the bowels, and supplying the system with nutritious fluid by absorption. If this be not done, the various secretions will very soon become suspended, and, ere long, cease altogether, when medicines will fail to exert any remedial influence.

Aberfeldy, Perthshire, Jan. 1846.

SYMPTOM IN HYSTERIA, AND ITS REMEDY.

To the Editor of *THE LANCET*.

SIR,—Perhaps a few remarks concerning a symptom of very frequent occurrence, may be of service to your younger readers. I allude to the pains in the left and right hypochondria, so often complained of by hysterical women.

These pains are generally accompanied by other hysterical symptoms, as globus hystericus, and a copious flow of limpid urine. They are not of an inflammatory character, and are generally relieved by those remedies which have so extraordinary an effect in all forms of hysteria,—viz. the foetid drugs.

April, 1846.

Your obedient servant,

E. J. B.

ON ELEPHANTIASIS.

By E. BASCOMB, Esq., Surgeon, London.

Its seat, pathology, and appearance; symptoms; operation on hypertrophied scrotum; predisposing causes; treatment.

THIS disease has been variously described, some writers confounding it with leprosy, others considering it as a primary malady; much confusion has consequently arisen from the misapplication of the term, elephantiasis distinguished from the greatly increased size of the parts involved being entirely and totally distinct from leprosy.

Elephantiasis I take to be rather the sequelæ or degeneration of other disease, its appellation originating, doubtless, in the disfigurement and hideous magnitude resembling the limb of an elephant. Although the lower extremities and scrotum are more frequently the seat of this disease, it often attacks the upper extremities, involving sometimes the pectoral muscles—it also attacks the labia pudendi in females. From observation during a long residence in British Guiana, where the disease is rife, I am induced to think the hypertrophy is caused in two ways—viz., from erysipelas, and from a want of tone in the lymphatics, induced by a sort of sub-inflammation in them; that arising from erysipelas, as is generally the case in that malady in the West Indies, being more or less complicated with visceral disease; that from the latter seldom or never so, being more of a local nature, a greater susceptibility to which is observable in those of a lymphatic temperament. When the sequelæ of erysipelas, it is not until after repeated attacks of that disease, and persistence longer of each attack, that enlargement of the part ensues, the inflammatory action at each accession seemingly penetrating

deeper, involving the whole of the subcutaneous cellular substance, producing infiltration of that tissue, and, ultimately, extensive partial disorganization, which, degenerating into a variety of shapes, becomes studded with stone-like excrescences or protuberances, intersected, especially about the instep and ankle, with weeping fissures or rhagades, partaking of a sandy or horny appearance. When it commences in the lymphatics, a weariness is felt along their course in the limb, and a benumbed sensation, as though (as it is termed) asleep; a dull, deep-seated, gnawing pain is always present, causing a sickening at the stomach, amounting sometimes to vomiting, and unfitting the patient for general exertion. It is unattended by fever or discoloration, (rosy-blush, as in erysipelas,) the pulse is small, feeble, and frequent; tongue pale, or white; and the limb imperceptibly enlarges, assuming a doughy feel, the temperature being lower than natural.

Should the scrotum be fastened on, a puffiness and intolerable itchiness are present, and if the surface be abraded by scratching or otherwise, lymph exudes profusely therefrom, forming crusts, which, adhering firmly, induce an unpleasant prickly sensation when in contact with the dress. The parts by-and-by become thickened into lumps, and run into one confused mass, attaining, in some cases, to an enormous size, with so little sensation as to admit of its being kicked at like a foot-ball; in one case, when amputated, the scrotum weighed ninety-two pounds avoirdupois, filling a pork-barrel!

The testes are usually sound,—at least, are not necessarily implicated: on one occasion I had to remove one of the testes, it being schirrus from a blow received some years previously to the scrotum becoming enlarged, as the patient himself explained. Hydrocele is, however, a pretty frequent



concomitant, but requires no other treatment at the time of amputation than the excision of a sufficient portion of the tunica vaginalis.

In operating for the removal of an hypertrophied scrotum, the operator should be guided in the form of his incisions principally by two circumstances—the size and shape of the tumour at its neck, and the position of the navel-like opening of the prepuce, leaving sufficient integuments of the scrotum for the protection of the testes as of the penis for its covering.

In three cases in which I operated, the parts healed by the first intention, and when so healed, I found no difficulty in bringing the integuments saved to the scrotum and penis to a tolerably healthy state by means of frequent superficial scarifications, the application of heated air, and the internal exhibition, three times in the day, of the hydriodate of potash, in ten-grain doses, taken in some carminative vehicle, such as a warm weak infusion of ginger; the parts about the penis and neck of the tumour partaking less of the hypertrophy.

On the dissection of a leg, which I amputated above the knee, the disease seemed to have been seated in the subcutaneous cellular tissue, the muscles, ligaments, &c., being apparently comparatively sound, the infiltrated or hypertrophied substance at the back of the leg, the calf, measuring six inches and a half in depth or thickness, consisting of a fatty bacon-like substance, with few bleeding vessels. I should state, however, that the bloodvessels (veins) above the knee, where the knife was applied, were unusually large, admitting, at the onset of the operation, of such a rush of blood as to startle one for the moment with the idea that the artery was not properly under command.

On the inspection of a scrotal tumour, in which the substance was very similar to that of the leg, it was interspersed with hydatid-like forms, from which, when cut into, a tenacious transparent fluid escaped.

I have said that I consider peculiarity of habit a predisposing cause; another may be found in the general relaxation and debility of the system from climatic influence.

The exciting cause I attribute to repercussion of cutaneous exhalation from cold air, or cold ablutions of the genitals and lower extremities—in fact, of the entire body, so common in warm climates, in the evening, after the exhausting efforts of the day, the extremities being with the feet uncovered, exposed, during that time, to the direct heat of a burning soil, and surrounded by the heated exhalations therefrom.

With reference to the treatment of this disease, little or nothing can be done when it has arrived at that stage, properly speaking, termed Elephantiasis, disorganization to too great an extent having already taken place.

If the lymphatics be the seat of the malady, rest in the recumbent posture is of the first consideration, but unfortunately seldom or never attended to until it be too late. Cold spirituous evaporating lotions, applied by means of flannel,* will be found grateful to the patient, and afford great relief. Gentle aperients should be administered, purgatives being decidedly injurious. After the subsidence of inflammatory action, a flannel roller, properly applied, so as to support and

* Flannel is recommended as being preferable to either linen or cotton rag, not drying so soon as either, and for keeping a larger quantity of the lotion like a sponge; at the same time, not interfering with the evaporation nor heating the part.

give tone to the valvular conformation of the lymphatics, as well as the surcharged cellular tissue, should be had recourse to. At the same time, the internal exhibition of the ioduret of iron, or hydriodate of potass, in some warm carminative,—and friction, by means of the flesh-brush, or horsehair glove, with heated air, occasionally medicated with sulphur, will be found excellent adjuvants. When speaking of the bandage, it must be understood that support, not compression, is wanted, the injudicious application of the roller, or laced stocking, often doing much harm, by causing an extension of the malady to parts seated higher up.

In incipient attacks of the scrotum, free superficial incisions, by means of the cupping scarificator, should be persevered in to the removal of the serous deposit; and astringent cooling lotions, such as the chloride of lime, sulphate of zinc, &c., diligently applied, the internal treatment being that observed when the extremities are affected.

In conclusion, unless those who are so unfortunate as to suffer from this malady be in circumstances to enable them to guard against cold, &c., by keeping the parts properly protected by clothing, shoes, &c., very little, or nothing, may be expected from any mode of treatment.

Craven-street, Strand, March, 1846.

ILLUSTRATIONS OF INFLAMMATION, ULCERATION, & INDURATION OF THE CERVIX UTERI.

By J. HENRY BENNET, M.D.,

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DEEP CAUTERIZATION WITH POTASSA FUSA.

Chronic inflammation, ulceration, and induration of the uterine neck in a young married woman, without family, treated by deep cauterization; severe partial prolapsus. Very rare case.

At the beginning of May, 1845, I was consulted by Mrs. G—, a young married lady, aged twenty-two, residing in London. She was of good constitution, and had always enjoyed perfect health until her marriage, which took place four years previous, at the age of eighteen. She had never conceived. Shortly after marriage, she was attacked with leucorrhœa, and menstruation, which had previously always been easy and free from pain, became difficult. This state of things continued for about a year. She then began to feel a sensation of pelvic weight and bearing-down on walking, and after any exertion. This feeling gradually increased, until one day, after a long walk, she felt the womb fall down quite to the external parts. Being alarmed, and in considerable pain, she returned home, went to bed, and sent for her medical attendant. On examining her digitally, he told her that she was labouring under prolapsus of the uterus. He then returned the prolapsed uterus, kept her in bed for a week, forbidding every kind of exertion. The former bearing-down sensations, however, returned as soon as she got up, and very shortly afterwards, the same accident—the falling of the uterus down to the vulva, again occurred, after fatigue; it was treated as before. From this time forward, the uterus always remained very low, and on any great exertion appeared, she states, at the orifice of the vulva. The leucorrhœal discharge continued to manifest itself, and was occasionally streaked with blood; she experienced also pains in the hypogastric and lumbar regions; menstruation was painful, and her general health became disordered; congress was not painful. After suffering in this manner during a couple of years, without benefiting from medical advice, she was advised to go to Paris, to consult M. Lisfranc.

She accordingly left town in September, 1844, and on her arrival in Paris, placed herself under the above-named celebrated French surgeon. By him she was told that she was suffering from engorgement and ulceration of the neck of the uterus, and placed under his usual treatment. This treatment consists, principally, in rest, occasional cauterization of the ulcerated surface with the nitrate of silver, emollient vaginal injections, and monthly small bleedings from the arm. Finding herself pretty nearly in the same state as at first, after four months of this treatment, she got tired, and applied to M. Ricord. This surgeon, after giving the same diagnosis as M. Lisfranc, also cauterized the ulcerated surface occasionally with a fluid caustic, and prescribed vaginal injections with the nitrate of silver, and complete rest. After three months treatment he pronounced her cured, and she returned to her husband in London, much improved in health.

It was a few weeks after her return that I saw her. She wished to know whether the cure which M. Ricord had announced was real and permanent, as since her return she had experienced many of her former sensations. It appeared that when she left Paris all leucorrhœal discharge had ceased, also the lumbar pains, and that she did not experience the sensation of the uterus being low; she had then been lying on a sofa for months. This sensation, however, returned soon after she got back, and this it was that induced her to consult me.

On examining per vaginam, I found the cervix low down in the vagina, not more than an inch and a half from its external orifice; it was slightly retroverted, very voluminous, as large as an egg, perfectly smooth and equal, and extremely resistant to the touch. There was no velvety, mossy sensation. On introducing the middle-sized conical speculum, I found that it exposed only part of the organ: I was obliged to use the bi-valve one, in order to uncover the os and inferior lip, owing to the very large size of the superior one. There was no ulceration, but around the os, especially on the superior lip, in an extent as large as half-a-crown, there was the trace of a former ulceration. This region, instead of being of a rosy white, as it would have been had the tissues underneath been healthy, was of a livid violet hue. The surrounding part of the cervix was deeply congested, and of a vivid red colour.

The cervix uteri was evidently hypertrophied to an extreme degree, and still the seat of chronic inflammation. The Paris surgeons had cured the ulceration, but they had left behind the inflammatory induration and hypertrophy which complicated it. They had therefore merely overcome one of the elements of the disease, and it was evident to me that the ulceration would soon reappear when the patient reassumed the duties of her position; that is, if the organ was allowed to remain in the state it then was. The livid surface which the cervix presented might, indeed, be compared to the cicatrix which forms on a chronically inflamed and ulcerated varicose leg after great care and nursing, and which breaks out again as soon as the patient resumes his occupations. I could not, however, make up my mind at once to propose to this lady, who had been just treated, lying on her back on a sofa for more than seven months, and had been pronounced cured by an eminent surgeon only a few weeks before, to again submit to a tedious and harassing treatment. I was also dubious how far my opinion would be complied with. I therefore told her candidly the state of things; that she was only half cured, that the womb was still too large, and that that was the reason it fell; that she might get completely well, but that I scarcely anticipated such an event. At the same time I advised her to use frequently cold water vaginal injections, not to exert herself in any way; and should the leucorrhœal discharge return, or the lumbar pains and prolapsus increase, to consult me again on the subject. I did not advise a pessary, because I felt certain that its contact with the cervix would only accelerate the ulcerating of the mucous surface. Besides, according to my view, the course to be followed in such a case is clear. No mere palliative method of treatment ought to be adopted, but the disease, if seriously treated, ought to be attacked by those measures only which are capable of removing it entirely. In my own mind I felt pretty certain, that in delaying the treatment I was only giving the patient a little respite—a little breathing time.

As I had anticipated, on the 7th of August, two months after I had first seen Mrs. G—, she called upon me, and stated that the discharge had returned, although not very abundantly; that she experienced considerable uterine and lumbar pains, and that whenever she walked the uterus came down very low, which made her feel extremely ill. On examining with the speculum, I found that the livid surface of the cervix had ulcerated in its entire extent, as I had anticipated it would, and was secreting pus abundantly. The adjacent mucous surfaces of the cervix and of the superior region of the vagina were congested, and in addition to the deep-seated, regular, and general hardness of the hypertrophied cervix before recognised, there was a superficial puffiness, which had still further increased in size and weight, and accounted for its still further weighing down the uterus. The indication for treatment was evident. The ulceration was a mere epiphenomenon scarcely worthy of notice. The real disease was the chronic general inflammatory induration of the cervix, and it was that which had to be subdued. Had the disease existed in a woman who had had children, I should not have hesitated a moment to have had recourse to deep cauterization with the potassa fusa at once, as I should have concluded that it alone, or cauterization with the actual cautery, was a sufficiently powerful agent to effect a cure. General and obstinate hypertrophy and induration of the

cervix uteri is, however, so uncommon a form of the disease in women who have never conceived, that I was loath to believe that extreme measures would be absolutely necessary with my patient. I thought, that although so chronic, and apparently so general and deep-seated, the induration might possibly subside under the influence of a more energetic antiphlogistic treatment than that previously followed.

With the intention of testing these views, I applied the following day ten leeches to the cervix, taking care that they fixed on or near the ulceration. They filled very rapidly, as usual in this region, and the blood afterwards oozed from the leech-bites nearly as rapidly as if so many veins had been opened. She lost nearly a pint of blood before I left the room. On examining the cervix through the speculum which I had used to apply the leeches, previous to extracting it, I found the mucous surface quite blanched; and on practising the toucher, I ascertained that it had diminished considerably in size. What remained presented a smooth, nearly stony hardness, and appeared an indurated nucleus of hypertrophy, which gave me but little hopes of my being able to subdue it by any but the most energetic means. In the course of a few days I again examined my patient, and found the cervix more voluminous than when I had last examined it, but considerably less than previous to the application of the leeches. The congestion had returned, and consequently the sensation of deep general induration was not quite so marked. I touched the ulceration with the nitrate of mercury. On the 20th, I again applied ten leeches; they bled abundantly, but not so much so as on the previous occasion, again blanching the cervix, and reducing it, for a short time, to a nucleus of induration. The catamenia followed a few days afterwards, and were more than usually abundant.

On examining Mrs. G.— early in September, after the cessation of the catamenia, I found that the cervix was reduced to two-thirds of its primitive size, and was higher in the vagina. She had lost the sensation of pelvic weight, as also a peculiar irritation about the neck of the bladder, of which she had much complained previously; she had little or no lumbar or hypogastric pain; the ulceration had begun to heal. I had obtained from the leeches, I presumed, all the benefit which I could anticipate, and saw that, the cervix remaining still deeply indurated, more energetic treatment was necessary. I was, however, still loath to have recourse to such treatment, as the extreme rarity of *obstinate* induration of the cervix in women who have never conceived, led me to think that, evident and confirmed as it was, it might yet give way under milder measures. Having, therefore, thus obtained a reduction of one-third in the size of the hypertrophied organ, and the ulceration showing a tendency to heal, I put my patient on the usual treatment for ulceration—viz., rest, astringent vaginal injections, occasional cauterization with the acid nitrate of mercury, or with the nitrate of silver, an occasional saline purgative, light diet, and hip-baths.

Under this treatment, on the 20th of October, the ulceration had all but healed; there were no pains, and the uterus had further ascended in the vagina. But, to my mortification, what remained of the hypertrophied cervix was still hard and indurated, and the healed surface presented the peculiar violet appearance which I had remarked on Mrs. G.—'s first application to me. I had evidently got a step further than the Paris surgeons: I had reduced the cervix to nearly one-half of the size they had left it; but there was still chronic hypertrophy, and deep-seated chronic inflammation. I saw that if I allowed the ulceration to heal, and then dismissed her as cured, the ordinary exertions of life would bring down the hypertrophied cervix, merely supported by the great tonicity of a vagina which had never been distended by parturition, and that ulceration and its consequences would soon return. I therefore at once determined to cauterize deeply the parts indurated, principally the anterior lip, as the only remedial means likely to succeed.

With the Vienna paste, equal parts of potassa fusa, and quicklime, I cauterized deeply, in the way I have described in my "Treatise on Uterine Inflammation," the centre of the indurated tissue, producing a black eschar about the size of a shilling, but more especially on the anterior lip. The only modification which I introduced in the *modus operandi* was, that instead of extracting the circular speculum after the application of the escharotic paste, as I have recommended, I left it in situ until the termination of the operation. This is an additional precaution which I have lately adopted. It is an additional guarantee against the accidental fusing of the caustic, and, moreover, enables the operator to cleanse and wash carefully the cauterized surface after the operation, and to ascertain at once the extent of the region cauterized,

before he withdraws the speculum. I then recommended rest and quiet, and vaginal injections with milk-and-water. The slight pains occasioned by the cauterization subsided the following day, and she remained as easy as usual until the 25th, when the catamenia appeared. This was a little earlier than their usual period, and had I been aware that they were so near, I should certainly have deferred the cauterization, as the eliminatory inflammation that sets up to bring about the separation of the eschar was certain to be increased by the menstrual irritation. This was in reality the case: she experienced rather severe uterine pains whilst the menstrual flow lasted, and the irritation about the neck of the bladder, from which she had been free for some time, returned. The menstrual flux was not quite as abundant as usual.

On the 29th, I was able to examine her. She merely experienced then a little pain above the pubis. On exercising the toucher, I could perceive the loss of substance produced by the separation of the eschar; whilst the organ itself was as voluminous, but not by any means so hard, as before. The introduction of the speculum was rather painful, and the cervix was found tender, of a vivid scarlet red. Where the potassa had been applied, there was a rather depressed granulating surface, which I touched slightly with the nitrate of silver. The eliminatory inflammation had evidently propagated itself to the tissue of the cervix, as I had wished and anticipated. The important point was to keep it limited to that region. With this view, I told my patient to remain perfectly quiet, to live rather low, and to use emollient injections. The following day, rather severe uterine pains set in, but without any febrile reaction; and a very abundant purulent discharge made its appearance. I confined the patient to the sofa, applied a poultice to the abdomen, and ordered tepid hip-baths night and morning, and frequent vaginal emollient injections.

On the 2nd Nov., the hypogastric and lumbar pains having nearly entirely subsided, I examined per vaginam. The vagina was bathed in muco-pus, and to my great satisfaction, I found the cervix scarcely half the size it presented a few days previous, and perfectly soft throughout its tissue. The inflammation which had set up subsequently to the elimination of the eschar, had evidently been followed by the desired effect—the melting of the chronically inflamed and indurated organ. The uterus was slightly painful on pressure.—Same treatment. The purulent discharge rapidly diminished, and in the course of a few days nearly subsided to the condition in which it was before the operation. At the same time, all local pain and tenderness on pressure disappeared, what remained of the cervix again becoming as hard as before the operation. I then found that the melting of tissue had principally taken place in the anterior lip; the inferior one was still very large and hard. Previous to the application of the potassa, the superior lip was so large as to cover the os uteri and inferior lip, which could only be brought into view by expanding the bivalve speculum to its utmost extent. Now the os fell into the conical speculum at once, along with the still hypertrophied cervix.

Matters remained in this state for a few weeks, the ulcerated surface gradually healing under proper local treatment, but I plainly saw that a repetition of the application of the Vienna paste on the lower lip was absolutely necessary to complete the cure, the deep-seated induration and hypertrophy of that part of the uterine neck remaining stationary.

On the 4th of December, I therefore again applied the Vienna paste to the still hypertrophied and indurated lower lip of the cervix, adopting the same precautions as before. The result of the operation was equally satisfactory. The eliminatory inflammation was, however, more moderate, as I took care to be a week after the appearance of the catamenia; and the symptoms of uterine irritation were consequently less marked. As before, the cervix softened under its influence, and then melted, as it were, leaving little or no induration behind; the indurated tissue having been gradually absorbed during the subsidence of the eliminatory inflammation which accompanied the separation of the eschar. When the acute inflammation of the cervix had disappeared, I found, to my great satisfaction, that the uterine neck had all but regained its natural size, and that the womb had completely ascended into the cavity of the pelvis, the cervix occupying its natural position, although still slightly retroverted. The ulceration of the superior lip had partially healed, and the surface on the inferior one, from which the eschar had separated, was covered with healthy granulations.

The chronic inflammatory induration and hypertrophy of the uterine neck had thus, at last, been totally overcome, and with it the prolapsus, or falling, of the uterus, which the in-

crease in weight of the cervix had alone occasioned, had entirely disappeared. The case was reduced to one of simple ulceration of the cervix, and merely required the usual treatment of such forms of disease. This treatment (consisting in caustics, astringent or emollient topical applications, &c.) was persisted in with slow, but constant, improvement until the end of the present month, (March, 1846,) when the healing process was at last completed. For the last six weeks there had merely been superficial and limited excoriation of the lower uterine lip, which was probably kept up by that part of the cervix being in contact with the lower wall of the vagina, owing to the retroversion of the cervix which I have mentioned. This close contact of the two surfaces evidently prevented the vaginal injections reaching the ulcerated region. To remedy this, I made my patient, an intelligent person, and very anxious to get well, herself place every night a small pledget of lint, soaked in a weak solution of nitrate of silver, and tied to a piece of silk behind the cervix. This she withdrew in the morning. Within ten days, the ulceration was healed.

From the time the ulcerated surface began to cicatrize, after the last deep cauterization—that is, from the latter end of December, I found that the parts that healed assumed a healthy rosy-white hue, characteristic of healthy texture underneath. This is now the colour of the entire cervix; its coloration is now, indeed, perfectly natural, with the exception of a few small red specks, that frequently remain on the cicatrized surface of the uterine neck, for a few weeks after complete cicatrization of an ulceration. The cicatrized surface is perfectly soft on pressure; there is no rough or hard cicatricial tissue to be felt or seen. The cervix is still a little fuller and firmer than it usually is in a female of twenty-three who has had no family; but these states are not sufficiently manifest to be considered morbid. It has risen in the cavity of the vagina, and is above four inches from the vulva, so that the index but just reaches it. Exercise and standing does not modify its position in the least. For several months, Mrs. G.— has been free from all sensations of bearing-down or pelvic weight, and for some weeks she has had no pain whatever in the loins, inguinal, or hypogastric regions. There is no leucorrhœal discharge. Indeed, she has felt well ever since the month of December, and would have thought herself quite cured had it not been for my assurance to the contrary. During the entire treatment, the general health has been attended to, local treatment being assisted by general tonics modified according to circumstances. But for the last three months there has scarcely been any indication for general treatment. She has ate, walked, and lived like other people; too much so, indeed, and that may be one of the reasons why the cicatrization of the ulcerated surface progressed so slowly. Her health is now as good as it has ever been. She has no uterine symptoms.

Remarks.—The above case is certainly one of the most important and interesting that I have ever attended, seen, or read of. It is, indeed, an admirable epitome of the views which I have advanced respecting the pathology and treatment of the more severe forms of disease of the cervix, and of partial prolapsus of the uterus, as it is most frequently met with. A young lady marries at eighteen, is soon after seized with leucorrhœa, which she had never experienced before, and with other uterine symptoms. This state lasts for a year or so, when she begins to experience pelvic weight, and dragging pains, and one day, after more than usual exertion, the womb falls to the vulva. It is impossible for one who is acquainted with the *real* pathology of diseases of the cervix to mistake the meaning of these symptoms. She was, no doubt, attacked soon after marriage with inflammation of the mucous covering of the uterine neck, with or without vaginitis. The disease not being discovered or treated, was followed by ulceration, and the inflammation extended to the sub-mucous tissues. The cellular element of the cervix becoming thus the seat of chronic inflammation, the organ gradually increased in size; its weight and volume keeping pace, as is the case with the amygdalæ after long-continued inflammatory action. The weight of the hypertrophied cervix gradually increasing, the uterus (which is merely floating, as it were, in the pelvis, and is principally supported by the natural contractility of the healthy vagina, and by the pressure of the surrounding organs) gradually overcame, by its gravity, the resistance offered by the vagina, descending lower and lower, until, after unusual exertion, it appeared at last at the vulva.

The real nature of the uterine prolapsus thus occasioned not being recognised, the uterus was merely replaced by the hand, and rest enjoined. Fortunately she escaped the use of a pessary, the means usually adopted in such cases,

which invariably increases the mischief that it is meant to remedy. After suffering some time, without obtaining relief from the measures resorted to by her medical attendants, Mrs. G.— went to Paris, by the advice of her friends, and placed herself under the care, first, of M. Lisfranc, the great authority on uterine disease; and secondly, under that of M. Ricord, the celebrated surgeon of the “Hôpital du Midi.” She was told by both these gentlemen that she was labouring under ulceration and engorgement of the uterine neck. She was four months under M. Lisfranc, but obtained no relief from the expectant and derivative treatment which he usually resorts to. It is a singular fact that M. Lisfranc, so bold with his knife in the extirpation of cancer localized in the uterine neck, scarcely dares resort to the use of even mild caustics in the treatment of inflammatory diseases of the cervix, impressed as he is with visionary fears as to the effects which they produce. M. Ricord’s treatment was more energetic, and in the course of three months, he succeeded in healing the ulceration; but, unfortunately, he left the induration and hypertrophy behind.

The consequence was, that the uterus still fell; and on Mrs. G.—’s application to me, on her return from Paris, I found the uterine neck nearly at the vulva, evidently the seat of deep chronic inflammation, its surface of a violet hue, like a recently cicatrized varicose leg, and all the symptoms of chronic engorgement present—viz., dragging, bearing-down pains, pain in the back, &c. The only improvement which she had derived from seven months’ confinement to a sofa in Paris, and all the annoyance of treatment, was the nearly total absence of leucorrhœal discharge, and a slight diminution in the extent of the prolapsus; the womb no longer appearing at the vulva. When I again saw her, a few weeks later, even this improvement had given way, the cervix was extensively ulcerated, and she was labouring under a profuse purulent discharge.

It was under these circumstances that I undertook the treatment. From the first I had but little hopes of resolving a cervix so extensively hypertrophied and indurated by ordinary antiphlogistic measures, but I thought it my duty, in accordance with my invariable practice, to try simple means before I resorted to more energetic ones; the most severe cases of induration sometimes giving way to antiphlogistic treatment, in a most remarkable manner. I was the more induced to give a full trial to antiphlogistic means, as the patient had never conceived, and the existence of so great an amount of induration and hypertrophy in a person thus situated is an exception to the general rule. Leeches, injections, hip-baths, indeed, all the antiphlogistic and resolutive agents, both local and general, which I usually resort to in such cases, failed, and after more than three months, I was obliged to acknowledge to myself their inadequacy to resolve the deep chronic hypertrophy and inflammatory induration of the organ. The volume of the enlarged cervix was diminished, and the ulceration was healing, but the previous history of the patient, and my own experience of similar cases, all told me that the improvement was merely palliatory, that I had only done for my patient a little more than her Paris attendants, and that the principal part of the disease remained.

Such being the state of things, I determined on adopting the only plan of treatment that is really capable of curing such conditions of the cervix—deep cauterization, which I have elsewhere fully described and discussed. My view, in applying a powerful caustic to the indurated tissues of the cervix, was not so much, as I have explained, to destroy the hypertrophy directly, as to bring on a state of acute eliminatory inflammation, which, extending to the entire cervix, might promote the subsequent absorption of the morbid tissue. My anticipations were fulfilled to the letter; the elimination of the eschar was accompanied by inflammatory softening of the tissues on which it reposed, and as the inflammation subsided, under proper and careful management, the parts softened were gradually absorbed. Two applications were, however, necessary to bring the cervix to a healthy state, one to the superior lip, and the other to the inferior one. The eliminatory inflammation which followed the first cauterization was rather more severe than I wished, owing to menstruation supervening, but was never sufficiently intense to require more than rest and emollients, (poultices, milk-and-water injections, &c.) I was deceived as to the epoch when menstruation was expected; otherwise I should have waited until it had passed—a very necessary precaution.

Once the cervix had been brought to its natural size, all symptoms of prolapsus disappeared, the uterus rising again in the pelvis. The weight that dragged it down mechanically had been withdrawn; and the vagina being in the full enjoy-

ment of its natural contractility, was again able to support the womb. The progress of cicatrization then proceeded uninterrupted, but slowly, owing to the cause mentioned, and perhaps to matrimonial imprudences. After eight months' treatment, my patient was restored to health, and to the full enjoyment of society; and was, moreover, in a state which rendered it nearly certain that she would remain free from future attacks of uterine inflammation.

A circumstance to which I would direct particular attention, is the fact of the cicatrized and reduced cervix being perfectly soft, and totally free from all cicatricial hardness. This I always find to be the case after deep cauterization of the cervix, either with the actual cautery or with chemical caustics. The loss of substance heals without leaving behind it any hard cicatrix. Such being the fact, the objection made to this mode of treating severe and intractable forms of uterine induration, by an intelligent reviewer in the last number of the *Medico-Chirurgical Review*, falls to the ground. He says, "We cannot doubt, after Dr. Bennet's testimony, that they (caustics) are equal to the resolution of the induration; but surely it is no trifling matter to implant a cicatrix tissue in this part of the womb. We are quite sure that Dr. Bennet will agree with us, that a cervix made rigid by a cicatrix is one of the most trying complications of midwifery."

Were deep cauterization followed by the implantation of a fibrous cicatrix tissue in the cervix, similar to that which occurs in the skin or vagina after laceration, I should certainly hesitate to adopt such a means of treatment. But this is not the case. As I have above stated, not only have I never seen a hard cicatrix texture follow the healing of an artificial loss of substance in the cervix produced by caustic, but I have never seen it produced in any other circumstance, either after laceration, or after the healing of ordinary inflammatory ulcerations. All traces, indeed, of cicatrization soon disappear on the cervix, the cicatrix being a thin film, which soon assumes,—apparently, at least,—the characters of the surrounding mucous tissues. This fact admits of anatomical explanation. The mucous membrane of the cervix is a very thin membrane, with but an exceedingly slight fibrous framework, and the tissues inflamed, indurated, hypertrophied, are nearly entirely, if not entirely, cellular.

In a word, laceration, ulceration, and loss of substance of the cervix, may be followed by inflammation and inflammatory induration, but I have never yet seen anything that leads me to believe that these lesions are ever followed by the implantation of rigid cicatricial tissue in that organ. Indeed, one of my reasons for attaching great importance to the complete resolution of these indurated and hypertrophied states is, that I believe them to be precisely the chief cause of that morbid rigidity of the uterine neck which is so much dreaded, and justly so, by accoucheurs, and to which the reviewer alludes.

I have merely to call attention to the fact, that, in addition to the various precautions recommended in my recent work, to prevent the possibility of the caustic injuring the surrounding tissues,—which would be a serious accident,—I have added another and an important one,—the retention of the conical speculum in the vagina during the entire period that the caustic paste is in contact with the indurated cervix. I have also lately taken the precaution of pushing in a small roll of cotton between the speculum and the part which it embraces, so as to separate the cauterized tissues even from the instrument. On withdrawing the speculum, I now likewise invariably leave a pledget of cotton, dipped in oil, and tied to a piece of silk thread, in close contact with the cauterized surface, so as to isolate it from the adjoining parts. These additional precautionary measures meet, I think, all the objections that have been raised with reference to the possibility of injury to the adjacent tissues. Carefully performed, this operation may be considered as free from danger as most of the minor operations of surgery, and constitutes a most valuable addition to our therapeutics in extreme cases. Without its assistance, the lady whose history I have narrated would inevitably have been, to say the least, an invalid for the rest of her life, whereas she is now in the full enjoyment of health, and has again become a useful member of society.

Cambridge-square, Hyde-park, March, 1846.

ADULTERATION OF IODINE. By M. HERBERGER.

The present high price of iodine of course leads to its being adulterated. Sulphuret of antimony and carburet of iron are used for this purpose to a considerable extent. To detect these adulterations, the iodine should be sublimed at a gentle heat; the sophistications will of course be left.

THE "ONE-FACULTY" SYSTEM, AND ITS INEVITABLE ADOPTION.

By JOHN COOPER, F.R.C.S. Eng., Surgeon to the Liverpool Infirmary.

THAT medicine and surgery are identical in science, is a truth that has long been universally admitted; and that they are inseparable in practice, is a fact now as generally acknowledged.

Dr. Grant, the present celebrated professor of comparative anatomy, observes, I believe, in a very clever pamphlet, which he published some years since, on the subject, that those who contend for the imaginary advantages to be derived from the division of medicine and surgery into two distinct branches, the physician confining himself to the treatment of constitutional ailments, and the surgeon to the management of local diseases, might as well maintain, that two men, the one hopping constantly on the right leg, the other on the left, would each make a more steady and rapid progress than any individual could who ventured in a race with them to walk or run upon both.

Sir James Graham, in his late proposed bills for Medical Reform, clearly made his own "darkness visible" in the very "parliamentary manner" in which he succeeded in rendering this apparently difficult subject still more complicated; and it soon became evident to all, or, at least, to all who would see, that Sir James knew nothing of the changes really required in the existing state of the medical profession—changes, indeed, greatly needed to raise it in public estimation and in general usefulness. Truly, Sir James Graham apparently chiefly contemplated an opportunity that seemed to be offered to him of adding something to the patronage power of the government.

Why do not the "general practitioners"—all those legally qualified—in this country, so infinitely outnumbering, and mostly, in education, equalling the "pures," at once unite their strength, and use all their energies to obtain from the legislature the only reform that can be efficient and satisfactory, that which would abolish all invidious, unnecessary, useless, and absurd distinctions, by the reunion of physic and surgery into one faculty? The physicians and surgeons in France have shown us a noble example; and in the resolutions lately passed in their deliberations in congress, have well, on every point, cleared the way for us. The distinctions and gradations here so long, so much too long, and perseveringly maintained, have served but one purpose, that of fostering quacks and quackery!

It will, no doubt, be urged, that such a sweeping reform would destroy the privileges of many colleges and institutions,—would invade too many vested rights. What, then! are what are termed vested rights and a few private interests, too often injurious monopolies, for ever to arrest the progress of improvement, check the advance of science, and even injure the cause of humanity? Vested rights and private interests would, however, suffer but little, and if at all, but temporarily.

Let the universities and colleges of London, Oxford, and Cambridge, of Edinburgh, Dublin, Glasgow, Aberdeen, and St. Andrew, still retain their privileges of granting degrees; but make it imperative that every graduate in medicine or surgery should belong to the one faculty of medicine, and that the admission into this faculty should confer equality in title and privileges upon all its members.

In all schools of medicine, one uniform course of instruction should be pursued—one curriculum for the whole, the student being, according to his convenience, or to his predilections, allowed the choice of his place of study, and of his teachers.

Should the general practitioners, for the present, fail to obtain, through an act of parliament, the reform to which I have directed their attention, as the only one really desirable, they have still an alternative for improving their status, and bettering their condition, in their own hands. They have but, with one consent, to relinquish and abjure the practice of pharmacy,—the whole body, by totally disconnecting themselves with trade, would then rise to an equality, and at least to a level with the pures.

With regard to the suppression of quackery, I feel convinced that the adoption of the one faculty, in place of the grades into which we are now broken up, would have the greatest influence. Whilst we remain divided into physicians, surgeons, surgeon and physician accoucheurs, apothecaries, and apothecary man-midwives, oculists, dentists, aurists, &c., the still lower grades and specialists, such as bone-setters, herbalists, worm-doctors, and nostrum-mongers of both sexes, will continue to exist in abundance, and to flourish.

Sir, to the one-faculty system, however opposed to it powerful and influential, but self-interested, individuals may now be, we must come at last; and, in my humble opinion, the day of its inevitable adoption is not far remote.

Liverpool, January, 1846.

REVIEWS.

Lectures on the Nature and Treatment of Deformities, delivered at the Royal Orthopædic Hospital, by R. W. TAMPLIN, F.R.C.S.E. London: Longman and Co. 1846. pp. 267.

THE attempted cure of deformities by operative means is one of the most questionable efforts which have been made by modern surgery. We say "questionable," because most cordially agreeing with Mr. Bishop, in his elaborate and admirable papers now in course of publication in *THE LANCET*, that "myotomy" and "tenotomy" are attacking *effects* instead of *causes*, and are therefore in principle empirical. The idea of dividing the tendons to remove club-foot originated with Thilenius, a physician of Frankfurt: the first operation was performed by his direction, but its success as then executed was small, so that the operation gained no repute; the conception, however, remained. The next great step was made by Delpech of Montpellier. Delpech performed the operation of dividing the tendo-Achillis with success, and in his *Orthomorphie*, published at Paris in 1828, the following principles were laid down:—

"A tendon to be divided must not be exposed, and its division should be made by turning the instrument on one side, so that the line of the incision may not be parallel to the division of the skin; without this precaution, risk of exfoliation of the tendon is incurred.

"Immediately after division of the tendon, the divided ends should be brought into contact with each other, and kept in this position by a suitable apparatus during the entire period necessary for their union.

"Inasmuch as it can only take place by the intervention of an intermediate fibrous substance, this substance, before it has become firm, can, and should be extended gradually and carefully, until it has assumed a degree of length equal to the shortened muscle.

"When this degree of extension has been effected, the parts should always be fixed in the position, and kept so until the new substance has acquired its requisite degree of consolidation."

The great points made out by Delpech, were the mode of union in divided tendons by the plastic fibrous matter deposited between the divided extremities, and the facility with which this might be elongated so as to almost entirely compensate for the shortened muscle. The necessity for subcutaneous division of the tendons was insisted on by Delpech, but was not carried out to the full extent. In his case of division of the tendo-Achillis, two wounds, of an inch in length each, were made, and this was, perhaps, the cause of the unfavourable circumstances of the case. Delpech died young, or he would, probably, have proceeded to establish the whole subject on its present basis. As it is, his great merit consists in the recognition of the mode of tendinous union, and the practical inferences he drew therefrom—namely, that the ends should be placed in apposition, and allowed to unite, and that the uniting medium should subsequently be elongated by gradual mechanical force. Resting at this point, however, the operation made no increase in reputation, until the subject was again taken up a few years since by Stromeyer. It is to Stromeyer that surgery owes the subcutaneous operation as at present practised, punctures being used in place of considerable incisions, a difference which is alleged to abate the severity and danger of the operation. It is right to be thus specific, as Dr. Little gave undue importance to the share Stromeyer had in the matter, while Mr. Tamplin has insisted unduly on the merits of Delpech. The idea belongs to Thilenius; the operative measures originated with Delpech; but these were enlarged upon and diffused by Stromeyer:

other able men have since assisted in a spreading of orthopædic surgery, and among them Dr. Little holds an honourable place.

In Mr. Tamplin's lectures, the various forms of contraction of the lower extremities, the upper extremities, the spinal column, and the head and neck, with the operations which have been performed for the relief of each variety, are discussed at considerable length. Mr. Tamplin chiefly treats the subject as a branch of operative and mechanical surgery. Yet his fitness for the task is more than doubtful. He displays a very imperfect knowledge of the mechanism of the human fabric; and he has taken no notice of the highly injurious effects of cutting paralyzed muscles, which Malgaigne, in papers read before the French Academy, has proved to follow that operation. But on orthopædic surgery in its higher relation—namely, to the physiology and pathology of the nervous system, even Mr. Tamplin looks with hopelessness; indeed, in this respect, his work is a retrogression from that formerly published by Dr. Little. Bones may be moved out of their place, tendons may become stiff, and muscles short and contracted, but they are merely agents; the nervous system is the master-power to the organs of locomotion. In one place, Mr. Tamplin remarks:—

"Our knowledge of the functions of the nervous system is limited, and this state of our ignorance disqualifies us from giving any satisfactory explanation, as well of those deformities which arise without apparent interruption to the general health, as of those formidable and fatal affections, tetanus and hydrophobia. On none of these affections has physiology or pathology yet thrown any light, although both have been the study of many able members of our profession. We cannot, therefore, reasonably hope, whilst the cause of the more palpable and striking, and serious nervous disorders, still remains involved in mystery, that the less remarkable and the milder derangements which sympathetically occasion paralytic deformities should be easily traced and comprehended."—p. 28.

Other quotations to the same purport might be made. We maintain, on the contrary, that a flood of light has of late years been thrown on the motor diseases of the nervous system, tetanus and hydrophobia included. It is Mr. Tamplin's misfortune if it have not reached him; but he is certainly not justified in expressing positive opinions on the matter. Throughout his work there is no clear distinction between the voluntary and involuntary, the cerebral and spinal motions of the extremities, and other parts subject to contraction. A less positive dictum would, therefore, have been more commendable. We venture to say, that any man well studied in nervous physiology and pathology, on going into Mr. Tamplin's cases, might clear away many doubts and discrepancies. Operating empirically, without reference to causes, mistakes must inevitably happen, and cases not proper subjects for the knife must be operated on. Accordingly, we find Mr. Tamplin stating that arteries have been wounded, and required tying, and that abscesses have formed under this empirical system of mangling the body. Without a reference to principles, the orthopædic surgeon is merely a mechanist, more able, it is true, than the old mechanical practitioners, but merely working with the knife instead of the bandage and the screw.

It might have been expected that Mr. Tamplin would have looked a good deal into the nervous system, as he repudiates entirely the idea of such a power as muscular irritability.

He observes, in a note:—

"I have no belief in the 'inherent irritability' of muscular fibre; nor do I consider the contraction of muscle after death any evidence of such inherent irritability. Doubtless, the muscle is freely supplied with nerves, and those nerves divide and re-divide, and anastomose freely, in every direction; but it is the irritation of these muscular nervous fibres, and that only, in my opinion, which occasions the contraction of the muscle. But this is not, to my mind, to be considered as muscular irritability, but an irritability of the nerves ramifying in and supplying the muscle; this irritability, as a natural consequence, affecting the muscle itself."—p. 41.

We do not admire Mr. Tamplin's physiology. It has the demerit of being entirely without proof, and we are not aware of any specific labours or experiments which should give him a right to dogmatize in opposition to the most modern and complete researches into the subject.

It could hardly be expected, after this, that Mr. Tamplin would be happy when he did attempt to elucidate the causes of contraction. We quote the following example:—

"Having now pointed out to you the true characters of the deformities of the foot, I may just draw your attention to the congenital deformities. These consist of talipes varus, talipes valgus, and talipes calcaneus. I have never met with talipes equinus. You will recollect I stated, that, in my opinion, it was position, and position alone, which caused these malpositions (or rather, the permanent extreme natural position, for this is its real character) during uterine existence; and if you observe the character of these three congenital deformities, I think you will have little difficulty in reconciling the possibility, if not the probability, of this being the case. Take the first-mentioned talipes varus. There are many positions in which the extremities of the child may be kept in utero, which would adapt it better to the cavity of the uterus, provided the feet were inverted; and it so happens, that by far the greater number of congenital cases consist of double varus; and when it does not consist of double varus, nothing is more easy to account for than one or other extremity being so placed that the foot should grow in that position, whilst its fellow may be free and unconfined. Then, if you refer to congenital varus, (query, valgus,) this also may be easily imagined—that the extremities, or extremity, may be so situated that the flat surface of the feet press more or less on the walls of the uterus, if not constantly, sufficiently to influence the position of them during the growth of the bones and ligaments.

"Then, again, take talipes calcaneus: this, also, is a position that may as easily be imagined to be constantly effected, according to the position in which the extremities lie; and if they are so situated, that the anterior portion of the sole of the foot presses more or less on the walls of the uterus, of course the flexed position is the one it would assume, and that without any difficulty or resistance; and if we suppose, during the motions of the child, the position of the feet may be more or less altered, as it regards the extreme amount of flexion, yet if, after these active efforts have ceased, the feet re-assume this position, the gastrocnemius remaining passive, which it would do, of course the greatest amount of flexion would most easily take place, and thus become permanent, the flexors growing in the natural position."—p. 103.

This, to our mind, is confused and inconclusive. Position in the foetus is not like position in after-life. It would be an impeachment of nature to suppose that morphology depended on mere position. There is every reason for believing that the feet can rarely come in lasting contact with the walls of the uterus. The size of the uterus, and the liquor amnii, tend to prevent this. If pressure or position could be supposed to exert any material influence, we ought to have contraction of the muscles of the neck most frequently, and there ought to be constantly morbid genuflexion, and contraction of the elbow. But this does not happen. The voluntary movements of the body, after birth, soon obviate the stiffness caused by intra-uterine position. Other causes than the merely mechanical must be looked to. The influence of tone, of muscular irritability, of cerebral motor action, of spinal motor action, must all be studied, with reference to these deformities, before a correct pathology, or a scientific practice, can be evolved.

As regards operative skill, and the adaptation of mechanical means to alleviate deformity, Mr. Tamplin may be a good surgeon; but his book is not a scientific work, and certainly does not advance our knowledge of the subject on which it treats. Indeed, it indicates that he is a century behind his contemporaries in an acquaintance with the physiology and mechanics of muscular action,—the two chief branches of knowledge involved in discussing with utility the "Nature and Treatment of Deformities."

The work is illustrated by numerous woodcuts. In so far as these exhibit deformities, and illustrate modes of treatment,

(and there are many such in Mr. Tamplin's work,) they are valuable; but we are not inclined to be indulgent to the pictorial results of treatment. It would be quite sufficient to say that benefit was conferred on the patient, or to pronounce a case cured, without putting a contracted leg and a well-proportioned one, a wry neck and a handsome face, in juxtaposition; to say, this before the operation, and this, after treatment. They look too much like the calligraphic specimens of good and bad writing before and after taking lessons.

BRITISH AND AMERICAN MEDICAL JOURNALS.

SUGGESTIONS REGARDING THE ANATOMICAL SOURCE AND PATHOLOGICAL NATURE OF POST-PARTUM HÆMORRHAGE.

IN the *Northern Journal of Medicine*, we find a communication on this important subject from the pen of PROFESSOR SIMPSON. He commences by showing that uterine contraction has less influence on uterine hæmorrhage than is generally supposed. Thus, in placenta prævia, when the placenta has been removed, and the uterus is still expanded over the child, there is little or no tendency to hæmorrhage. Again, it does not necessarily occur when the placenta remains in the uterus after the expulsion of the foetus, or during the alternate contractions and relaxations which are often observed. On the other hand, hæmorrhage sometimes supervenes when the uterus appears contracted and reduced to its ordinary size. Professor Simpson observes—

"No doubt the occurrence, after delivery, of great and decided atony in the whole muscular system of the uterus, does assuredly give rise to post-partum hæmorrhage. But if I may judge from my own observations, I would venture to remark, that the morbid condition which is most frequently and earliest seen in connexion with post-partum hæmorrhage, and which is specially remarkable in cases where the flooding is more enduring than usual, is a state of irregularity and want of equability in the contractile action of different parts of the uterus—and, it may be, in different planes of the uterine fibres—as marked by one or more points in the organ feeling hard and contracted, at the same time that other portions of the parietes are soft and relaxed—and by the contracting and relaxing fibres slowly but frequently changing their relative situations."

Hence our object in arresting hæmorrhage which is not dependent on a traumatic or organic cause, should be, to endeavour to produce, not merely a certain amount and degree of uterine contraction, but also a certain equability and uniformity. Professor Simpson sums up his views in the following suggestions:—

"First.—Uterine hæmorrhage, after the separation of the placenta in any of the stages of labour, is not arterial in its character. The utero-placental arteries are numerous, but so long and slender* as to become readily closed; 1, by the tonicity of their coats; 2, by contraction of the uterine fibres upon the course of these vessels themselves as they pass through and amid the uterine structure; and, 3, and principally, by the changes in their tissues produced by the mechanical rupture of their coats,—torn arteries being little, if at all, liable to bleed,—and the placenta being separated by a true process of avulsion.

"Secondly.—Hæmorrhage, therefore, under the conditions supposed, is venous in its source and nature. Further, it is specially important to mark that it is a venous hæmorrhage by retrogression. The forward course of the uterine and utero-placental venous circulation is from the dilated maternal capillaries or cells of the placenta towards the periphery of the uterus, and the ovarian and hypogastric venous trunks. In uterine hæmorrhage, the blood that escapes, instead of flowing onwards, regurgitates backwards into the uterine cavity.

"Thirdly.—The mechanism by which, after the separation of the placenta, this retrograde course of the venous circula-

* Professor Simpson refers to the utero-placental arteries seen in William Hunter's beautiful preparations.

tion towards the cavity of the uterus, so as to lead to hæmorrhage, is prevented, is probably of a compound character, or is effected by different means. Each of these means may be more or less efficient under different circumstances and at different times.

"Fourthly.—The most powerful of these preventive measures consists in the uniform and regular contraction of the uterine fibres. By this contraction the canals of the supplying arteries are constricted, and the venous tubes or sinuses which more immediately yield the discharge, are directly compressed. The facility of this compression of the sides of the veins, and the consequent diminution of their cavities, is promoted by the naturally thin, flattened form of their canals, and by the fact that the proper contractile tissue of the uterus forms their second coat,—the uterine veins consisting of the usual lining membrane of the venous system, placed in direct contact with the muscular tissue of the uterus. At the same time, it is to be recollected, that there seems to be often no direct relation between the degree of uterine contraction and the degree of tendency to hæmorrhage.

"Fifthly.—The structure and mutual relations of the venous sinuses of the uterus seem calculated to prevent such a retrograde flow of blood in their tubes as to cause hæmorrhage. The uterine veins are large, but of a compressed, flattened form, and arranged in several planes or floors above one another in the uterine walls. On examining these veins in several pregnant uteri, by dissecting them from the outer or peritoneal surface of the organ, downwards towards the mucus, I have found the following arrangement:—Each venous tube gives off numerous communicating branches to the veins of its own plane or floor, by a set of lateral foramina. When, however, a venous tube of one plane comes to communicate with a venous tube lying in the plane immediately beneath it, the foramen between them is not in the sides, but in the floor of the higher or more superficial vein, and the opening itself is of a peculiar construction. Looking down into it from above, we see the canal of the vein below opening very obliquely into the upper. In the folds of these falciform projections, the microscope shows the common contractile tissue of the uterus. Do these semilunar or falciform projections, and the oblique communications of the lower with the higher planes of veins, allow the normal flow of venous blood from the deeper to the more superficial veins of the uterus, while, after the placenta is separated, they prevent that anomalous or retrograde flow of it from the more superficial towards the deeper-seated venous tubes which would produce hæmorrhage? Here I suppose it possible that these falciform processes may act upon the same principle as the Eustachian valve, but in a less perfect manner, while by the obliquity of the communications between the different planes of veins it may be that blood does not so readily retrograde into the deeper vessels, in the same manner as urine does not retrograde into the ureters from the bladder, in consequence of the oblique opening of the former into the latter. Do the uterine fibres seen in the venous falciform processes tend to aid this valve-like mechanism, by diminishing, under contraction, the apertures between the different planes of veins?

"Sixthly.—One cause contributing to prevent hæmorrhage after the total separation of the placenta, is the abstraction from the uterine vascular system of the derivative or sugescent power of the maternal circulation in the placental cells, and the consequent tendency of the blood to flow in the more direct and freely communicating channels that exist between the uterine arteries and veins.

"Seventhly.—Among the other remaining means by which hæmorrhage is more or less prevented after the detachment of the placenta, I may mention,—1, the occasional presence of tufts of foetal vessels left in the orifices of the uterine veins, and forming, not only immediate mechanical obstacles, but nuclei for the ready coagulation of the blood; 2, the formation of coagula in some of the collapsed venous tubes and orifices; and 3, the presence, for some hours, or even days, after delivery, of the collapsed decidua over the apertures seen in the veins on the interior of the uterus."

REMOVAL OF A PORTION OF THE LIVER FROM THE HUMAN SUBJECT.

Dr. MACPHERSON, in the same Journal, having referred to two similar cases, records that of a Hindoo, from whose liver a considerable piece was removed during life, and without a fatal result. The man had been stabbed in the side about

twelve hours, previously to his being brought to the doctor, who found a wound about an inch long, through which a triangular piece of the liver, about the size and shape of four fingers, projected. Finding its return impossible without enlargement of the wound, Dr. Henderson resolved on cutting it off, and

"To prevent hæmorrhage, a ligature was applied tightly round the base of the protrusion, which was then cut off. Two arterial twigs bled very freely, and it was found necessary to take them up, and a double ligature was also passed through the stump, and tied on either side, when all bleeding ceased. No attempt was made to return the portion of liver which still filled up the wound, as it was desirable to prevent all risk of blood or bile being extravasated into the cavity of the abdomen. For a day or two the patient was rather low, and had slight irritative fever, and the bowels remained costive. These symptoms yielded to a few doses of purgative medicine, and in nine days the ligatures came away along with a small slough of liver; the wound granulated and healed, and the man returned to his home in three weeks. No bilious discharge occurred from the granulating surface of liver. The portion removed, after having lost its blood, and being in spirits for some weeks, weighed 1½ oz., its surface uneven, though not torn, and it is probably a portion of the edge of the right lobe, from near the notch between it and the left.

"It might be added, that the patient complained of a good deal of pain when the surface of the liver was touched, but that cutting through its substance, caused him hardly any.

"The old man appeared two months after as prosecutor in his own case; he was in perfect health. There was a little puckering in of the skin about the wound, and the liver was evidently adherent beneath."

CASE OF PROCDENTIA UTERI DURING LABOUR, IN WHICH ARTIFICIAL MEANS WERE NECESSARY TO EFFECT DELIVERY, WITH SUBSEQUENT REPLACEMENT OF THE UTERUS AND COMPLETE RECOVERY.

"In April, 1829, a negro woman was taken in labour. She was about forty years of age, of good constitution, the mother of several children, and, so far as is known, not subject to any previous prolapsus or other disease of the womb. Something unusual and anomalous having occurred during the progress of the labour, Dr. HARRIS was sent for. He found her, on his arrival, in the following condition:—She was lying on her back, with the whole gravid uterus between her thighs, retained only by the ligaments, which were much stretched, but not ruptured, and discharging from its external surface a serous or sanious fluid. The woman had been in this condition for about twenty-four hours. She had had no pain since the descent of the uterus, and was complaining of none at this time. The liquor amnii had been discharged. After a careful examination, no motion or other sign of life in the fœtus could be perceived. The uterus appeared to be in a perfectly quiescent state, without any disposition to contract. The os tinæ was barely dilated sufficiently to allow the introduction of two fingers. Finding it absolutely necessary to relieve her as soon as possible, the Doctor proceeded to deliver her by artificial means. He opened the head of the child with a suitable instrument, and then, having an assistant to hold and support the uterus, he introduced his hand, and by careful traction succeeded in removing its contents. There was very little pain during his manipulations. He now returned the womb, which had scarcely contracted at all, and advising the recumbent position, left her. She had a very good 'getting up,' and two years ago, as the Doctor learned, was in good health."—*British American Journal*.

THE ORIENTAL BEZOAR—AN ELLAGIC-ACID CALCULUS.

Mr. TAYLOR, in an interesting communication to the *Philosophic Magazine*, describes this calculus, to which so many sanative virtues were formerly attributed. He finds it composed of "ellagic acid," the peculiar insoluble acid obtained by Braconnot from the infusion of galls. They are generally taken from one of the stomachs of the wild goats of Persia, and also from this viscus in some other species. Mr. Taylor remarks that its chemical composition removes the uncertainty as to the origin of the bezoar, and proves that it is derived from the juices of the plants and fruits on which the animals live.

THE LANCET.

LONDON, SATURDAY, APRIL 18, 1846.

A GENERAL MEETING of the Members of the National Association is to be held THIS EVENING, *Friday*, April 17th. The meeting has been convened by the Committee, and it is announced that Mr. PENNINGTON, the President, will take the chair, at six o'clock. The intended proceedings are referred to at some length, (at p. 447,) in a report from the Committee of Associated Surgeons, sitting at the Freemasons' Tavern. It would appear that a final effort is about to be made by all the Associations, to induce the profession to enter into a powerful organization for the support of their own cause. Should it be zealously supported, and honestly conducted, it will be crowned with success. Should a contrary course of policy be adopted, disappointment and defeat are sure to be the results.

ANOTHER Meeting of the Council of the College of Surgeons was held on Thursday evening last. These Assemblies, they find, are not becoming very agreeable, and the feelings of dissension amongst the members are rapidly gaining strength. On the subjects involved in the proposals relative to a Supplemental Charter, nothing is yet finally resolved, and the differences of opinion in the Council appear to be almost irreconcilable. Mr. LAWRENCE has again received the condemnation of several members of the Council, in consequence of having published the following inaccurate statement in the *Times* of Thursday the 9th. The internal difficulties of the Council are evidently augmenting, and it cannot be said that the hostility which is felt towards them externally to the walls of the College is declining.

THE ROYAL COLLEGE OF SURGEONS AND THE HUNTERIAN ORATION.

We are requested to publish the following statement :—

"At a meeting of the Royal College of Surgeons of England, held on the 30th of March, the resolutions of the Council respecting the Hunterian Oration, adopted on February 26th, were rescinded by an unanimous vote. These resolutions, which were proposed without previous notice to the orator, and in his absence, and strongly opposed by some of the most judicious members of the Council, including the respected President, were carried by a small majority, and were confirmed on the 9th ult. by one still smaller, indeed by a bare majority. When the resolutions had been thus curiously confirmed, the Council determined to do what would have been more proper as a preliminary measure—namely, to ask the opinion of their solicitor on the legality of the proceedings. They soon learned from this gentleman, that to propose and confirm resolutions without previous notice expressed in the summons convening the meetings, is contrary to the by-laws and ordinances of the College: that it is inconsistent with the rules of fair-dealing, and with the established usages observed by public bodies of gentlemen, was already obvious. The Council were further informed by their legal adviser, that the ordinances of the College have specially provided, in a Hunterian committee, for the management of everything connected with the Oration and festival; so that the matters to which the resolutions refer should, at least in the first instance, have been brought before that body. It thus became necessary for the Council to retrace its steps. A retrograde movement of this kind is awkward and unpleasant; however desirable, it could hardly be expected that it should be executed with a particularly good grace. At the meeting of the 30th ult., the members who had proposed and voted for the resolutions, strongly insisted that they were not a vote of censure, stating that they would not have proposed them if they had suspected that they could be so considered, and that they had merely meant to express regret that a controversial sub-

ject should have been introduced into the Oration. They stated, further, that the resolutions, such as they were, would not have been brought forward, if the Oration and its prefatory advertisement had been published previously, and that they entirely concurred in the opinions of the orator, regretting only that they had been expressed on that particular occasion.

"In estimating the relative position of the orator and his colleagues, it is material to observe, that Mr. Lawrence, who had already delivered the Hunterian Oration, undertook it again at an unusually short notice, and under considerable inconvenience, from its interfering with other avocations, at the request of members of the Council, who urged his compliance on the plea that it would be advantageous to the College, and would relieve the Council from a position of difficulty; in short, no one else would undertake the task. Perhaps it would have been more prudent if he had resisted instead of yielding to the flattering importunity.

"It may be doubted whether members of the Council will find, in what has happened on this occasion, much encouragement to undertake a duty, for the performance of which they seem to have been previously not very eager. The publication of the Oration may, however, serve as a beacon to future orators, pointing out the kind of discourse to be avoided in order to escape the risk of collegiate disapprobation."

A TERRIFIC storm has suddenly burst upon the head of Dr. REID and his system of ventilation. The daily and hebdomadal press are launching their shafts of wit, sarcasm, and invective, at the poor devoted Doctor. Angry blasts visit him from Lloyd's, from the Library of Lincoln's-inn, from the Temple, from the Royal Palaces, from the New Houses of Parliament, and from the countless other places he has visited with pipe, and funnel, and shaft. He is coming to be looked upon as the grand source of catarrh, cough, rheumatism, and every other consequence of chill and suffocation, that befalls the denizens of public rooms. In the present temper of the public mind, if an influenza were to visit us, there is little doubt that it would be satisfactorily traced to Dr. REID and his "airs." Everybody is resenting the attempts made by philosophy to fetter the free air, and make it humbly do man's bidding. There seems to be a desperate resolve abroad to patronise the gales of spring rather than the gales of science. People seem still resolved to warm their fingers and their fancies at chamber fires, and to catch ideas and colds from chamber windows. There are some singular anomalies in this feeling. The man who says to the inhabitants of a city,—Arrange your streets, so that they shall be air-tubes; and plant and arrange your parks and squares, so that they shall be as lungs, to make and convey pure air for the dwellers therein, is at once greeted with homage and respect. There is something in it that captivates the public imagination, and to this all the town-improvements of the age profess to tend. But that which seems pleasant in the general, is odious in the particular case, and is resented as something allied to an infringement of personal rights. No scorn is too bitter for the man who says—Make your houses and public buildings respiring machines; endue them with a power of breathing, so as to be warmed and vivified, with as nearly as possible the same perfection as belongs to the animal machine.

But science is a stream that never stops; flowing in the Baconian channel, no impediment has ever yet proved more than a temporary hindrance to its progress. Warming and ventilation will still go on, until something like perfection is reached, in spite of all the ridicule that the world can produce. The time will come when people living in crowded cities will no longer be content to live in houses, with fires burning in

every apartment, pouring up their volumes of heat and smoke through the chimneys, as though the primary object were to warm the chimney-pots, and to taint and blacken the atmosphere. The time will be, when even the poetical temperament "in populous city pent" now babbling away, will prefer the exhilarating influence of a clear blue sky, and a pure atmosphere, to the mere sight of a blazing fire, be it ever so cheerful. The time for comprehending and appreciating these things does not seem to have yet arrived. Dr. REID, too, may not have the worldly wisdom to tack skilfully amongst the popular prejudices, instead of sailing straight a-head to his point; he may, too, in his simplicity, have done *proper* things in a *manner* likely to make the gravest feel somewhat risible. This we suspected some time ago, when we saw him seriously treating the "blue Billy" of the Thames, meaning, thereby, the prismatic scum that floats upon its surface, and complaining of a few cabmen smoking cigars in Palace-yard, as a source of atmospheric impurity. Such complaints may be very well in their place, but the world is not yet sufficiently awake to look steadily at them. Or, again, Dr. REID's plans may be imperfect; it may be too severe a trial for ventilation, a thing confessedly as yet in its infancy, to have to cope, impromptu, with the wants of such an immense building as the new Houses of Parliament. Architects, also, like the materials they work in, are so immovable, that it is no wonder squabbles should arise when ventilation, with its mechanic, tries to force itself into architectural designs. There is an old standing feud between ventilation and architecture, such as we have heretofore possessed it. It is only recently that architecture has been even able to include chimney tops and stacks, the old channels of ventilation, within its scope!

And then, it is so very easy to laugh at science. Indeed, with the vulgar, whether high or low, to laugh at science and its devotees is held to be the very pink of wisdom. But the man of science, if he be of the true metal, can afford to let the herd laugh and run riot, and smile himself in return. NEWTON blowing soap-bubbles, GALILEO playing with the pendulum, and DAVY making lanterns, were things ridiculous enough; but, nevertheless, the science of optics, and the clock, and the safety-lamp, grew out of them. So now, however amusing, "the squabble," as it is termed, between the architect and the savant, ventilation will go on, though peers and M.P.'s may be overheated or over-chilled by the first trials,—until our private and public buildings become, not merely grossly mechanical masses of wood and stone, as they now are, but breathing mechanisms, with their unseen tubes and spiracles constantly engaged in purifying the air before it enters the living mechanism that consumes it. It is, indeed, a disgrace to architecture that something of the kind should not long ago have been attempted by architects themselves. But they have almost entirely confined themselves to mere *form*; anything that pertains to ventilation is, with them, in a far more backward state than it was in the times of ancient civilization.

The misfortune or fault is, that there exists no adequate machinery for bringing science, and particularly medical science, to bear upon the Public Health. Those who observe what is passing, see that here and there medical men are devoting themselves, not to attendance upon individual disease, but to the preservation of the health of classes, of communities, or of mankind in general. Public Health—PUBLIC ME-

DICINE, is now engrossing greater attention than it ever did before. And this is not wonderful, considering the rapid increase of our population, the numbers who are living in mines, collieries, factories, and workshops, under circumstances favourable to the development of fatal diseases, and the propagation of an unhealthy race of offspring. It is a national duty, that this, perhaps the noblest department of the profession, should be fostered and extended, for upon it the preservation of the physical status of our countrymen most intimately depends. An immense number of questions directly concerning the public health can only be treated properly by bodies of medical men properly trained for the purpose, and withdrawn from private practice. Such subjects are those of lunacy, suicide, quarantine, epidemic and contagious fevers of all kinds, small-pox, ventilation, the dietary of prisoners and paupers, vital statistics, the diseases incident to particular trades, and many more. Hitherto the men who are labouring at these questions have been in a state of isolation; thus we have Dr. CONOLLY, Dr. ARNOTT, Mr. FARR, Dr. SOUTHWOOD SMITH, Dr. REID, Dr. BISSET HAWKINS, and others of the same class, who may be called *public* physicians, inasmuch as they are engaged in analyzing, preventing, and curing diseases upon the grandest scale. We have these men working separately, instead of in combination, and with the efficiency which combination produces. Even the faults of such men, when proved, should be dwelt on with leniency, for they are the first pioneers of a new department of medicine and of civilization.

This department must ultimately rest with the Government, and the bringing Medicine into more immediate connexion with the State, will tend to increase the importance, and extend the influence, of the medical profession generally. As it is, the Government takes no pains to produce men fit for the labours we have been considering; and then, when they are wanted, if they are not found perfect, they and science itself become objects of slander, as in the case of Dr. REID. What would be said if the State trusted to chance for an army and navy, and then complained, that, when wanted, they were not to be had.

At the present time, would not the subject be materially advanced, if a Chair of Public Medicine were established in either University or King's College, or in both? Such a Professorship might be made the means of enlightening the profession, the public, and above all, the Legislature, on questions of public health. We throw out the hint for public consideration.

In the Foreign Department of last week, (p. 404,) will be found the series of conclusions, by which the Plague Committee of the Academy of Medicine of Paris have terminated a long and interesting report, which it has very recently laid before the Academy.

It will be remembered, that the French Minister of the Interior, after long turning a deaf ear to the remonstrances of scientific and commercial men against the absurd sanitary laws now regulating the communications of France with the East, was at length aroused to a sense of the absolute necessity for a revision of the existing legislation, and applied last year to the Academy of Medicine for information respecting the contagion of plague. The Academy, anxious to respond to the confidence thus placed in its opinion, named a Committee, composed of MM. PRUS, FERRUS, BEGIN, DUBOIS, ADELON

DUPUIS, LONDE, MELIER, PARISET, ROYER-COLLARD, and POISEUILLE—all men occupying eminent positions in the French medical and scientific world. This Committee has sat, nearly without interruption, for a full year, and has investigated the question of plague and contagion with the most scrupulous and untiring industry. Every accessible document of any importance has been consulted, and every possible step taken to ensure correct information.

The conclusions arrived at by the Committee are most satisfactory, embodying, as they do, fully and entirely, the scientific principles so ably advocated in France for the last few years by AUBERT-ROCHE, and adopted, we may say, by nearly all the most enlightened physicians on this side the channel. The *Times* newspaper, in drawing attention to this remarkable report, sums up the opinions therein expressed in a few very simple and clear axioms, which we cannot do better than republish, as they will at once enable the reader to appreciate, at a glance, the nature of the results arrived at and to foresee the legislative measures which must necessarily follow, if the French Minister acts up to the opinions so solemnly expressed by the learned body to which he applied for advice. These axioms, or propositions, are as follow:—

"1. The plague is endemic in Egypt, in Syria, and in Turkey.

"2. The plague develops itself spontaneously under the influence of local and atmospheric causes.

"3. Civilization alone can prevent the development of the spontaneous plague, be it endemic or be it epidemic.

"4. The plague frequently appears under the form of epidemic disease.

"5. The plague is produced by the air, and not by contact; that the plague is not contagious.

"6. That clothes, merchandise, &c., do not convey the plague by contact, and do not constitute centres of infection.

"7. That persons infected with the disease can alone form centres of infection.

"8. That infection is alone produced on board vessels by the presence of infected persons.

"9. That the period of incubation of the plague has never been known to surpass eight days."

It will be perceived that the contagion of the plague is repeatedly denied, and that without reserve or restriction. The Committee believe the plague to be a purely infectious disease, susceptible of developing itself endemically and epidemically, but not susceptible of being transmitted by contagion. Moreover, they adopt, in full, M. AUBERT-ROCHE's conclusion, that "the period of incubation has never been known to surpass eight days."

The deliberately-formed and well-matured opinion of the Paris Academy, should it sanction, as no doubt it will, the report of its Committee, will either be thrown aside by the French Minister, or it will be fairly and frankly adopted. Should the latter be the case, the entire fabric of the quarantine law will be inevitably annihilated, and a sound and rational code of sanitary regulations raised on its ruins. Firmly believing in the correctness of the opinions espoused by the Committee, we trust and hope that the cause of reason may triumph, and that the advice of the Parisian Academy will not be unheeded or rejected, but be soon, and fully, acted up to by the French Government. The abrogation, in Western Europe, of the restrictions upon commercial intercourse between Western Europe and the East, which prejudice, and ignorance, and fear, have hitherto fostered, will be an important era in the progress of civilization.

INSTEAD of devoting, as we intended, a portion of our columns to a critical examination of the statements of Dr. ROGET and Mr. NEWPORT, that were contained in the letters which we published from them in the last number of *THE LANCET*, we have preferred publishing, at the earliest moment, the following communication, which we have received from the greatly injured, and profoundly scientific and accomplished Professor GRANT, of University College. The disclosures made in this letter are of the most startling description, and will produce feelings of astonishment, disgust, and indignation throughout all ranks and classes of the profession. That the Royal Society should have become an Augean stable is nothing marvellous, when we consider that Dr. ROGET has been one of the head grooms of its medical department.

DR. ROGET'S BRIDGEWATER TREATISE.

(PROFESSOR GRANT'S REPLY TO DR. ROGET.)

To the Editor of *THE LANCET*.

MY DEAR SIR,—In your recent exposure of the secret proceedings of the Royal Society, in reference to the award of its honorary medals, you have incidentally alluded to the identity of the matter of the Bridgewater Treatise of Dr. Roget, the Secretary of that Society, with that of my lectures delivered at University College, (*THE LANCET*, April 4th, 1846, p. 391.) This, as might have been expected, has called forth from that gentleman his explanation of the circumstance of your allusion; but it is one which is certainly calculated to present your readers with a view neither flattering nor creditable to me, of the relation in which I stand to the contents of that work, (*THE LANCET*, April 11th, 1846, p. 420,) and contains imputations which, as coming from him, I feel to be neither merited nor just. I hope you will indulge me, therefore, with the insertion in your valuable pages of what appears to me to be a more equitable representation of this private and personal matter, which is not altogether foreign to the proceedings you have been lately investigating, or to the legitimate sphere of your public discussion, in so far as it involves general principles of ethics among public men and fellow labourers in the field of science.

In reference to my connexion with his Bridgewater Treatise, Dr. Roget observes—"While it was in the press, being then in familiar and unreserved intercourse with him, I allowed him to see some of the proof-sheets of that work, in which he professed to take great interest, and respecting which I naturally wished to have the benefit of his suggestions," (*id. ibid.*) Thus it appears that, in the confidence of private friendship, I was permitted, from my professing to take great interest in them, to have access to Dr. Roget's yet unpublished labours; and this is the explanation afforded to your readers to enable them to divine the source and origin of the identity of our views in the most abstruse parts of science. But surely this cannot be meant by the secretary of the Royal Society as the amount of evidence he will vouchsafe to posterity for their guidance in "adjudicating" the praise of originality, should he and I contend for priority in the announcement of important truths. He is aware of other conditions of this problem, the knowledge of which might aid them in its solution, and by his excess of caution in withholding them, he has betrayed a want of prudence. More candour would have been the better policy, and that quality is never manifested by imputations.

Before proceeding to the publication of the first edition of the Bridgewater Treatise, which forms two thick volumes octavo, and is chiefly occupied with descriptive details in comparative anatomy, Dr. Roget, with whom I had then the pleasure of being acquainted, did me the honour of attending my lectures at University College. He entered in April, 1832, and attended most regularly a course of sixty-four lectures on comparative anatomy and zoology, during which his pen was never at rest; and after each lecture, extended explanations were cheerfully given him, and innumerable references to books, plates, and diagrams, were carefully communicated to him, with the names of recent important works which he might recommend for the library of the Royal Society. But I was still more gratified to see Dr. Roget, notwithstanding his important avocations, again my pupil in October of the same year, and equally constant, zealous, and inquisitive, at a course of fifty-eight lectures on comparative

anatomy. At this course he was accompanied by Professor Royle, of King's College; Dr. John Storrar, of London; Dr. Negri, of Italy; Dr. Baly, the classical translator and illustrator of "Muller's Physiology;" Mr. William Farr; Mr. George Newport, and a few other gentlemen. He attended, also, the concluding part of the next succeeding course of comparative anatomy, in the beginning of 1833, which course was likewise attended by Professor Royle, Dr. Negri, Mr. George Newport, Mr. Ashcroft, of Liverpool, and a few other gentlemen; and in the summer of that year Dr. Roget began to print off the proof-sheets of his work.

Having thus repeatedly and unreservedly discussed with my zealous friend every part of the study of my past life, and having, at that time, been nearly twenty years an author on comparative anatomy, and studied it for several years in France, Italy, and Germany, and lectured on it publicly in Scotland and England for nearly ten, he submitted to my inspection, in rapid succession, several of the proof-sheets at the beginning of the first volume of his Treatise. From the manner in which they were hurried through my hands, and from the nature of their contents, it appeared to me that he considered it more important to be enabled to say that I had seen them, than to know what I thought of their contents; and I will give him the credit of my opinion, that they contained less for me to correct than I could have wished. It has often given me extreme pleasure to model into form the dawning conceptions of my friends in these obscure walks of science, or to afford my humble aid in their literary productions, where I could neither expect nor wish my name to be noticed; but the proof-sheets of the Bridgewater Treatise, which ought to have cheered me with their congenial rays, I must confess, had the most opposite effect,—and that, too, although my name occasionally figured in the pages, where he had occasion to cite me, from my papers long published. Observing the effects of his vigilance at my lectures, and that I was never cited for a single idea derived from that source, I took occasion to suggest to him the peculiar position in which that conduct would place me, should I find the means of publishing my own views. During all my most intimate discussions with Dr. Roget, while he was my pupil in University College, never satisfied my curiosity with the smallest hint as to the plan or details of his promised Bridgewater Treatise on Physiology; which surprised me, as I had the vanity to think that he might have benefited by my suggestions; but I am not now so much surprised at that part of his conduct.

Exactly at this time, (Oct. 1833,) by a fortuitous, and to me most fortunate, concurrence of circumstances, Mr. Wakley resolved to publish my lectures on comparative anatomy in the pages of this journal, and they began forthwith to appear weekly. Dr. Roget, I well remember, did not congratulate me on that flattering distinction. I now saw less of him and his proof-sheets; and in this tranquillity, I was surprised by the receipt of a bullying letter from him, on the 15th of Nov., 1833, imputing to me the exposure of his proof-sheets, and containing the astounding intelligence—that he had always mentioned to me the plan of every part of his work, and told me his views and sentiments on every subject connected with it; and also inquiring whether I had any grounds of dissatisfaction with the contents of the proof-sheets. I replied on the same day: "I already mentioned to you several parts of your interesting work, which contained details identical with those which I am accustomed to communicate to my class; and I have also expressed to you my feelings on that subject, where the views or illustrations appeared to be peculiar to myself. When you have had occasion to refer to my printed papers, you have cited the authority, but only on these occasions. Neither during the composition of your book, nor since, have I had the means of knowing anything regarding your plans, your views, or your details, excepting those contained in the proof-sheets of a part of the first volume, which you put into my hands for inspection. * * * No one, to my knowledge, has read a single page of any proof-sheet which you have put into my hands."

Perhaps I may have been too sensitive or too sanguine, but after my reply to his unexpected epistle of the above date, my intercourse with Dr. Roget ceased and determined. I received from him, however, on the following day, a letter, in which he observes, "I am glad to learn, from your letter of this morning, that what had been stated to me respecting the proof-sheets which I put into your hands having been seen by others is not correct. With regard to the allegation, that several parts of my work contain details identical with those you have been in the habit of communicating to your class, I would beg to observe, in the first place, that I consider myself as having the full right to make whatever use I please of the

information I may derive from my attendance as a regular pupil on the lectures of a public professor. Facts, and details of facts, communicated in that mode, become the property of those to whom they are communicated, and there can be no breach of confidence in making them public, nor any obligation to quote, in every instance, the authority on which each statement is made, more especially where no claim is made by the lecturer to originality in giving these facts. My object in attending your excellent lectures was, of course, to gain information; for although I have, as you know, been a lecturer myself on the same subject, (?) I am still anxious to omit no opportunity of instruction; and I have never been backward in acknowledging the value of that which I have derived from you: It ever was my intention, as I have already mentioned to you in conversation, and is so still, to make this acknowledgment in the preface to my work."

He has kept his promise, and made the acknowledgment in the preface in these words—"I should be ungrateful were I not also to acknowledge the instruction I have derived from my attendance on the lectures at the Royal College of Surgeons, delivered successively, during many years, by the late Sir Everard Home, Sir Astley Cooper, Mr. Lawrence, Mr. Brodie, Mr. Green, and Sir Charles Bell; and also from those of Professor Grant, at the University of London." But he is wrong in supposing that I know him to have been a lecturer on the same subject with myself, as I have never heard of his having delivered, in the course of his life, a lecture on comparative anatomy or zoology, which alone have occupied mine.

He was indiscreet, I think, in leaving the readers of your widely-circulated journal to interpret the alleged identity of our scientific views, solely by my having gained private access to his unpublished documents by professing to take great interest in them. But I can afford to pardon his indiscretion, which, though it might offend, will not hurt me, as it has called forth a statement of facts which should have been made earlier, and which some may think might have come with more grace from himself. In like manner, some few years since, when an attempt was made to rob me of the merit of having first pointed out the motor nerves of insects, and when the trump of glorification of the pseudo-discoverer had ceased to sound, an indiscreet letter from him in the pages of *THE LANCET*, soon led to the publication of facts, which entirely eased me with regard to posterity—the judges to whom alone a prudent author should look for impartiality in the appreciation of truth, or the adjudication of the highest reward of merit.—I remain, my dear Sir, with great regard, yours most truly,

ROBERT E. GRANT.

Grafton-place, Euston-square, London, April, 1846.

MEDICAL REFORM.

PROCEEDINGS OF THE COMMITTEE OF ASSOCIATED SURGEONS.

At a meeting of this Committee, held at the Freemasons' Tavern, on Saturday evening last, April 11th, GEORGE BORTOMLEY, Esq., in the chair,

The minutes of the former meeting having been read, the honorary secretaries stated that they had called the committee together for the purpose of determining what steps it might be desirable to take in the present state of affairs. Upwards of two months had elapsed since a deputation from this Association had waited on the COUNCIL OF THE COLLEGE OF SURGEONS, to state the wishes of the members with regard to a supplemental charter. Other bodies of surgeons, both before and since that time, had addressed the council to a similar effect, but no official intimation had been given that the council were in any respect prepared to yield to the wishes of the members, and the only public document which had emanated from that body contained a succession of insults offered by one of the vice-presidents of the College to those members who had remonstrated against the injustice inflicted on them by the charter of 1843.

A meeting was shortly to be held of the members of the National Association, at which it was understood that proposals would be made for the establishment of a medical institution, which should include members from the several branches of the profession. Should this be constructed on a liberal and comprehensive plan, it might be well to consider whether this Association ought not to lend its aid in carrying it out.

Mr. OTTLEY stated that he had seen one of the secretaries of the National Association, who had suggested the appointment of a sub-committee from this body to see the sub-com-

mittee of that Association, for the purpose of learning their intentions, and had urged the necessity of union amongst the several sections of reformers in carrying out their objects.

Mr. WAKLEY, Mr. BLOXAM, Mr. JONES, and several other gentlemen, expressed their opinions on this subject, all being in favour of the proposition. It was generally agreed that, after all that had occurred, no further application could with propriety be made to the council on the subject of the supplementary charter, and the following resolution was moved by Mr. LEWIS, seconded by Mr. HARRISON, and carried unanimously:—

Resolved,—That this meeting do appoint a sub-committee to ascertain the nature of the propositions which the Committee of the National Association intend to submit to their members at the meeting to be held on the 17th instant.

That the following gentlemen be the Sub-committee:—The CHAIRMAN, the HONORARY SECRETARIES, Mr. BLOXAM, Mr. LEWIS, and Mr. YEARSLEY.

That the Sub-committee be requested to suggest to the Committee of the National Association the propriety of publishing the resolutions intended to be proposed previously to the day of meeting.

It was finally agreed that the meeting should adjourn to Wednesday evening, April 15th.

Freemasons' Tavern, Wednesday, April 15th.—Pursuant to the adjournment, the Committee assembled again this evening, to receive and consider the Report of the Deputation, GEORGE BOTTOMLEY, Esq. in the chair.

Mr. OTTLEY, one of the secretaries, and a member of the deputation, read the Report of the Sub-committee, which was as follows:—

REPORT.

Immediately after the adjournment of the Committee, on Saturday evening, the 11th instant, your Sub-committee met, and addressed the following letter to the honorary secretaries of the National Association:—

To the Honorary Secretaries of the National Association of General Practitioners, &c. &c.

Committee-room, Freemasons' Tavern,
Saturday, April 11th.

Gentlemen,—The Committee of Associated Surgeons, observing that “a statement of several important considerations, relating to the present condition of the medical profession,” is to be submitted to the members of the “National Association,” on Friday, the 17th instant, have appointed the undersigned as a sub-committee, to request information as to the nature of the propositions so to be submitted.

We shall therefore feel obliged by your informing us whether it will be agreeable to you to receive us for that purpose, and if so, to appoint a time for our meeting.—We remain, Gentlemen, your obedient servants,

G. BOTTOMLEY, W. BLOXAM,
DREWRY OTTLEY, T. C. LEWIS,
C. H. R. HARRISON, J. YEARSLEY.

In reply to that letter the following communication was received:—

The National Association of General Practitioners in Medicine, Surgery, and Midwifery.

Office, 294, Regent-street,
April 13th, 1846.

Sir,—We beg to acknowledge the receipt of the communication dated the 11th instant, which yourself and colleagues have done us the honour to address to us, and to inform you, that the sub-committee of the National Association meet on Tuesday next, the 14th instant, on which day, at five o'clock, we shall be most happy to see the deputation, at the office of the Association, and to furnish them with such information as it is in our power to give.—We are, Sir, your obedient servants,

JAMES BIRD,
HENRY ANCELL.

To George Bottomley, Esq.

Accordingly, your Sub-committee proceeded to the office of the NATIONAL ASSOCIATION at the time named, and had an interview with the sub-committee of that body, when the information they received, in reply to their several inquiries, was to the following effect:—

That the general meeting to be held on the 17th will be confined to members of the National Association, and is not intended to include other members of the profession,—that at this meeting a report of the proceedings of the committee would be read, and all *pro forma* resolutions merely be definitively passed,—that the plan of a proposed voluntary institution of practitioners in medicine, surgery, and midwifery, would be submitted to the meeting, and if approved of by

them, that the necessary steps would be subsequently taken to ascertain the opinion of those members of the Association who are not present at the meeting, and of members of the profession generally, upon the subject,—that in the event of the plan meeting with such support from the general practitioners of this country as would render the establishment of the proposed institution feasible, a general meeting will be called, to which the matured plans will be submitted, and at which arrangements will be decided on for the appointment of an elective council for the permanent government of the institution.

To the inquiry, whether the institution was intended to be confined to general practitioners, or was to embrace members of all branches of the profession who might be willing to join it, it was replied, that it would be open to all legally-qualified practitioners who were prepared to join an institution founded on the principle, that medicine and surgery are one science.

In reply to the question, whether any effort would be made to separate the practice of medicine from the sale of drugs, it was stated, that though, at the outset, all legally-qualified members of the profession would be admitted to join the institution, that it certainly was intended that, in future, the being engaged in retailing drugs &c. should form a ground of exclusion from the institution.

The deputation was informed that the resolutions intended to be proposed were not in a sufficiently matured state to be submitted to their inspection; and to the suggestion of the deputation, that the “resolutions” intended to be proposed to the meeting should be previously published, it was objected that such a proceeding would be contrary to established custom.

Several members of the Sub-committee of the National Association expressed strongly their desire to see an union effected between the various bodies of general practitioners engaged in seeking the same object—namely, to advance the social position and professional character of the great body of the medical profession; and the chairman invited those members of the deputation, who were not also members of the National Association, to attend the meeting on Friday.

It was moved and seconded,—

That the report of the Sub-committee be received; and the resolution was adopted unanimously.

A discussion of some length ensued, for a report of which we have not space. The feeling appeared to be general, and was strongly expressed, that by unanimity alone would the profession triumph over the hostile monopolists who preside at the irresponsible Councils of the Colleges. Mr. BLOXAM, Mr. WAKLEY, Mr. COOPER, and other members, all concurred with the CHAIRMAN and HONORARY SECRETARIES in thinking that it would be prudent, as the resolutions to be proposed on Friday night were not yet before them, to adjourn the Committee to MONDAY EVENING NEXT, at 7 o'clock, in order that the scheme which is about to be proposed by the Committee of the National Association may be fully and deliberately considered. It was also suggested that the meeting should be again opened to all medical gentlemen who might be disposed to attend. The Committee did not conclude the discussion until a late hour.

UNIVERSITY COLLEGE, LONDON.

THE RECENT “PUBLIC NOTICE” OF THE APOTHECARIES’ SOCIETY.

A LARGE meeting of the Students of this College was held on Easter Tuesday, in the Anatomical Theatre, to take into consideration the notice recently issued by the Society of Apothecaries with regard to the prosecution of unqualified practitioners.

Mr. JOHN ELLIOTT WOOD, who was called to the Chair, opened the business of the meeting by reading the document recently put forth by the Hall, a copy of which appeared in THE LANCET of April 11. He observed that the school of University College, always ready to take the lead in everything which concerned the welfare of the profession in general, and the junior branches of it in particular, was the first, he believed, to notice in that public manner, a subject of such great and general interest. Much had been said of late with regard to the all-important subject of medical reform, but he might safely affirm that no measure would be of so great value to the profession as that which the Society of Apothecaries, by virtue of the power vested in them, were about to institute.

It was undoubtedly true, that many difficulties existed in the way of putting in force the penal statutes contained in

the Charter of Apothecaries' Hall, but it should never be forgotten that the power of prosecution had been held *in terrorem* over the heads of the guilty, and had deterred very many who would otherwise have engaged without scruple in irregular practice. It would now appear, however, that a vigorous stand was to be made against the system of quackery, and it became medical men to aid, by every means in their power, any endeavour to put a stop to practices fraught with imminent danger to the public, and calculated to bring discredit on the profession at large. (*Cheers.*)

Mr. CLEGG then proposed the following resolution:—"That this meeting has observed with pleasure that it is the intention of the Society of Apothecaries to institute prosecutions against unqualified practitioners, thereby affording to its licentiates a just measure of protection; and this meeting hereby pledges itself to facilitate, in every possible way, the laudable endeavours of the Society to mitigate so great an evil." (*Hear, hear.*)

From the general feeling of the meeting he had no doubt that the resolution just read would pass unanimously, and he could not let that opportunity pass without congratulating the students of University College that they were the first who had paid their tribute of approbation to the authorities of the Hall for their avowed determination to discourage unqualified practice. This meeting would show to the world what was the real reform wanted by the medical profession. He proceeded to refer to several glaring cases, with which he was acquainted, where grossly ignorant persons had had the hardihood to practise medicine without the shadow of a qualification, and concluded by referring to the fact that nothing had tended to raise the character of the profession more materially than the extended course of study required by Apothecaries' Hall. (*Cheers.*)

Mr. COLBORNE had great pleasure in seconding the resolution, which was carried amidst loud cheering.

It was proposed by Mr. LOWE, seconded by Mr. WILLIAMS, and carried unanimously,—"That a copy of the foregoing resolution be transmitted to the Secretary of the Society of Apothecaries, and that he be requested to lay the same before the court."

Mr. GRUNDY suggested that a copy of the proceedings of the meeting should be transmitted to the Editor of THE LANCET, with a request that, if possible, he would give them publicity.

After a few remarks from Mr. WEST, in approval of the general proceedings of the Meeting, thanks were voted to the Chairman, and the Meeting dissolved.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

SURGICAL CASES TREATED AT THIS HOSPITAL.

(Reported by HOLMES COOTE, Esq., Fellow of the Royal College of Surgeons of England, Surgeon to the North London Ophthalmic Institution, and formerly House-Surgeon to St. Bartholomew's Hospital.)

ACUTE INFLAMMATION OF THE PENIS, FOLLOWED BY SLOUGHING OF THE GLANS, FIRST INDICATED BY PROFUSE HÆMORRHAGE FROM UNDER THE PREPUCE, SIX DAYS AFTER CONNEXION: DIVISION OF THE PREPUCE.

CASE 3.—James B—, aged twenty-two, a stout, healthy labourer, had connexion with a female four days ago, (Sunday, Jan. 4, 1846.) The day following, he took a long walk in search of work, and returned home with the penis red, swollen, and painful. He paid no attention to the part, and pursued his usual habits until Thursday, Jan. 8, when he came to the hospital, and was admitted under Mr. Lawrence.

Jan. 9th.—There is acute inflammation of the glans, prepuce, and integuments of the penis, with considerable swelling. (Query, sore on the glans.) Ordered to apply ten leeches; to be followed by a linseed-meal poultice. To take calomel, five grains; powdered jalap, twelve grains, immediately; and a compound senna draught afterwards. Milk diet. To keep in bed.

10th.—He has complained of pain under the prepuce all night, especially at one point, near the apex of the glans: the body of the penis is less swollen. In the afternoon, profuse hæmorrhage came on, which lasted three hours, when Mr. Remnant, the house-surgeon, divided the prepuce in its entire length, and exposed a sloughing sore, rather larger than a shilling, seated partly upon the glans, partly upon the body of the penis. Ordered a cold lotion.

11th.—Fresh hæmorrhage came on, which lasted two hours. It was computed that he must have lost from three to four pints of blood. Persist.

13th.—The destructive process is stopped; the patient is free from pain, and sleeps well. Ordered a charcoal poultice.

15th.—The slough, which extends deeply between the glans and corpora cavernosa, is separating.

16th.—The slough is separated, and the surface of the wound is quite healthy. One-third of the prepuce and two-thirds of the glans have been destroyed: the urethra is opened at about a quarter of an inch from the natural orifice.

27th.—The wound is rapidly cicatrizing: the prepuce still forms a very good covering to the vestige of glans.

Feb. 24th.—Discharged. The wound is cicatrized. The water passes in greater part through the unnatural opening.

SLOUGHING SORE OF THE GLANS PENIS, FOLLOWED BY MORTIFICATION OF THE PREPUCE: DIVISION OF THE PREPUCE.

CASE 4.—John D—, aged seventeen, baker, a slightly-built lad, of temperate habits, contracted venereal disease a fortnight ago. He was not intoxicated at the time; he remained with the woman about an hour, and had connexion only once. Eight days afterwards, (Friday, Jan. 2nd, 1846,) he observed a discharge from the urethra; on Sunday the prepuce swelled, became extremely painful, and in a few days mortified.

Jan. 8th.—He came to the hospital, and was admitted under Mr. Lawrence. There is a mortified patch on the prepuce, of the size of a five-shilling piece; the disease is advancing; he is pale and anxious; the pulse is feeble, and the extremities cold; the tongue is white; the appetite is gone; and he has not slept for the last three nights. Mr. Lawrence immediately divided the prepuce in its whole superior length. There is a spreading sloughing sore, which has destroyed three-fourths of the glans penis; the apex, containing the orifice of the urethra, is still sound; the whole internal lining of the prepuce is mortified. Very little hæmorrhage followed the incision. To take a glass of weak warm brandy-and-water, with fifteen minims of laudanum, immediately. Ordered, twelve ounces of port-wine daily; arrow-root, beef-tea, &c. Pill of soap and opium five grains, to be taken nightly: a charcoal poultice.

9th.—The slough is extending laterally, and perhaps deeply; pulse very feeble; tongue white; bowels open; he slept some hours after taking the brandy-and-water, but had no rest during the night. Ordered, di-sulphate of quinine, two grains; carbonate of ammonia, four grains; camphor mixture, an ounce and a half; mix for a draught, to be taken three times daily: to continue the pill of soap and opium nightly; wine, beef-tea, and arrow-root, as before; brandy, if needed.

10th.—The sloughing process has now stopped; the apex of the glands is still uninjured; pulse stronger; tongue clean; bowels regular; he sleeps well at night.

13th.—The entire slough has separated; the whole of the prepuce and four-fifths of the glans penis are destroyed; the urethra, uninjured, opens at the natural orifice; the wound is granulating healthily. He is quite free from pain, and makes no complaint.

27th.—The wound is cicatrizing; the boy's strength is returning, and he can leave his bed. Omit the wine and brandy. To have meat diet, and a pint of porter, daily.

Feb. 24th.—The wound is nearly cicatrized. Discharged.

SLOUGHING SORE ON THE BODY OF THE PENIS: DIVISION OF THE PREPUCE.

CASE 5.—Charles N—, aged thirty-five, a well-made, healthy-looking labourer, contracted venereal disease a month ago. About ten days afterwards, he noticed upon the left side of the penis, and immediately behind the glans, a small ulcerated spot, which rapidly increased in size. January 12th, he became out-patient at the hospital, but he continued his usual habits; the sore extended, and soon became extremely painful. January 30th, he was admitted under Mr. Lawrence.

There is a large, black, circular sore, the size of a shilling, upon the left side of the body of the penis, behind the corona glandis, and penetrating the reflected lining of the prepuce; large-spreading phagedenic sore upon the opposed surface of the prepuce. There is a large, oval, phagedenic sore, the long diameter about the width of a shilling, upon the inner surface of the prepuce, on the right side. The prepuce is inflamed, swelled, and partially retracted, but is not in a state of paraphimosis. He complains of feeling weak; pulse feeble; extremities cold; tongue clean. Prepuce divided; there was but little hæmorrhage. Ordered a bread poultice.

30th.—The slough is separating; there is no extension of disease; pulse very feeble. Meat diet; a pint of porter daily.

Feb. 3rd.—The slough has separated, leaving a healthy granulating surface; the corresponding preputial sore is healthy; the sore upon the right side of the prepuce is extending. Ordered a black wash. Portions of soft lint are to

be carefully introduced between the opposed ulcerating surfaces.

5th.—The sores are granulating, but their surface wants the proper florid-red colour; there is an abundant puriform discharge. Ordered, mercury and chalk, two grains and a half, to be taken every eight hours. Repeat the black wash. Meat diet and porter, as before.

10th.—The sores on the left side of the penis are much in the same state; that on the right side of the prepuce is larger, deeper, and of foul aspect; the pulse is very feeble, and he complains of feeling ill; the lotion causes pain. Omit the mercury and chalk, and the black wash. Apply lotion of nitrate of silver, two grains to the ounce. Lint soaked in the lotion is to be carefully introduced, as before. Continue the meat and porter.

13th.—The sores have a perfectly healthy surface.

24th.—Cicatrization is nearly complete.

March 11th.—Discharged; the sores are healed.

25th.—Re-admitted, with considerable induration over the cicatrices of the preputial sores on both sides of the penis; slight return of ulceration. There are a few rupial spots over the body; painful periosteal swelling upon the right tibia. Ordered, iodide of potass, three grains; decoction of sarsaparilla, an ounce and a half. Mix for a dose three times daily. Meat diet. Still under treatment.

Remarks.—The thin integument, which is reflected from the inner surface of the prepuce, over the glans penis, affords a very inconsiderable protection against the venereal poison; hence, primary sores most commonly occur in this situation. Whatever may be their form, they are, for the most part, readily amenable to ordinary treatment. Circumstances, however, may entirely change their aspect, and convert the ulcerative into a sloughing process; the venereal poison is then destroyed by the activity of the local disease, and the patient recovers with a mutilated organ, but free from risk of secondary symptoms.

The causes of sloughing may be arranged under three heads:—

1. Neglect on the part of the patient, in a constitution enfeebled by intemperance or insufficient food.

2. Acute inflammation of the part.

3. Some unfavourable relation between the constitutional powers of the patient and the venereal poison, giving to the latter an especial virulence.

In the cases related above, (3, 4, and 5,) the sloughing cannot be assigned to the first cause, for the patients were young, healthy, and temperate men, who allowed no considerable time to elapse between contracting the disease and seeking medical assistance.

The occurrence of acute inflammation is a very untoward circumstance; the glans penis swells, and becomes tightly girt by the inflamed and swelled prepuce, and the excoriation or sore, inclosed between two opposed mucous surfaces, rapidly assumes an unfavourable aspect. The discharge, losing its puriform character, becomes ichorous, or sanious, and offensive in smell; sloughing next ensues, which may involve, not only the glans, but also the whole inner lining of the prepuce. This rapid destructive process, extending to some large arterial trunk before Nature has had time to plug the tube, leads to violent and uncontrollable hæmorrhage. In case 3, from three to four pints of blood were lost in a few days.

If the prepuce be not divided early, it mortifies, and thus liberates the glans, the slough upon which separates, and generally leaves a healthy granulating surface. It occasionally happens, however, that the liberation of the glans is not followed by such marked improvement; the sloughing process goes on until the whole glans is destroyed, and the extremities of the corpora cavernosa are denuded.

The occurrence of mortification in so important an organ as the penis, is marked by symptoms of general depression. In cases 4 and 5, Mr. Lawrence found it necessary to allow, from the moment when he first saw the patients, liberal diet, and stimuli in the form of porter, wine, or brandy; and in case 3, the same course was adopted, after the surface of the inflamed sore had passed into a state of slough.

Case 4 exhibits a sloughing sore under different circumstances. A healthy lad, of temperate habits, and in a respectable occupation, contracts venereal disease. In about eight or nine days a sore appears upon the glans; sloughing ensues, and in five or six days, three-fourths of the glans and the whole inner surface of the prepuce are destroyed. Are we to attribute these serious consequences to some peculiar virulence in the syphilitic poison? The patient had connexion but once, and it is now an established fact, that several persons exposed to the same contagion suffer in very different ways.

What, then, is that condition of the constitution which renders a young healthy person subject to such a calamity? Future observations must furnish an answer to this question.

Case 5 affords an example of sloughing and phagedenic sores existing together in the same individual. Upon the latter the poison was not destroyed; and Mr. Lawrence endeavoured, during the progress of the case, to secure the patient a permanent cure by the cautious administration of mercury. Two and a half grains of mercury and chalk were ordered every eight hours; but after four days the remedy was discontinued, on account of the less favourable aspect of the preputial sores, and a feeling of greater debility and restlessness upon the part of the patient. Although he was quite well when he left the hospital, the secondary effects of the poison soon became manifest. Indurated lumps appeared in the prepuce; rupial spots broke out over the body, and a painful inflammatory swelling formed upon the periosteum of the right tibia. Just at this time, when it is urged by many that the more formidable secondary and tertiary symptoms are caused by the injudicious administration of mercury, it is interesting to observe the occurrence of rupia and periosteal disease in a patient treated upon the non-mercurial plan. However important it may be to point out the mischievous consequences resulting from indiscriminate and long-continued salivations, it is equally so to draw a correct line between the effects of mercury and those of syphilis.

Considerable judgment is required in the treatment of these affections. If local congestion exist, it must be relieved; the sore must be liberated from pressure, the pulse restored to its natural standard, and the nervous system quieted.

The two first objects are attained by division of the prepuce; the arteriæ dorsales penis divide, and form a ring around the corona glandis; two sets of branches are given off, one to the glans, the other to the prepuce. Division of the latter at once abstracts blood from the former. The importance of this fact, which Mr. Lawrence has for many years been in the habit of impressing upon his class in his clinical remarks, is fully appreciated by those who have witnessed the beneficial effects following the early performance of this operation.

But how are we to know when a sore is about to slough under a prepuce, inflamed, swollen, and contracted at its orifice, so as to be incapable of withdrawal?

The discharge, losing its puriform character, becomes ichorous or sanious, and extremely fetid, and flows from under the prepuce in great abundance. The least pressure upon the exterior causes intense pain; the patient generally exhibits febrile symptoms, and the pulse is full, hard, and bounding. When mortification to any extent has ensued, with the same local symptoms, the pulse rapidly sinks, and the patient becomes feeble, restless, and dejected.

The glans penis is more completely liberated by division of the upper than of the lower half of the prepuce; but the latter section is sometimes preferred, in consequence of its causing less deformity.

When the sore has been liberated, and the bleeding has ceased, a warm bread-and-water poultice is the best application. Febrile symptoms, if present, must be subdued by suitable remedies, and by low diet. If the patient is feeble and depressed, stimuli and liberal diet may be necessary, as in the cases here related. In case 4, a glass of warm brandy-and-water was administered immediately after the division of the prepuce. Pain must be quieted and rest obtained, by the judicious employment of opium; and the patient must be put in a roomy and well-ventilated apartment.

The general constitutional disturbance marking the progress of these cases contra-indicates the employment of such a remedy as mercury, the action of which is of itself sufficient to produce a state of irritable feverish excitement.

MEDICAL FEES AT ASSURANCE OFFICES.

(ANSWER TO MR. STOOKES.)

To the Editor of THE LANCET.

SIR,—In the introductory remarks to the correspondence between us and Mr. Stookes, which you have printed in THE LANCET of March 21st, p. 345, you have incautiously allowed that gentleman to disseminate an assertion which we beg leave to pronounce wholly unfounded, and almost to deserve the character of being calumnious. Mr. Stookes ventures to say, "It is pretty well known, in spite of the confidential assurance of the insurance companies, that they do not hesitate to say, 'the answers of your medical man are not satisfactory.'" We wish to be allowed to give to this statement

an unqualified contradiction, so far as relates to the office with which we are connected, (the European Life Insurance Company,) and we are satisfied that no office of respectability ever violates the confidence reposed in it by medical men.

Mr. Stookes further implies, that the circumstance of a medical man replying to the usual queries of life insurance companies must often involve a breach of professional confidence towards his patient. It is perhaps scarcely necessary to comment upon such a remark as this, for it must be evident to any thinking man, that the reference being made to the medical man by the patient himself, with a full knowledge as to the description of information required from him, there can be no such thing as a breach of confidence in affording it; but, on the contrary, it is clearly the duty of the medical man readily to comply with that which is a proper and reasonable request on the part of his patient.

These are the only portions of Mr. Stookes' letter which we feel called upon to notice. We are surprised, however, that you should have allowed to pass, without reprobation, the insinuation against the honour of the medical profession contained in the following paragraph of the same letter:—

"If insurance companies want true answers, they should adopt some method which would not compromise the medical man with his patient, and they should pay him."

We do not understand the morality of this doctrine, that the truth of the answers ought to be affected by the circumstance of their being obtained gratuitously, or paid for by the patient instead of the office.

Here, also, we beg to say, that our experience of the respectable medical men with whom we are connected here, has led us to a conclusion different from that to which Mr. Stookes' observations seem to point in his own case.

We are content to leave the main question of the correspondence on the ground taken by Mr. Stookes himself. He contends that "the parties seeking information for their own benefit are the persons who should pay for it." We are of the same opinion. The information sought is for the benefit of the party insuring his life. He is informed by the insurance office that they cannot grant a policy to him unless he is in good health, and free from certain disorders tending to shorten life. They require him to furnish proof of his assertion that he is so, from the medical man best acquainted with his constitution. It is a question between them, on what terms this is to be furnished. The usual course of transmitting the answers confidentially to the office, (which alone gives the transaction the air of being instituted on its behalf,) is adopted expressly for the sake of preventing those consequences of loss of practice, which Mr. Stookes dreads, in case he should be induced to make true answers in the cases on which he is consulted.

To use his illustration of the attorney, the insurer is in the condition of a man with an estate to sell, to which he is required to make a good title. It is a novel doctrine that the purchaser is to be at the expense of deducing it, especially as he has to pay a lawyer of his own to protect him from being overreached, in case the vendor's attorney, from over apprehension of losing his client's practice, should be tempted to give false information.—We are, Sir, your obedient servants,

WIDOW SUTTON AND SONS.

European Life Insurance Office,
Liverpool, April, 1846.

ON THE DIVISION OF FEES IN THE PRACTICE OF MIDWIFERY.

To the Editor of THE LANCET.

SIR,—May I once more ask a space in your valuable journal, assuring you I do not intend to write again on this subject? Indeed, I should not have thought it necessary to have troubled you or your numerous readers with any reply to the observations in last week's LANCET, on my previous letter, had not those observations been made by the official of a Society established to bring about what in my simplicity I had presumed to condemn. It is true, the number of the Society's members is not very appalling, neither can I believe this Sanhedrim includes all the names of authority in our profession. I may therefore, perhaps, stand excused for having ventured to intrude my "individual opinions," believing, as I did, they would be approved by many, it might be, even by seventy, practitioners of midwifery.

I asked for the insertion of my former letter, because I entertained the same feeling reported to have been expressed at the first meeting of the Society of which Mr. Wilson is the honorary secretary—i. e., "that some honourable and just

arrangement should be come to with respect to midwifery fees, when it happens that accident, ill health, or absence from home, (and I presume any other cause,) occurs at the precise moment at which their presence is most needed by patients in child-bed, and a second practitioner is requested to attend;" and because the only arrangement I had seen proposed in your pages was in accordance with the suggestions of that meeting, at which it appears seven gentlemen were present. Though the object I have quoted was highly commendable, I felt myself called on to condemn the proposed arrangement; and as the subject is of much importance, I will, with your permission, say a few more words on it, by way of answer to Mr. Wilson's letter.

Since the resolutions of the—I know not what name the Society has borne; may I call it the Sanhedrim?—were proposed and carried, the honorary secretary says, "I have ascertained that there are three classes of opinions on the subject." Now, in my humble opinion, it would have been as well if this had been ascertained *before* the resolutions referred to had been proposed for the general guidance of the profession; as it would then have been possible to have considered each class, and the meeting need not have been under the necessity of recommending the only arrangement which appears to have been brought before them for consideration.

Mr. Wilson has given me the credit of having developed pretty fully the reasons of one class of opinions. I can truly say I feel it has been done very feebly; and, at last, only because none of those so much more capable seemed inclined to undertake it. I must also say, I do not consider this document, with the official signature, has done much damage to the class I belong to, the assertions I made, or the arguments I adduced, feeble as they may have been. Let us see.

In the first place, the honorary secretary quotes two assertions from my letter, neither of which he denies; but he attempts an answer by asking a question which had never been raised by me; which, indeed, the whole tenour of my observations had answered in the manner the querist seemed to desire. Did I choose to be critical, I think the honorary secretary has laid himself open to a word or two, from the association of ideas—which I think tell as much as hard expressions—that must occur to the readers of this question. "Carelessness in his unremunerated exertions" is not very suggestive of dignified notions of responsibility.

I asked no man, skilful or the reverse, to attend for another, except on the terms of mutual friendship; and it does not follow, therefore, that in doing a kindness for a neighbour, even the most experienced practitioner would uselessly occupy his time in the affairs of others.

I deny the assertion that I have not reflected on the loss that may be sustained while employed for another. I have not only reflected on it, but felt it; though I beg to add, and to acknowledge here with grateful thanks, that I have received ample remuneration by the kindness of my friends. I do not wish to speak of my personal doings on this or any other subject; but as Mr. Wilson has written so pointedly, and believes that I have spoken without a just appreciation of the responsibilities of the duties of an accoucheur, I must state that I have practised this branch of the profession more than twelve years, and, without having been more fortunate than other men, I have generally seen, what I wished only to intimate, that natural labours are the most common. And how can Mr. Wilson place so much importance on the expulsion of the fœtus and placenta, when he must well know that other things, of equal, or indeed greater importance, frequently demand attention. One of the gentlemen associated with him to carry out this plan of the division of the fee—Mr. Tucker—felt this before he assisted in proposing a cure for the evil all alike wish to remedy. And his letter, published in your journal, October 11th, 1845, contains a case in point; and a strong case also in my opinion, with all due deference to Mr. Tucker, *why the fee should not be divided*. Surely Mr. Wilson would not fear to consider the person referred to by Mr. Tucker cormorant-like in his notions; and surely he must see, that in this case his associate *did something*,—that, in fact, the fee—if he had received it—for the services he rendered, was both inadequate and hard-earned.

Instead of saying that the friends of patients *could not* complain of having to pay for a stranger's services, I might have said, in spite of the "capital joke," that they *do not* complain; and for a verification, I doubt not, I might appeal to others as well as to my own experience. Besides, those patients who will have a medical man, though he lives at some distance from them, are generally both able and willing to pay for the temporary assistance they ask for.

The question about Dr. A. and Dr. B., if an argument at all,

I see in no other light than a reason why the fortunate practitioner who happens to be in at the birth, should quietly walk off with the whole fee.

I do not believe, therefore I could not have forgotten, that in the majority of cases, "the necessity for a second practitioner arises from the individual act of the first." Neither does the writer of this sentence believe in what he has written, for he contradicts it directly after by saying, "that with every inclination to be present, the cause of his non-attendance might be entirely beyond his control."

The chief object of my former letter, although it would appear I did not make myself understood, was to point out that the labourer should not go without his hire, but that the husbandman who engaged him should pay him; and that, in such an ill-remunerated profession as ours, we should have no robbing Peter to pay Paul. When, Sir, the time has come that a council, chosen by the universal suffrage of the profession, shall direct its actions and watch over its destinies, the expression of "individual opinions" may be dispensed with, and your pages need not, I hope, be occupied in discussing such subjects as these; but until this happy result of your powerful pen shall have been accomplished, we must depend on the facilities you offer for the promulgation of opinions, however humble their origin, intended to be useful to our body.—With very many thanks for your present kindness, believe me, Sir, yours, ever obliged,

WILLIAM ROBINS.

Upper Southwick-street, Cambridge-square, March, 1846.

DR. MARSHALL HALL AND THE ROYAL SOCIETY.

To the Editor of THE LANCET.

SIR,—I have long resolved never again to enter into controversy, and I have publicly and privately expressed this determination; but all the documents which I possess, relative to the treatment which I have experienced at the Royal Society, and every explanation which I can give, are at your service and disposal. I make this offer on principle. I should be glad if anything which I could do, should prevent any future inquirer into Nature's ways, however humble, from occupying the position which I do, as long as the Royal Society itself shall endure.—I am, Sir, your obedient servant,

Manchester Square, April, 1846.

MARSHALL HALL.

THE SYDENHAM SOCIETY.

To the Editor of THE LANCET.

SIR,—As a member of the Sydenham Society, I cannot but view with extreme regret the publicly expressed dissatisfaction of some few of its members. The ostensible origin of this dissatisfaction,—the selection by the Council of Paulus Ægineta,—is most certainly not a justifiable cause of complaint to be preferred by any single member. At the best, the Council have a most difficult task to perform; but thankless, indeed, will be their office, if they are to be publicly denounced and threatened by all whose tastes are not exactly suited in every instance. Can it possibly be expected that such books shall always be chosen as may be the most acceptable to every member? Such an idea is manifestly preposterous; and yet it would seem, that because Paulus Ægineta (one out of the seven already distributed or announced) does not happen to suit the taste of your correspondent, "Censor," he must needs charge the Council with having "prostituted the funds of the Society," and say "the whole affair is a dereliction of duty," and a "degradation to our science and literature." Now, Sir, I maintain these charges are false; the publication of such a work is not a "degradation to our science and literature." What! is it a degradation to our literature that physicians should make themselves acquainted with its history? And where can such a complete account of the medical knowledge possessed by the Greeks, Romans, and Arabians, be so conveniently found as in Paulus Ægineta? True, a knowledge of their pathology and therapeutics might not stand the physician of our own day in much stead when at the bedside of his patient, neither would an isolated page of their works figure to much advantage in THE LANCET, (although "Censor" does think this the fair way to test its merits;) but surely to the literary and scientific physician, the man who loves literature and science for their own sakes, there may be something even in the "anile" pages of Paulus Ægineta sufficiently interesting and instructive. The study of the history of medical literature is confessedly at a very low ebb amongst us, and truly the remarks of "Censor" tend but to corroborate this; he cares not to learn what the Greeks, Romans, or Ara-

bians knew of medicine, or whether they knew anything at all; neither is he willing that others should become more learned than himself: this is, indeed, a "degradation to our science and literature."

Further, it is not clear how "Censor" can substantiate the remaining charges, "dereliction of duty" and "prostitution of the Society's funds," unless he can show that the Council have not been guided in their selection by those rules laid down and printed in the prospectus issued at the formation of the Society. This he has not yet done.

April, 1846.

Jus.

THE REVIVAL OF THE PROSECUTIONS OF QUACKS BY THE SOCIETY OF APOTHECARIES.

To the Editor of THE LANCET.

SIR,—I perceive, by your this week's number, that the "Society of Apothecaries" request to be furnished with the names of individuals alleged to be practising as Apothecaries, without having submitted themselves for examination, &c., accompanied by adequate proof of such illegal practice. Will you be kind enough to inform me and others, what is meant by "adequate proof"? Is it sufficient the having his name upon the door as Surgeon, or must it be proof of remuneration received for medicine administered?—I remain, yours, very respectfully,

SUUM CUIQUE.

London, April, 1846.

* * The proofs which the Apothecaries' Company will require, in order to enable them to commence any prosecution of unqualified persons with a reasonable prospect of success, will be,—

1st. That the offender, being without a licence from the Society, has attended a patient, or patients, in England or Wales, in a medical case, or in medical cases.

2ndly. That he has prescribed for such person, or persons, as a medical practitioner; that he has attended them for emolument; and that he has supplied them with medicines.

MEDICAL NEWS.

THE HALSTEAD CASE.—A medical gentleman, on whose line of conduct we made a passing remark in THE LANCET of April 4th, (p. 400,) has addressed a letter to the Editor, in which he says,—

"In reply, I would beg to observe that I am equally as sensitive as yourself, that when human life is in danger, it is not a moment for calculating the value of a few shillings; but, Sir, there is such a thing as working a free horse to death, and occasionally, the most charitably inclined (after having been repeatedly imposed upon,) are compelled to turn a deaf ear to the exigency of a case which, under ordinary circumstances, they would have considered a duty and a pleasure to have alleviated.

"To convey to your mind my meaning upon the present subject, I will just state that I had resided in this town some years prior to the introduction of the Poor-Law Amendment Act, and in conjunction with my partner, (and whose father had practised half a century before in this town,) had attended the poor of this parish, as well as the adjoining ones in the neighbourhood; but the proposals held out to us under the New Poor Law were of such a degrading nature, that, anxious to uphold the dignity of the profession, we were precluded the possibility of accepting the terms offered. What was the result? Why, instead of the Board of Guardians procuring a qualified practitioner to alleviate the wants and sufferings of their poorer fellow-creatures, they actually appointed a man who was neither a licentiate of Apothecaries' Hall, nor a member of the Royal College of Surgeons, but who was practising under fictitious diplomas, obtained by the death of a gentleman of the same name, who was buried in Oxfordshire. Subsequently the Board conferred the appointment on the assistant of this officer, who, at that time, was neither a member of the Hall or College, though it is no more than due to this gentleman to state that in a few months after his appointment, he became a licentiate of the Apothecaries' Society. But as he had no assistant for some years, and was liable to attend 5,000 paupers in this manufacturing town, as well as the poor in five adjoining villages, you can easily imagine that our time and services were daily, and indeed almost hourly, called into request; and in one or two urgent cases which did occur, we made a charge upon the Board, but as we were not their recognised medical officers, we could obtain no remuneration. To continue in this manner, would, Sir, as the editor of the *Weekly*

Dispatch wisely remarks, 'be the means of my ending my own days in the union house.'

"Although the system lately has somewhat been improved, (inasmuch as I believe the union officer is obliged to keep an assistant,) still the extreme number of pauper cases which we daily have to bestow our charity upon in a medical point of view, is far exceeding anything you can imagine, and renders it far from desirable to commence attending a case of midwifery, which is known will be very protracted, and for which no remuneration can be received. Such was the case of 'Cranfield's wife,' and after making an examination per vaginam, and finding that the midwife (even if she kept herself sober) could be of no avail, I attended personally upon the relieving officer, and urged him to grant an order for their medical officer to attend her; and even went a second time to him for that purpose without effect. Ultimately I did wait upon her; and it was not until I had devoted twelve hours' constant attendance that she was delivered; clearly showing that the time lost between my application to the relieving officer and my own visit had not protracted her case."

In answer to the questions we proposed at page 400, this gentleman and another correspondent have stated, that the relieving officer was not reprimanded by Sir J. Walsham, and has not been dismissed; and that no report has been yet received from the Poor-Law Commissioners.

The attention of the Board had been directed to the case, but they quite exonerated the relieving officer, which induced the Rev. W. Way to lay the subject before the Poor-Law Commissioners.

THE GREEN-GINGER WINE DOCTORS.—To the Editor.

—Sir: Summer is fast approaching, and as verdure seems the order of the day, the enclosed may not prove unacceptable. I enclose my card, and am, sir, your obedient servant,

RAD. GENTIAN, M.D.

* * The above note was accompanied by an advertisement, cut from a country newspaper, containing a certificate of Dr. M. S. KENNY, senior physician of the Halifax Infirmary, who says—

"Gentlemen,—I have tested your Green-Ginger Wine, and have much pleasure in declaring that I find it deserving of my fullest approbation. From the Green Ginger it obtains an *anti-spasmodic* and *carminative* property, producing the beneficial without the prejudicial effects of the alcoholic ingredients found to predominate in most other cordial wines. And, what is of still greater importance in *gouty* and *rheumatic* constitutions, as well as in those of *dyspeptic habit*, it is free from that acid or ascescent principle which, though concealed from the palate by an excess of saccharine matter, is, by its effects on the stomach, too soon and certainly found to prevail in almost all sweet wines. I must therefore consider it a valuable and most beneficial beverage, the moderate use of which cannot fail to prove beneficial as well to those in health as to the invalid.

"December 5, 1845."

This creditable "testimonial," probably the return for a present of a dozen of the liquorish fluid, our correspondent says, has appeared weekly in the paper for some months past.

The following statistical account of the patients admitted to the following hospitals was laid before the Lord Mayor a day or two since:—

St. Bartholomew's Hospital.—Patients admitted, cured, and discharged, during the last year: 5,419 in-patients, 17,808 out-patients, and 22,088 casualty patients, most of whom were poor, sick, and lame persons; and many of them being destitute of all relief, have been supplied with money, clothes, and other necessities, to enable them to return to their several habitations. Amount together, 45,315; died, 356; remaining under cure—in-patients, 484; out-patients, 3,299.

St. Thomas's Hospital.—There have been cured and discharged from St. Thomas's Hospital, in Southwark, the last year, of sick, wounded, maimed, and diseased persons, 3,552 in-patients, and 41,815 medical and surgical out-patients, including casualties, some of whom have been relieved with money and necessities, at their departure, to accommodate and support them in their journeys to their several habitations—total, 45,367; buried thence, after much charge in their sickness, 234; remaining under cure—in-patients, 425; out-patients, 707.

Bethlehem Hospital.—Admitted during 1845: curables, males, 110; females, 205. Incurables, males, 5; females, 2. Criminals, males, 7; females, 4. Discharged cured, males, 62; females, 118.

QUEEN'S COLLEGE, BIRMINGHAM.—The Reverend Chancellor Law, the vice-principal, has taken up his residence within the college walls, in order personally to superintend the proposed extended system of collegiate medical and surgical education. The reverend gentleman has offered to the resident students the following munificent prizes,—viz., £50 to the student who may carry off four medals; £30, three medals; £7, two medals; £5, one medal. William Sands Cox, Esq., has also gone into a like residence, to aid the council in carrying out their important arrangements.

APOTHECARIES' HALL, LONDON.

Names of gentlemen who obtained certificates to practise as apothecaries, on Thursday, April 9th: Osmond Mullett; William Lord Grundy, Wigston Magna, Leicestershire; Edward Bennion Batten, Oswestry, Salop; Thomas James, Louth, Lincolnshire; John Yeoman, Grosmont, Yorkshire; Octavius Edward Peddle Chard, Long Sutton, Somerset; Bryan Lister, John Barrett Collins, Dulverton, Somerset; William Haines, Avon Dassett, Warwickshire; Henry James Wordsworth Welch, 1, Dalston Terrace, Kingsland.

CORRESPONDENTS.

Mr. Thomson, of Aberfeldy, will see his remarks inserted in the present number of *THE LANCET*. We much regret they were not acknowledged before; but the correspondence of this journal has become so extensive, that attention to this department alone, occupies nearly the whole time of one gentleman, besides engaging much of that of the Editor and Sub-Editor.

X. Y. Z.—The statistics on the subject are not sufficiently precise to enable us to answer the latter question satisfactorily. That such a rupture is a deviation from the healthy standard cannot be doubted.—The life can be insured in the Medical Invalid Office, Pall-mall.

We regret that Mr. P. A. Brady has bestowed so much labour on such unthorough subjects. We do not consider that either the water-cure Johnson, or his quackish book, is entitled to receive two lines of criticism in our columns. The profession stood in no need of being instructed on such subjects. If some of the wealthy portions of the public have much faith in folly, and place no trust in science and knowledge, let them pay, and pay handsomely, for their blind stupidity. Fools are the foster-parents of quacks.

Dr. Howard.—Mr. Wakley has publicly stated, on more than one occasion, that he will first endeavour to obtain the support of the profession for his Medical Bill, and that he will then endeavour to prevail on Sir J. Graham to introduce the measure into the House of Commons as the *Bill of the Profession*, sanctioned by the Government. Should he fail to succeed in one or both of those objects, he is then resolved, at all hazards, to ask leave of the House of Commons, to introduce the Bill, about the last week in the next month (May)—the period of the year chosen by Sir J. Graham for the introduction of the most important of his medical bills in the last session of Parliament.

The paper of Dr. John Craig, of Paisley, shall be inserted.

Chirurgus and Subscriber.—In strictness of law, he is not, unless he had received a degree at an university; but by custom and courtesy he is so entitled. *Intra* licentiates of the College of Physicians are eligible for the office of physician in the London institutions.

The evil practices condemned by *Fairplay* cannot be made the subjects of legislative enactment. Proceedings so objectionable in the profession should fall under the cognizance of the medical institutions, though without means on their part either to prosecute or fine the offending parties.

The correspondent who sent the shop-card of Mr. Taynton, surgeon, of Bedford-place, Commercial-road, has supplied no reason for its transmission.

The communication of Dr. J. H. Hinsman, of Bury, was duly received, and contained much valuable information relative to the effects of the Factory System on the physical and moral conditions of young persons. We regret that an acknowledgment of Dr. Hinsman's communication was omitted in the two preceding numbers of this journal. We have made inquiries respecting a "case book" for private practice, and there is not one published which we could recommend for the Doctor's use.

The communications of Dr. Herapath, Mr. Prowse, Mr. Hartley, and Dr. Berncastle, will be published in *THE LANCET* of next week.

In *THE LANCET* of next week will be full reports of the meeting of the National Association, on Friday evening, April 17th, and of that of the Committee of Associated Surgeons, to be held on Monday ensuing.

In the report of the interesting case of concussion of the retina, forwarded to us by Mr. Page, from the Cumberland Infirmary, the name of the practitioner who directed the treatment is not mentioned.

Communications have been received from—Mr. Storks; Dr. Mordant; Mr. Prowse, Clifton; Mr. M. A. Brooks; Dr. Herapath, Bristol; Dr. G. A. Mantell, London; Dr. J. Berncastle, Croydon; Mr. E. Martin; Mr. W. Self; Mr. W. B. Page; Mr. Carston; Mr. J. Thomson, Aberfeldy; Dr. Martih Sinclair; Mr. George Combe; Mr. G. E. F. Hatch, Blackheath Hill; Mr. R. Amos; Mr. Beddoe; Mr. D. Hartley, Cheltenham; A Stammerer; An Essex Union Medical Officer.

CLINICAL LECTURES ON THE PRINCIPAL FORMS OF INSANITY,

DELIVERED IN THE MIDDLESEX LUNATIC-ASYLUM
AT HANWELL.

BY JOHN CONOLLY, M.D.,
PHYSICIAN TO THE ASYLUM.

LECTURE XV.

The advantages and disadvantages of removal of the patient from home.

HAVE a few more remarks to make on subjects connected with the perplexities incident to the management of cases of insanity in private practice. In the preceding lecture the chances of recovery were spoken of, in relation to questions always put to the medical practitioner. Another inquiry, always very anxiously made, relates to the expediency of removing the patient from home; either to an asylum, or to some residence apart from the family; and this often involves all the arrangements of the family, so that our consideration of many circumstances should be very careful before replying to such inquiry.

Removal is often imperative, on account of the extreme violence of a patient, or a resolute disposition to suicide, or the dangerous tendency of some of the delusions entertained, and which generally affect the comfort or safety of the patient's relatives, or that of persons in high situations. It is often equally necessary, on account of the refusal of the patient to submit to any kind of control over his habits and manners as long as he is in his own house, or that of his parents. Arrangements for the security required in such cases are made with difficulty, or are almost impossible, in private houses. Opportunities occur to the patient of becoming possessed of poison, or of dangerous weapons. The windows, the fire-places, the staircase, the furniture, the doors and gates, all offer means of danger or of mischief. The domestics are timid, and unable to control those whom they have formerly obeyed; and they act at once with the negligence of a house the usual discipline of which is relaxed, and the injudicious yieldings arising from habitual submission. Where more vigilance is observed, it most commonly arises from the unwillingness of the family to have the condition of the patient known to the neighbourhood; and as long as the patient remains at home, it is in a state of comfortless seclusion, deprived of the benefit of exercise and air, and weighed down by a monotonous and dispiriting solitude, and without the services of proper attendants. Accidents ensue, or extreme irritability is produced, and an entire loss of bodily health is the consequence. The attendants, equally imprisoned, become also unhealthy and morose, and unfitted for their office; the patient regards them as his enemies and his jailers, and the proper objects of his revenge. All this is entirely opposed to the cure, and the unfortunate patient, particularly in the higher ranks of society,—for pauper lunatics are sooner taken care of,—is neglected, and exposed to many dangers, and grows worse. He either continues shut up in some dismal, but secure apartment, where his mind gradually sinks into apathy and weakness, or he escapes, spends money lavishly, and runs many risks of losing his life. On his re-capture, the next step of his misdirected treatment is the application of rude restraint; a strait-waistcoat is put on, or the patient is fastened at night with cords; and the light of the day is scarcely admitted; and at length, the malady of the patient becomes much aggravated, and the discomfort of the family indescribable.

In less violent cases, the temper of the patient, or his continued attempts to regulate the affairs of the house, produce intolerable annoyance to all his family. The children of insane persons of this character generally suffer long and much before the malady of their father or their mother is suspected, and still longer and more before it is generally admitted and acted upon; they feel a scrupulous delicacy about interfering with the patient, and, in such cases, the medical practitioner becomes a most useful friend.

The best expedient, in these and other exigencies, is to remove the patient to an asylum, and it may be firmly insisted on, without unkindness. Opposition to it will be least obstinate where the dangers are most manifest; but it is often difficult to persuade a parent, a wife, a husband, or a sister, that their presence is hurtful, and that their absence would

be useful, to the patient. They naturally suppose that the patient will continue violent when taken away from them, and consequently be treated with great rigour, or perhaps with cruelty. These apprehensions are, I trust, becoming every year less prevalent, in consequence of the improved and improving state of private asylums; and, for the present, I rather rejoice than otherwise, to find an extreme jealousy of the employment of restraints beginning to prevail in all families, and in all classes. But removal is in such cases indispensable. All other methods and plans are generally so much waste of money and of valuable time, and productive of an increase or prolongation of the mental disorder. Simple removal also generally makes a powerful impression, and the impression is usually and almost immediately salutary. A temporary calm is produced, affording an opportunity for several remedial measures, and for acquiring the patient's confidence. Many bad habits, unconquerable at home, are found to be readily given up. Restraints are found to be no longer necessary, and the patient, no longer excluded from exercise and air, becomes docile and manageable. This is the beginning of his improvement. There are among the insane many young persons, the violence of whose temper, or the waywardness or viciousness of whose conduct, makes their parents wretched, or who even abuse or strike their parents, yet who become polite and easily governed in a well-managed asylum. There are also many sensitive patients whom injudicious opposition, or continual thwarting or scolding on the part of their parents, renders violent and obstinate. Their friends observe the altered habits of the patients, their decreasing application and unreasonable irritability, and are yet long before they learn to be forbearing, and to cease to force actions for which the malady has disqualified the brain and the nerves. They cannot understand that what is required is, the restoration of power to perform. These patients are much relieved and benefited by removal from home.

Several of our male patients are dissipated or violent at home, sell the furniture, and spend the money in drink, and ill-treat their wives and children; but they are always well-behaved here, and recover their natural affections. They come to us as if really coming to a place of refuge. They are conscious of superintendence, without being annoyed by it, enjoy a liberty which would be unsafe at home, and fall into a stream of habits, occupations, and hourly diversions of the attention, by which they are carried away from their individual griefs, fancies, and irregularities.

Melancholic patients, retaining a degree of sensibility which seems to render their removal to an asylum undesirable, will frequently ask to be removed to some place in which they may be secure, and they derive actual satisfaction from finding themselves so situated, although, with the inconsistency characteristic of the insane, they will protest against the removal which they have asked for, and resist it when about to be effected. So, also, they will remonstrate urgently against the careful watching which they very well know to be necessary, and even which they secretly desire. Such patients are conscious that they require protection from their own morbid impulses.

The manner of removal is always important; for one of its advantages is the immediate satisfaction which it should impart to the patient, who has wished for a change, and is usually at first delighted with a new place. This state of calm may only last a few days; but the returning irritation can be better met in an asylum than at home. From the very beginning of your treatment of an insane person, I would counsel you not to be persuaded into deceiving him. All attempts to do so usually fail, and if they do not fail, they are more frequently pernicious than useful. The truth may be unpalatable to the patient, but it is less so than deception, which destroys his confidence, and the practitioner's influence over him. This rule should be observed when his removal becomes necessary. Few maniacs are quite unconscious that they are ill, and almost all insane patients may, by degrees, be persuaded to leave home for the sake of health. Some will oppose it to the last; but when every arrangement is made, and a carriage is ready, will get up, and walk rapidly to the door, and set off very cheerfully. Many have conceived such a dislike of home, that they willingly consent to leave it. When there is a reluctance to do this, the usual plan is to tell the patient he is going to pay a visit; but I have always found that the patient preserved an angry recollection of this deception, and it sometimes even becomes the origin of delusions as to having been entrapped and imprisoned for some political or unfriendly reason. Distrust is also created, and, in some cases, immediate and violent excitement is the con-

sequence, and attempts are made to escape by scaling the walls; and thus an unfortunate character is given to the patient's commencement of residence in the asylum, creative of much subsequent difficulty. The best plan is to tell the patient that his state of health requires change, and that all is arranged for his removal, and that he must positively remove; and he will, in most cases, give up the point, and go. Harm is seldom done by stating the undisguised truth to the patient, that his mind is actually disordered, and that without care being taken of him, he will become incurably insane; but this communication must be accompanied by every expression of sympathy, and by words that may encourage hope of a speedy amendment. In all cases, as the time of removal approaches, I should recommend a particular watchfulness of the patient, who may possibly give way to despair when he finds it is resolved to take him from home, and all at once resolve to end a life which he feels to be becoming miserable.

The comfort of patients in removing is commonly and needlessly neglected, by trifling inattentions, such as a want of proper preparation of their wardrobe, their books, or flute, or favourite snuff-box, or cane; and it is much better to avoid even these and all other removable causes of discontent, however insignificant they may appear; for they are not so to the patients. It is generally desirable that the family medical attendant, unless the patient very much dislikes him, should accompany him to the asylum in which he is to be placed, and introduce him respectfully and kindly to the superintendent's notice; that he may feel that he is left in friendly hands, with friendly purposes. The superintendent of every asylum should pay great attention to the ceremonials of admission, and, if possible, never delegate them to others; for the first words addressed by him to his patient are the beginning of his treatment. Every sensitive person knows how materially his comfort, as a mere visitor, when going to a strange house, depends on the manner in which he is received, and the same feeling is still more intense in the greater number of insane persons when placed wholly under a stranger's care. They are naturally suspicious of everything, and never mistake conventional politeness for that which springs from sincere sympathy and benevolence. No people distinguish more accurately than the insane between that true politeness which is the expression of the social virtues, and the false politeness which is only the imitation of them. They notice every particularity of manner, voice, and dress, and the appearance of the house and of the attendants; very often, in subsequent conversations, alluding to things said, done, or observed, on the day of their arrival. If they come from an indulgent home, their feelings are easily wounded; and if they come from some other asylum, where they have worn restraints, and suffered insult, hope is revived once more in them by kind words and looks, and by that revival a way is made to break in on many perverse habits nursed by solitude and neglect.

I suppose it is common to most persons to be extremely sensible of the comforts or discomforts of any new place of residence during the first hours that are passed in it, and to have experienced a feeling of strangeness and loneliness in such circumstances, even when unaccompanied by any particular cares or causes of depression; and I often refer you to such experiences of mental influences, because in treating maladies of the mind, a knowledge of such influences is indispensable to successful attempts to cure or to relieve the irritation which constitutes so large a part of the malady. You must be able to imagine, then, how a sensitive patient, who has just lost sight of the faces of his family, and heard their voices, as he knows, for the last time probably for many months, may be affected, on his arrival, at even the pleasantest and most elegantly arranged asylum. The change may really be the means of his immediate amendment, and of his final recovery; it may be strikingly salutary, even from the first hour; but all depends on the management of this important movement, and on the careful exclusion of all probable causes of distress. A gloomy apartment, doors noisily and ostentatiously locked, windows out of reach or heavily guarded, the prospect of a dismal yard or unweeded garden, dilapidated furniture and shabby fire, negligent cookery and uncleanly service, are all too well calculated to oppress the heart. Still more painful must it be to see other patients with their arms tied up in leather, or their wrists fastened by handcuffs, and to find, as a part of the furniture of the house, any of those disgusting instruments of restraint, called coercion-chairs, even although constructed of elegant materials. The civilized appearance and neatness of the attendants are also points of importance far too much neglected, some of them having often a ruffianly appearance, that it is impossible

to mistake; whereas, without good and respectable attendants, of known humanity, no asylum can really be a proper place for the insane, or afford full opportunities of recovery.

When the patient has a great aversion to leaving home, and when there is no violence, or when there is good reason for expecting that the attack will be of short duration, removal is not at all advisable. The patient, if rashly removed, will either become worse, if the sensibility to impressions remains nearly unimpaired, or, on recovery, will accuse all who concurred in sending him away as cruel, and perhaps for ever afterward regard them as enemies. The temporary interests of a man of business, or of a professional man, may also be so seriously affected by such a step, that it should have the most scrupulous consideration before being determined upon, even in cases where, as a mere remedial measure, it might be desirable. When it is almost certain that the prospects of the patient would be ruined by its being known that he has been in an asylum, such a step should never be taken until all hope of cure has disappeared. Such serious consequences are chiefly incidental to those whose prosperity depends upon their intellectual reputation, and whose ordinary professional engagements demand the union of acuteness and judgment.

In puerperal cases, removal from home is often indispensable to the cure; but the general prospect of an early recovery makes it desirable that the treatment should be privately conducted, and the associations of an asylum avoided. Where there is no violent excitement, this may be practicable; and removal to a quiet residence, in the house or under the particular care of a medical practitioner, may greatly aid recovery. Reasons, however, often exist, as regards poor patients, which do not render removal necessary for those in comfortable circumstances.

In cases of hysterical mania, removal to an asylum should be delayed as long as possible, as the symptoms, although very likely to return, often speedily subside; and the impressions of an asylum on the sensitive and imitative mind of an hysterical patient may produce very inconvenient consequences.

However necessary the separation from home may have been, there are cases in which its long continuance is prejudicial to the patient. There are few patients whose state of mind requires the entire prevention of visits from their relatives or friends; and fewer still in which it is necessary to forbid their writing to them or receiving their letters. The strict regulations of some private asylums in these respects are unfavourable to the well-doing of many patients. I have often seen recovery advanced, and sometimes I think I have seen it commenced, by a visit from those dear to the patient. It is possible that the ties of relationship are stronger among the poor than among the rich; it was strikingly observed to be so, we are told by Sydenham, in the great plague of London. Certainly, we find the visits of the friends of our pauper patients at Hanwell far more frequently soothing than otherwise. Almost all our patients who have any remaining sensibility would think themselves quite deserted by their friends, and given up altogether, if they were not permitted to see them. One of our female patients lately got over the boundary fence, and walked some way along the road, assigning as a reason, that whilst all the other patients had friends who came to see them, hers never came near her: and she could only be pacified by a promise that her friends should immediately be written to. A few are, indeed, violently exasperated by such visits, and these we protect from such irritation by dissuading the friends from coming, or forbidding them to have access to the patient. Every Tuesday and Friday you may observe the general effects of the visits allowed by the rules of the asylum. Many an insane, but still affectionate father, or mother, or brother, or sister, may then be seen walking about the grounds with satisfaction and pride, linked arm in arm, or hand in hand, with those whose love still cheers them in their seclusion from the world, and in their peculiar affliction. And in private practice I have several times found that the amendment of the patient was advanced by such visits, and the self-control of the patient animated to exertions successful far beyond expectation, and almost amounting to its entire restoration. I have especially noticed this in the cases of young persons whose parents had been previously almost estranged by their undutiful conduct or bad temper; and in cases of puerperal insanity I have observed the same remarkable results. To be able and anxious to write a letter is sometimes among the first signs of recovery, and to be permitted to write is salutary. I am therefore always, myself, inclined to advise a greater degree of indulgence than I believe to be allowed in private asylums in

general, respecting the visits and correspondence of friends. Unfortunately, the friends of richer patients are sometimes rather unreasonable, and it is not so easy to control them as the friends of our patients at Hanwell. Unaccustomed to any kind of restraint themselves, and impatient of the oddities of those they come to see, they irritate them whenever they visit them; and when they have meant to give pleasure to their insane relative, raise a whirlwind of passion, from which they are glad to escape. Their visits, in order to be useful, should always be made in strict conformity, as to duration and all other circumstances, to the regulations of the physician. Without this precaution, their intended kindness may very much retard the recovery of those for whom they are anxious. In cases of marked aversion, the relatives who are so strongly disliked should on no account come near the patients. We find some of them driven to uncontrollable fury the moment they see their husbands, wives, or other relatives.

It is not, however, in public asylums, that much error is committed either as regards permitting or refusing the visits of the friends of the patients. In private asylums it is sometimes otherwise, and the refusal is accompanied by circumstances of aggravation. I have known an instance of a lady who was convalescent from melancholia not being permitted to have an interview with her husband, although he had travelled a great distance for the purpose, and she had seen him pass the window of her room, and had joyfully prepared herself to meet him. The motives of the proprietors of private asylums naturally become suspected in such circumstances. In other cases in which melancholic patients, in the chronic stage of their malady, are not visited, or even allowed to go home, the fault lies with the selfish convenience of relatives. The patient has no suicidal propensity, is never violent, retains his affection for his children and his regard for his friends; but he is disposed to take desponding views of the state of his property and of his general prospects, or his religious opinions are tinged with gloom, and he is negligent of ordinary habits and customs. I have sometimes seen, with sorrow, instances of this kind in affectionate mothers of families, and to whom the presence of their children, and the comforts of their own houses, would have been sources of great satisfaction, if not of great benefit, yet who were kept year after year in the dreadful seclusion of the old-fashioned private asylums, until the last remnant of hope faded, and life ended in a deeper gloom than the malady would have created without the intolerable imprisonment. Among our poorer people, such patients sometimes continue in the asylum on account of their necessitous circumstances, but every mitigation of their long exclusion from home is sought for them, and occasionally you will find little children running about the wards, having been permitted to come and remain with their mothers for a time; and in some cases, the good effects of this have been unquestionable.

I believe that several of these cases of reputed melancholy belong to the class of debility of the brain, already mentioned, and are best managed in a quiet and affectionate family circle, or in an asylum conducted on the principles which regulate a private family. There is a large class of these cases, in which the feeble condition of the brain is differently manifested, and without any particular admixture of melancholia, and yet, of which the proper treatment is very important, inasmuch as the happiness of the patient wholly depends on the arrangements that are made. These cases are most commonly observed in young women. The brain appears always to have been feeble, as a part of a feeble constitution; its functions are performed tolerably well so long as the patient leads a regular and quiet life; she exhibits no remarkable deficiency in ordinary circumstances, or in society, and may even pass for accomplished. But any unusual cause of agitation or emotion, any sudden or vehement impression made on the affections, or even on the senses, any kind of hurry or excitement, or even the commotion of a large and noisy evening party, or created by one loud and long talker, throws the mind for a time off its balance. The immediate effect is generally the renewal of some habits indicative of feebleness of mind, or the return and ascendancy of some delusion, which seemed before to have disappeared. In such cases, no relief of retirement being allowed to the young lady, she becomes oppressed by a consciousness of more exertion and cleverness being expected from her than she can show the possession of; or she is overwhelmed by the excitements of society, into which she is forced by the undiminished ambition of her parents. If these efforts are not desisted from, fits of more pronounced caprice and violence follow, which are the mere expression of an inward uneasiness and sense of over-work and the precursors of decided maniacal excitement. Some-

times the worldly design of stimulating these young persons to social display is accomplished, and they are sought in marriage; but this event, so much desired by their parents, is found to produce a manifest discomposure; the young person becomes more capricious, unsettled, or even violent; or, by imaginable mental associations, begins to be dissatisfied with herself, and to accuse herself of impropriety of conduct. But she perhaps recovers from this state, and marries; and then she sinks under the sense of domestic responsibilities; falls into dull and silent melancholia, and seeks to destroy herself; requiring very considerate arrangements to be made to support her resolution and to assist her weakness; even with the aid of which she sometimes falls into a hopeless condition of mind and body.

In these young persons, the governing power, or power of comparing and judging, is so diminished that the patient can resolve upon nothing; the affections, if accidentally appealed to, waver between opposing objects or between rival admirers: every mental effort and bodily exertion becomes weak and inefficient; nothing is done in time, and days are lost in attempts to perform what is never accomplished. At the same time, some propensity or some sentiment gains an undue ascendancy, or becomes indifferently regulated; perhaps some delusions now and then prevail, and altogether, the habits of the patient become so irregular or so peculiar that the comfort of the family requires her temporary removal. But it is unfortunate for the subjects of these cases when they are treated altogether like insane persons. Removal to an asylum may be very hurtful to them, and removal from home is only useful where the associations of home feed the malady, or when the patient cannot receive proper care and attention at home. If removal to an asylum is for any reason preferable in such a case to residence in a private family, the character of the asylum is of vital importance. It should be one into which noisy, violent, or very disagreeable patients are not received, and should be conducted with as little of the form of an asylum, and as much of the ease of a private family, as possible. Everything should favour tranquillity, contentment, bodily health, and comfort—and mental repose alternated with moderate, judicious, and pleasing exertions. The restoration of the deficient physical and mental power should be thoroughly understood to be the principal object of the residence, and of all the treatment; and not the forcing of actions for which the patient does not possess power. If the persons under whose care the patient is placed are extravagant concerning mere intellectual acquirements, they will probably drive the patient to complete insanity; and if they are characterized by the low fanaticism which so much prevails, even in private asylums, where the tables are covered with gaudy little books, containing histories of the conversion of young and delirious children, and other absurdities, to the exclusion of all wholesome literature, the poor victim will be driven to an unreasonable despondency, lead a life of wretchedness, and, perhaps, in the end, destroy herself. If the guardians selected for her are wanting either in judgment or in kindness, and imagine they can mortify or scold the patient into recovery, much irritation will be occasioned, and sullenness will ensue, and then a depressed or melancholy state, or dementia; and all hope of that partial recovery which is within reach in such cases, and by which the patient can be restored to considerable enjoyment of life, will be entirely destroyed, and the case will be lost.

Many such cases are, I believe, entirely lost by some of the means to which I have alluded. But if the patients are properly managed, either at home, or in a well-arranged asylum, and shielded from excitements, and dealt with very patiently and considerately, due attention being paid to the bodily health, which is almost always disturbed in such cases, and manifestly so when the disturbance of the mind is most observed, it will be found that the mind will, in time, and for a time, and again and again, perfectly recover its equilibrium; and a great share of mental health, although with occasional relapses, will be preserved to the end of an ordinary life; just as a feeble bodily constitution may be nursed and propped up so as to get pretty creditably and comfortably through the ordinary term of human existence. These cases appear hopeless when the patient is in her worst state, but recovery is seldom hopeless until there have been many attacks, and the patient is no longer young. It is sometimes highly beneficial to the patient, at a particular period of convalescence, to be restored to her family and her home, where no especial reasons to the contrary exist; for although much evil is avoided by the temporary removal of the patient from friends or relatives, who cannot conceive that what are called moral means

of cure are inadmissible at an early period of the malady, and who, consequently, fatigue the patient with efforts to rouse her, there is a time when some of these efforts may be more admissible, or when the patient's state is sufficiently satisfactory to the friends to cause them to abstain from them.

In all cases in which patients are removed from home in consequence of mental malady, the anxiety of friends naturally follows them, and the practitioner who has the care of them may be urged to try means of mental cure which he knows to be premature—means which can only be effected in a later stage. To allay the morbid excitement of the brain must be the first object, and until this is accomplished, it is imprudent to assail the patient with a variety of impressions, or to excite the feelings by the visits of friends, or by the reception of frequent presents, or presenting a multitude of objects calculated either to occupy or to amuse. For a time, all social intercourse may be best avoided, all mental exertion in reading or in writing, and even attendance on divine service. All these things become instruments of cure at a later period only, and when the excitement is subsiding. It is to guard the patient from too many habitual impressions, that we are often chiefly anxious to remove him from home; if they follow him, the whole benefit of the removal is obstructed, for they prolong the excitement, and postpone the recovery.

A time does at length arrive when not only all these impressions may be permitted, or designedly resorted to, but when a renewal of the associations of home is all that is wanting to complete the recovery of the patient; and to determine when the actual period is arrived, is sometimes as perplexing as any question that presented itself before the patient was removed from home to an asylum. In general, the danger of delay is not so great as that of premature return; but now and then much fretting and anxiety for discharge take place, and become preventive of further amendment. Hope, in the meantime, should be kept carefully alive; the friends should be written to, invited to come, and enjoined to acquaint the patients with the measures in progress for their return home, for their re-appearance in society, their re-establishment in business, or any other circumstances of importance, according to the patient's station in life. All this is useful, but specific promises as to time should be avoided, not only because the patient's state may undergo an unfavourable change before the time arrives, but because unexpected delay may arise from other causes, and produce violent irritation and relapse. In an asylum, many little preparations for going away are in themselves interesting, and make the intervening time pass agreeably; and as respects female patients, the preparation of dress is one of these, and of great efficacy. Care should be taken to make the manner of quitting the asylum consistent with the whole plan of treatment professedly pursued in it from the time of the admission of the patient, and, as it were, the last article of the treatment confirmatory of all that went before. The pauper lunatic should not be deserted as soon as he recovers, or forgotten when the gate of the asylum is closed upon him; the regulation of that departure, and of his first steps afterward, may render the recovery secure, or unsettle it. All this can only be done where the physician is the head of the asylum, and one system is pursued throughout; but when it is practicable, the result is, that the patients go away contented, often with tears, but tears of attachment and gratitude. When it is not done, and after being neatly dressed whilst in the asylum, they go away in old and shabby clothing, and penniless, the spectacle is very painful, and very disgraceful. The return to the world, where not much pity is shown to recovered lunatics, should, if possible, be rendered less rugged to them by some last acts of kindness and pity, in the case of the poorer, and by every assurance in the case of the richer patients, that confidence will be fully placed in the restored member of the family.

One is sometimes asked how it is known that a patient is recovering from a state of insanity. It is, perhaps, best known by our appreciation of numerous slight manifestations, almost defying description, shown in the countenance, manner, speech, and general carriage and demeanour, and often in the dress; just as any person of tolerable observation knows, from various trifling indications, that a man has just drunk a very little too much, or that any one is of a refined or of a vulgar character. An acknowledgment of the previous illness, and the present improvement, is sometimes a satisfactory confirmation; but it is not always an accompaniment even of decided recovery, and it is sometimes one of the peculiarities of the incurable to make such complacent avowals without real foundation.

In an asylum so conducted as to shut out all possible causes of disturbance and irritation, some of the incurable patients

will conduct themselves in so rational a manner as to lead to a belief that they have become perfectly sane. Conversation with them, and still more, a perusal of their letters, will show the extraordinary discrepancy existing between their ordinary conduct and their habitual thoughts and actual mental state, and reveal delusions and extravagancies which are scarcely credible. In every case of delusion, we should carefully inquire into the tendency of the delusion to suggest actions when the patient is at liberty to do as he likes. Very extreme and absurd delusions may be harmless, and one simple delusion may be dangerous. The question of confinement, or of liberty, wholly turns in these cases on the patient's impressions, and probably consequent actions, being safe or unsafe, or convenient or inconvenient, to himself or to others. I cannot imagine your having much difficulty in deciding on the proper course to be pursued in these cases if you keep this short, simple, and easily-remembered rule in view.

It is desirable to avoid ambitious and useless attempts to define, by a word, the differences between sanity and insanity; and this may be usefully remembered when we are engaged in investigating cases of supposed or imputed insanity, and in giving evidence concerning them in civil or criminal cases. The medical witness is often keenly cross-questioned respecting his interviews with the supposed lunatic, and, especially, respecting what he said, and what the supposed insane person said; but the fact is, that many insane persons talk without always talking foolishly or madly, and that the manner of saying the commonest things, and the mere aspect of the person suspected, are often quite sufficient to declare the nature of the case, to indicate the disorder, or to manifest the deficiency of the understanding beyond the possibility of doubt.

The difficulty of determining the time of removing a patient from an asylum is, after all, much greater in some cases than can well be believed by those who have not had extensive opportunities of observation. The object of all treatment is, to restore the patient's power of controlling himself; but I am quite sure that cases occasionally occur in which the completion of the treatment is incompatible with the continued confinement of the patient, and his liberation is the last part of the treatment required, and which will confirm the patient's power to control himself when nothing else will do it. I have noticed this more remarkably in female patients of the educated classes of society, and can only ascribe it to their intense perception of the unhappiness of being placed in an asylum, and their ardent desire to go home, and when there, to remain. In some of these cases, when accidental circumstances have caused the removal to take place before it could have been justifiably advised by the physician on ordinary grounds, the result has been very surprising and gratifying. In public asylums for the poor, a physician would scarcely think it right to send away patients on such chances; and in private asylums, the probability of such patients being willingly set at liberty can scarcely be expected. Certain it is, however, that there are some patients who are capable of recovery, and yet who, if kept in an asylum until they are quite well, must be kept there for ever.

All the foregoing considerations, which have been necessarily brought before you in a somewhat desultory manner, have chief reference to the management and cure of cases of insanity; and I must here observe, that the total change of character and habits, and often of the patient's appearance, incidental even to a temporary attack of insanity, has a tendency to produce an impression of the disorder being irremediable, and that the injudicious, and apparently inhuman, arrangements made for the insane have probably often arisen from this impression acting, almost unconsciously to themselves, on those taking charge of them. But the first object to be pursued in the treatment of every case of insanity is, its perfect cure. This perfect cure is often impossible; and if the life of the patient is preserved, the disorder passes into a chronic form, the character of which, or the cure of it up to a certain point, attainable in every case, but different in every case, wholly depends on the general management; and to these chronic varieties of insanity, and their general management, particularly in asylums, the concluding lectures of this course must now be devoted.

THE QUEEN'S COLLEGE, BIRMINGHAM. A SPLENDID GIFT TO SCIENCE.—The Rev. Dr. Warneford has presented, by the hands of William Sands Cox, Esq., the munificent sum of *one thousand pounds sterling*, towards the erection of additional rooms for the students, halls of study, lecture room, and chemical laboratory, in this flourishing College.

CONTRIBUTIONS TO THE
PATHOLOGY, DIAGNOSIS, AND TREATMENT,
OF
VENEREAL DISEASES.

By WILLIAM ACTON, ESQ.

SURGEON TO THE ISLINGTON DISPENSARY, AND FORMERLY EXTERNE
TO THE VENEREAL HOSPITALS OF PARIS.

ON THE EMPLOYMENT OF NITRATE OF SILVER IN THE TREATMENT
OF ULCERS ON THE GENITAL ORGANS.

Unanimity shown in selecting nitrate of silver in the local treatment of ulcers; difference of opinion on the best means of employing the salt; author's reasons for its use; method of applying it; how far capable of preventing secondary symptoms; precautions to be taken in using the salt; necessity for repeating the cauterization; practical remarks on pustules, excoriations, and fissures; assistance to be derived from washes; on the pain produced by caustic; indications for suspending its use.

THE more precise notions entertained by modern surgeons on the cause, progress, and termination of chancre, have rendered popular the employment of nitrate of silver in the profession, and, at the present time, this salt is almost exclusively employed in the local treatment of ulcers on the genital organs, by all practitioners who acknowledge that chancre, like small-pox, or hydrophobia, depends upon a specific virus, capable of being destroyed in situ, soon after its coming in contact with the animal tissues. Though, however, medical men are agreed upon its efficacy, there is anything but unanimity shown in the manner of its application; and it is in the absence of any practical directions on the point, that I propose calling the attention of the profession to the uses and abuses of nitrate of silver, confining my observations to such matters as private practice proves to be necessary. If a patient consults me within a few days after promiscuous intercourse, on account of any abrasion, excoriation, pustule, or sore, I employ caustic, except in the instances hereafter to be mentioned. I am well aware, that in nine cases out of ten in private practice, the appearances about which a surgeon is consulted are not of a specific character, and that the disease, if left to itself, would probably get well under simple treatment, for patients who have once suffered from syphilis, easily get alarmed, and come to their surgeon on the slightest appearance; still, I must maintain, that in the early stages of syphilis, the disease is not to be distinguished by any characteristic appearance,* and I think it far preferable to cauterize nine simple sores than allow one specific ulcer to gain ground, which it will undoubtedly do if not cauterized, and the virus effectually destroyed. It is, however, by no means true, that all non-specific sores will heal under simple means; or even if this be granted, it must still be allowed that nitrate of silver often expedites cicatrization, or, at any rate, does not retard it, unless injudiciously employed. I would urge, then, the employment of caustic in all these cases; and the success of the practice will be the best guarantee of its efficacy.

Experiments on inoculation have incontestably proved, that if caustic be employed soon after the receipt of the virus, all further effects may be stayed; they have, moreover, shown, that up to the third day the disease is of a local nature, entirely confined to the parts with which the virus has come in contact, and that it is not necessary to cauterize beyond the extent of the ulcer, but that, on the contrary, the doing so is fraught with great mischief. Cases like the following not unfrequently come under my care:—

H. H.—consulted me on the 6th of December, on account of a sore at the frænum; it had appeared a fortnight ago, and my patient had burnt it daily with caustic. At the moment he came to me, there was a large spot, of the size of a kidney-bean, covered with a thick dry coating of skin and nitrate of silver, and close to the frænum I observed a secreting surface with slight ulceration; there was a good deal of induration round the dry scab. Whatever might be the nature of the sore, I at once ordered him to suspend the caustic; I washed the part once with a solution of hydriodate of potash, and employed water-dressing; the next day the scab had come away, and the sore presented a clean ulcerated surface. I then ordered opium-and-water as a water-dressing.

13th.—The sore is now nearly cicatrized, but there remains some slight induration, much less than when I last saw the case. To continue, and return in a few days.

19th.—The induration entirely gone.

In other instances, a patient, thinking he can treat his own

case, and following, as he believes, his surgeon's plan, employs nitrate of silver most bountifully; great pain is produced; a deep eschar comes away in the course of a few days, the irritability of the organ is greatly increased; and being unable to uncover the glans, the patient now seeks the assistance of his surgeon, who, after carefully examining the parts, finds the original sore re-inoculated, and perhaps several other small ones in the neighbourhood. These cases clearly show that the employment of caustic may often do more harm than good; that while the nitrate of silver destroys the virus of one sore, the irritation it produces prevents us seeing the mischief accruing to others; and probably the non-observance of these rules leads to caustic being much abused. If a surgeon will inoculate a man and watch the effects, he will find, that at the commencement he can destroy effectually the virus by the slightest touch of the salt; little or no irritation will follow, and the application may be repeated at intervals. Before we employ nitrate of silver, the part should be carefully cleansed by being soaked in warm water, for the virus may exist on the surface of the neighbouring skin, and if not washed off, will re-inoculate the sore when the little eschar falls, and undue blame will be thrown on the caustic. Although no other ulcer exists at the time of using the salt, frequently, in a few hours after, another sore, or a little pustule, will be met with, which, if precaution be not taken, will go on increasing, and the disease will spread rapidly. These circumstances explain several anomalies which have thrown discredit on caustic. The parts should now be carefully dried, and if it be an excoriation the surgeon is called on to treat, the skin should be put on the stretch, and the solid stick of nitrate of silver lightly passed across it, so as effectually to whiten the surface in its entire extent; all cracks and crevices must be treated in the same way. If a pustule exists, it should be opened with a lancet, the pus evacuated, and a pointed stick of the nitrate of silver introduced, so as to cauterize the walls of the pustule. For this purpose the caustic should always be kept pointed; and this may easily be done, by wetting it, and rubbing its sides against a piece of soft wash-leather. It is very difficult to obtain a point by scraping the stick of nitrate of silver, in consequence of the brittleness of the salt, and when once obtained, the caustic will retain its pointed character.

If the surgeon is called upon to treat chancres at the orifice of the prepuce presenting the appearance of cracks, he must draw back the prepuce gently, when he will be enabled to cauterize the entire extent of the chancre, but in repeating the operation, let him guard against breaking through the cicatrix, or this linear chancre will extend, the same observation applying to the treatment of chancres on the frænum; and to obviate the difficulty of healing such ulcers, I usually divide the frænum, and cauterize the entire of the divided surface. Without these precautions, it may be weeks before you will heal such sores. Reliance must not be placed alone on the salt, and previous ablution, but extension of the disease should be stayed by lotions of an astringent kind; the one I prefer is a solution of pure tannin, in the proportion of two grains to the ounce of water, which not only checks the discharge, but seems to tan or harden the skin: the private patient, however, should be told, that this solution slightly stains his linen with a brown mark, or the lotion may tell tales to the family; to obviate this, a weak solution of sulphate of zinc may be employed, or, if desirable, dry lint; but dry lint has the objection, in some instances, of irritating the part, and, moreover, the little eschar is a long time in falling, and we are therefore prevented re-applying the caustic.

We now come to consider how soon the caustic should be re-applied. The rule I follow is to employ it as soon as the eschar is removed, and this will vary in many cases; generally speaking, it is sufficient to cauterize once in twenty-four hours, particularly if the sores be numerous or large. More frequent applications might be useful, did they not produce irritation, and should swelling of the prepuce arise, the mischief will be greater than by allowing the disease to run its course, as we should be then unable to employ ablution: before removing the lint, let the part be well soaked, or the little eschar may be detached, and the part made to bleed: it will then be only necessary to dry it and apply the caustic as before, very slightly.

I alluded above to the pain occasioned by caustic. When applied to a surface of considerable size, generally speaking, pain is very acute for a few minutes; I have known a few susceptible persons nearly faint from its effects: they describe it like what molten lead might be supposed to produce if thrown on the skin; but this gradually ceases, and a person is unaware that any soreness exists, unless the part be pressed or rubbed against: so much is this the case, that many patients

* Practical Treatise on Venereal Diseases, by William Acton, p. 240.

are glad to have a chancre burnt, as the caustic destroys the morbid sensibility so usually met with in syphilitic sores, dependent apparently on the ulcerative process going on, if not checked by nitrate of silver; and before twenty-four hours pass, this sensibility will return, and be again relieved by caustic. When the salt has been applied on several successive days its application is scarcely felt.

I shall be asked, perhaps, how long these repeated applications of caustic must be continued. In private practice, where we see cases early, or during the first day or two, one or two burnings will suffice; but in the more advanced stages, it may be necessary to continue them at intervals of twenty-four hours,—for a week or ten days, in fact, as long as we believe any virus is secreted by the sore; and this is known by the ulcerative stage continuing, by the surface being covered with a yellow, chamois-leather-looking pellicle; whereas, when the virus has been effectually destroyed, the ulcers do not remain stationary, but become every day less and less in size, and healthy granulations spring up; in these cases it is better to omit the caustic, as it may prevent cicatrization, but we must have recourse to it again if the sore regains any of its specific characters.

The surgeon will occasionally be disappointed in finding chancres progress less favourably than here stated; in spite of all his attempts to cure them, caustic fails; this is more especially witnessed in ulcers situated around the narrow prepuce, at the frenum, orifice of the urethra, or fourchette in the female; it is the situation of the sore rather than the want of efficacy in the remedy that prevents cicatrization; rest and attention to cleanliness, without rupturing the cicatrix, will alone bring about a cure; in these instances it is in vain to continue the caustic; its objects can be no longer attained, and it produces much mischief.

Queen Anne-street, Cavendish-square.

CONTRIBUTIONS

TO THE PRACTICE OF MIDWIFERY.

By J. HALL DAVIS, M.D.,

PHYSICIAN TO THE ROYAL MATERNITY CHARITY; LECTURER ON MIDWIFERY AND THE DISEASES OF WOMEN AND CHILDREN.

LABOURS TERMINATED BY INSTRUMENTAL DELIVERY, WITH ILLUSTRATIVE CASES AND REMARKS.

A first labour; age of patient thirty-seven; liquor amnii discharged spontaneously twelve hours from the commencement of labour pains, fifteen hours from the escape of the "waters," ardent fever; os uteri rigid, and of the diameter only of a five-shilling-piece; pains had been strong, and had then abated, after being re-excited for a time by the ergot of rye; head impacted.—Treatment: general depletion; delivery by craniotomy; vaginitis ensuing, with inflammation of the os uteri, treated by general and local depletion; other constitutional disturbances met by appropriate measures.—Remarks.

JUNE 13th, 1839.—I visited H. B—, a strong, healthy woman, aged thirty-seven, a patient of the lying-in charity attached to the University College Hospital, in labour of her first child, at the full term of her pregnancy. She was under the care of a student of the midwifery class of the College, at whose request I saw her. The previous history was, that the pains commenced, of feeble character, early on the morning of the 12th. In the evening, the orifice of the uterus had become dilated to about the diameter of a five-shilling-piece; the waters had then just escaped in small quantity, this being about twelve hours from the first pains; the head presented, resting on the pelvic brim. The pains continued strong and frequent during that night, without progress.—Eight a.m.: The pains subsided to great feebleness, and half a drachm of the ergot of rye was exhibited, which was followed by strong action in fifteen minutes; two more doses were given, but ultimately with no good effect. I saw this patient for the first time at mid-day. The skin was then hot; pulse hard, full, bounding, and 130; no uterine action; the orifice of the uterus dilated to the diameter only of a five-shilling-piece, its boundary tissue being thin, hard, dry, and closely and tightly encapping the presenting head; the head impacted. The patient thirsty, with a white, furred tongue, flushed face, and frontal headach. She was by my directions bled, and being a full, firm-fibred subject, with ardent fever, thirty-five ounces of blood had flowed, although she had been placed in the sitting posture, without any approach to fainting, or without any perceptible diminution

in the hardness and fulness of the pulse, and the skin being yet dry. I felt unwilling, however, to take more, and hoped that this might suffice. After the lapse of an hour, the patient complaining much of a sense of heat in the abdomen, and the pain of the head being yet unrelieved, the arm was untied, and ten ounces more having flowed, entire relief was obtained. A breathing moisture broke out upon the skin, and the pulse became soft and less frequent; the pain of the head had vanished. The bladder had all along suffered no interruption of its function; the urine, however, had been scanty and high coloured.—Three p.m.: No progress having been effected, I proceeded, without further loss of time, to the operation of craniotomy. The head being opened by the scissor-perforator, and the cerebral substance freely evacuated, simple traction, of a legitimate amount of force, with the guarded crotchets, did not suffice to bring it forward; and to prevent mischief by pressure upon the maternal tissues, I removed, by the osteotomist, several sections of bone from the cranium, that it might collapse the more readily. Thus was I enabled to bring the head easily through the partially-dilated and rigid uterine orifice, and through the pelvis; the body of the child followed in due time. The placenta was thrown off in about a quarter of an hour, without hæmorrhage, by the unassisted efforts of the uterus. The patient was left with the security of a bandage. She was ordered sixty minims of tincture of opium, to be followed by thirty minims more, if she should not have slept, or feel disposed to sleep, at the end of three hours.

14th, mid-day.—Has had six hours' continuous sleep, which has refreshed her; the second dose of laudanum was taken; skin moist, and of natural temperature; tongue clean; no headach; no abdominal pain or tenderness; no pain of back; with the exception of a little smarting pain, she has passed water without difficulty; pulse 120, hard and active; lochia scanty; bowels not open. Bled to eighteen ounces, which did not produce fainting. Ordered seven drachms of castor-oil.

15th.—The genital passage was found hot and swollen; lochia very scanty; os tincæ tender, examined by the speculum, found very red and swollen; has passed water freely, and without any smarting sensation; bowels open three or four times since the oil had been taken; breasts flaccid. I directed the application of twelve leeches, to be distributed upon the labia and os tincæ, and applied by a wooden tube; pulse moderate; the leech-bites had bled very freely, and the patient was sensibly relieved.

16.—On account of inflammation continuing, the leeches were repeated. From this time forward, the inflammation subsided under healthy supuration.

17th and 18th.—Pulse 120, and soft; insomnia and delirium. These were subdued by well-regulated doses of different opiate preparations, the morphia (muriate) appearing to answer the best. Allowed mutton-broth.

19th.—Pulse 114; the morphia agrees, is still required, and is combined with a light vegetable bitter. The delirium has ceased. Ordered, a mutton chop, with a quarter of a pint of porter.

20th.—Decidedly better; gets sleep by the aid of the morphia at night, and relishes her diet; pulse 100; slept six hours; a very trifling discharge per vaginam. The bowels not having been opened for two days, half an ounce of castor-oil prescribed, to be taken immediately; same diet.

The improvement of the patient from this time forward was steady and uninterrupted, with the aid of tonics; the opiate was soon dispensed with, and she called upon me at the end of a month from her delivery, to report herself quite recovered.

Remarks.—The subject of the foregoing case being in her first parturition at the age of thirty-seven, we might have anticipated a protracted labour, *quoad* the maternal soft tissues; but the circumstance of our patient being of full and firm habit of body added further to the difficulty in that respect. Moreover, some amount of disproportion, absolute (sacro-pubic diameter at brim) as well as relative, the child being a male, and large, made the obstruction yet greater. The exhibition of the ergot of rye, under the circumstances, was opposed to correct principles of treatment, as I informed my young friend at the time. At my visit at mid-day, the ardent fever, headach, and abdominal heat, led me, for our patient's relief, to adopt the depletive treatment already indicated, and with good effect. I am of opinion, however, that a moderate depletion some hours earlier, with the exhibition at intervals of the tartar emetic, although it could have made no difference in respect to the mode of delivery itself, on account of the large size of the child, yet as regards the constitutional disturbance,

and the state of the soft parts of the mother, would have rendered needless the practice of so large a depletion as became necessary in the sequel.

The object of the general bleeding during the labour was not only as a corrective of much vascular disturbance in the system at the time of its adoption, but as a preventive of pelvic inflammation very likely to supervene upon so protracted a pressure by the head upon certain portions of the genital tissues. And although it had not this desirable effect, yet, aided by the subsequent treatment, it brought the inflammation, which otherwise must almost certainly have proved fatal, within the limits of safety. The os tincæ being scarcely dilated above the diameter of a five-shilling piece when I undertook the delivery, and, moreover, in close application with the presenting head, more time was required, yet the services of the osteotomist rendered the business of extraction a safe and an easy proceeding, enabling me to diminish the bulk of the cranium to an amount adequate to my purpose.

In the treatment of the attack of hysteritis and vaginitis which supervened upon delivery, the local detraction of blood by leeches, applied as described, was of great service in aid of the general depletive measure. In addition, I should have stated in the above report that the passage was syringed out at intervals with warm water, from which the patient seemed to derive considerable relief. The tone of the bladder not having been weakened by previous distention, it was enabled to respond to its function after delivery. There was but a scanty secretion of urine during the labour, and that readily passed, the direction of the head's pressure being such as not to interfere with its free escape by its natural outlet.

The subsequent management of the case was, in all other respects, conducted in conformity with general principles; the inflammation being subdued, the debility and irritability left were treated by sedatives, tonics, and nutritious diet.

A protracted labour brought to completion by craniotomy; vaginitis and hysteritis ensued, accompanied by high-toned pyrexia. —Treatment: one full venesection followed by an emetic of tartarized antimony and ipecacuanha, which proved likewise, with advantage, a copious purgative; the patient convalescent on the following day.—Remarks.

July 10th, 1843, Two P.M.—I was requested by a surgeon at the West end of town to come to his assistance in the case of a lady, aged thirty, whose previous health had been moderately good, in labour since the previous afternoon. The liquor amnii had escaped the night before, the orifice of the uterus being then fully dilated. The head had effected a partial descent into the pelvic cavity, but had, I was informed, made no progress in its descent for about eight hours; no pyrexia; pulse soft, 100; no evidence of plethora; local heat, but parts moderately moist. There being no positive proof of the child's death, I applied the forceps, the respective blades being passed over the head at the sides of the pelvis, having first, by the catheter, emptied the bladder of a small quantity of urine. The locking of the instrument was easy and true. After I had applied traction very cautiously during the presence of the pains, separating the locking, and desisting from traction in their absence, and employed them thus, as long as I considered safe, but without effect, I removed them, and had recourse to craniotomy. The brain was freely evacuated by the perforator scissors, aided by the compression made upon the skull by the resistance of the walls of the pelvis in its transit. The extraction was made by the guarded crotchets. The delivery was accomplished in about five minutes, of a male child of large size, and the placenta followed spontaneously without hæmorrhage, within twenty minutes of the expulsion of the fœtus.

July 11th, half-past ten A.M.—She had slept well during the night without an opiate, and had passed water without inconvenience. There was no fever, and no pain was complained of.

12th, mid-day.—Throbbing in the hypogastric region, with severe pain in the sacral region, which had prevented her sleeping; pulse 110, hard, and full; skin hot and dry; tongue coated with a whitish brown fur; considerable headach over the frontal region. There had been some previous chilliness. On introducing my finger into the vagina, I found it, as well as the os tincæ, tender and swollen, and the parts sensibly much heated; the lochia scanty. At my suggestion, a vein was opened in the arm, and the patient being in the sitting posture, was bled to syncope. Twenty ounces of blood flowed before that effect took place. The pain immediately ceased, and did not return; the skin became moist. The patient afterwards took, within an hour from the bleeding, by my directions—tartarized antimony, one grain; ipecacuanha, one

scruple, as an emetic, followed by warm diluents; and this acted also freely, and with good effect, as a purgative.

13th.—She had had good sleep; pulse 85, and soft; no return of pain; she was, in fact, convalescent. Due caution in respect to diet and general management was judiciously observed by my friend, who afterwards informed me that she had no relapse and was enabled to leave her room without risk at the usual period.

Remarks.—The difficulty in the case above detailed was due, not to any want of parturient action,—for there had been no lack of that,—but to more than ordinary resistance to the agents of labour, occasioned by the large size of the child, which was a male. My report, which was taken at the time, and subsequently to each visit, does not state whether our patient had had children before; it is my strong impression, however, that the reply to the inquiries which I made on my arrival was, that she had had one child five years previously, still-born, after a lingering labour, but that no instruments were employed. Full time having been given to the natural efforts, which had been fully exerted, and a reasonable fear what might be the result of a more prolonged pressure of the head upon the adjacent maternal tissues, determined me at once, in the absence of distinct proof of the child's death, to make a trial with the forceps, there appearing to be sufficient room for their use. I did not deem it justifiable—taking the patient's pulse and her general condition, when I saw her, into consideration—to adopt any depletive treatment. The forceps, most cautiously employed, were passed to their destination along the sides of the pelvis, without difficulty, but, as was seen, without avail; accordingly, the operation of cephalotomy was at once proceeded with.

If we inquire whence arose, in this case, the inflammation which followed upon the delivery, we may assign a principal part, if not the entire, of that effect, to the pressure of the head upon the same tracks of tissue during the time stated, yet fully admitting the possibility that the forceps, which were essayed upon clearly legitimate grounds, might, although more carefully applied and used, in a predisposed state of parts, have contributed a share. That the pressure of the head, however, *per se*, upon the same points of soft structure, for a period of eight hours, is adequate to produce such an effect, was remarkably instanced in the case of a patient (M. C.—) aged twenty-eight, who first came under my care thirty-eight hours after delivery of her first child, on account of inflammation of the vagina, attended by sloughing and retention of urine, in April, 1844. Her labour had been completed without any recourse whatever to instrumental means. Its entire duration was twenty-one hours and a half, being less than the time assigned by Denman to a natural labour. During the last eight and a half hours of that period the head had been strongly bearing upon the soft tissues at the flooring of the pelvis. For the details of her case, which was of considerable interest, and which terminated so far successfully, that she has since given birth, by the natural efforts, to a living child, see THE LANCET, "Contributions in Midwifery," June 28th, 1845.

In the case of the above lady, the attack of inflammation of the vagina and os uteri, which declared itself distinctly on the second day, with attendant high-toned fever, (being speedily met by adequate general depletion, assisted by the effect brought about by emetics employed in equalizing the circulation, and in promoting general relaxation of the system,) readily yielded. It may, I think, be admitted as more than probable, judging from the violence of the pyrexia which attended the case, that detraction of blood to an amount short of the production of fainting would have allowed the inflammation to proceed to a fatal extent, or at all events, to a lamentable destruction of parts.

A second labour; patient's age twenty-three; liquor amnii escaped after fifteen hours' labour; parturient action good during twenty-four hours, then flagged; os uteri then became rigid, closely encapped the head in front; pyrexia.—Treatment: venesection twice, after which the orifice of uterus obliterated; delivery by craniotomy at the end of twenty-one hours from the discharge of the "waters;" pulse before delivery 110, sank in one hour afterwards to 80; patient recovered without a single bad symptom.—Remarks.

Dec. 7th, 1839.—One P.M.: I was requested to visit M. R.—, aged twenty-three, in labour of her second child, her first having been born dead, not putrid, without assistance.

Previous history.—Very trifling pains had commenced on Thursday evening. She was seen first by her medical attendant at six A.M., Friday, the pains having become stronger and

more frequent. At six P.M., the membranes broke, head presenting. The pains occurred at short intervals, and were strongly bearing during Friday night. This morning, at six, an intelligent friend of mine was sent for. The pains had then abated, returning at long intervals; a considerable tumour of scalp projecting to within a short distance of the outlet of the passage; the os uteri anteriorly closely and tightly encapping the head. The patient, moreover, having a hot, dry skin, and being thirsty, sixteen ounces of blood were taken from the arm. A temporary increase of labour pains was the consequence; the condition of the os uteri remained as before. At my visit, I found the head impacted firmly in the pelvic brim, a considerable protrusion of scalp reaching to within a few lines of the vulva; the anterior segment of the os uteri tightly embracing the head; the genitals hot and dry; pulse 110; considerable turgescence of the face; the bladder had been relieved. I ordered a repetition of the bleeding, which was carried to the extent of eighteen ounces, after which the os uteri could nowhere be felt; it had become obliterated. The patient felt cooler and more comfortable; the vaginal mucous membrane as well as the skin had lost its dryness. At half-past three P.M. I visited her again. No progress; the impacted state of the head unaltered; the pains, as if by a wise provision of Nature, had remained as feeble as before. The head had been fixed for twelve hours; any change which had taken place in that time had consisted alone in a greater and greater protrusion of scalp; the bony part of the head had not progressed in the least. Further delay being needless and unsafe, for the obvious reason sufficiently alluded to in the cases previously detailed, the delivery was forthwith completed by the perforator and guarded crotchets. The placenta was thrown out of the uterus in a few minutes by the spontaneous efforts of that organ, which, now relieved from its load, seemed at once to recover its natural energies. The pulse sank after delivery, within an hour, to eighty. The child was above the average size, and a male.

8th.—Ten A.M.: No pain; had slept well without an opiate; had passed water; pulse 78. Ordered, castor-oil, six drachms. The ordinary management, after a natural labour, was pursued, not a single bad symptom occurring. I told the patient she would next time, most probably, become the mother of a living child, and I have had an opportunity of knowing that she has in this respect obtained her wish.

Remarks.—The depletive treatment adopted, and timely, during the labour, was no doubt the means of ensuring to this patient so prosperous a convalescence after delivery. The entire duration of this artificially completed labour might be stated at thirty-six hours. Of this period, fifteen hours were occupied by that part of the labour which preceded the rupture of the membranes and escape of the waters, technically termed the first stage. Of the remaining twenty-one hours, the bony part of the head might be said to have occupied a fixed position during the last twelve. In many, I would say in most cases, it would not be safe to allow of the head's pressure upon the same tracts of tissue for that space of time; but a due knowledge of the principles of our art, and an accurate observation of the circumstances of each case, will, with rare exceptions indeed, inform us of the extent to which we may safely place trust in the natural powers.

Under the general and local circumstances of this case, with the timely treatment to which it was submitted, the delay incurred was admissible and justifiable, and the more especially when it is moreover borne in mind, that the first child of our patient, although a still birth, was born without artificial aid at the full term of gestation. That there was room for the passage of a child of average size was apparent to me on careful examination of the capacity of the pelvis after the birth of the child, and the result has confirmed my opinion.

Russell-place, Fitzroy-square, Dec. 1845.

POISONING BY TARTAR EMETIC, AND APPEARANCES AFTER DEATH.

By DAVID HARTLEY, Esq., Surgeon, Cheltenham.

Two children—a boy, aged five years, and a girl, three years of age—were each given a powder containing about ten grains of tartar emetic, mixed with a little sugar. The boy died about eight hours afterwards; the girl lived for four or five hours longer. Mr. Newman and myself were ordered by the coroner to make the necessary examinations, of the bodies; this we did about one hundred and eleven hours after the death of the first child, whose body we found not at all emaciated, or presenting any external signs of disease. The

abdomen was not distended. On opening the thorax, there was a slight adhesion of the left pleura, and about three drachms of serum were found in the right pleura. The anterior surface of the lungs appeared healthy; the posterior surface more red than usual, particularly at the lower lobe of the right lung; heart natural; there was a little dark blood in the right ventricle; the coronary vessels were very fully injected. In the abdomen, we found the liver healthy, the gall-bladder empty, the peritoneal coat of the intestines injected, evidently from recent inflammation. The stomach and its contents were removed. The mucous membrane of the duodenum was inflamed, and covered with a whitish-yellow viscid secretion; this was observed throughout the intestinal canal, though more yellow in the colon and rectum; there was no ulceration. The other abdominal viscera were healthy, and presented no abnormal appearance. The jaws were so firmly set, that there was great difficulty in opening the mouth. The tongue was covered with a white fur, and appeared soddened; the fauces were not inflamed; the trachea and oesophagus had a natural appearance. On opening the cranium, the dura mater was found very vascular; the longitudinal sinus contained a coagulum of lymph, but very little blood; the vessels on the surface of the brain were very much injected with dark blood, the whole surface having a deep-purple appearance. Every portion of the brain, when cut into, presented many bloody points; the cerebellum and medulla oblongata were also extremely vascular; there was no effusion in the ventricles, or at the base of the brain. The stomach (the peritoneal coat of which was inflamed) contained about two ounces and a half of dark grumous fluid, but it was not distended with gas. On opening this viscus, the mucous membrane was found very much inflamed about the larger curvature, also at the cardiac orifice; there was no ulceration; the contents were very adherent to it, and in one place was a patch of lymph. On testing the contents, there was a slight acid reaction; but no test that was used indicated the presence of any antimony, although the same tests applied to a mixture of one part of solution of tartarized antimony, and two of distilled water, displayed the characteristic appearances.

In the other child, the morbid appearances were similar, though not to the same extent; there were also patches resembling the eruption of scarlatina on the arms, legs, and neck. The arachnoid membrane was more opaque than usual; and on the mucous membrane of the stomach, where the inflammation was greatest, were two or three white spots, each about the size of a split pea, and which, with the aid of a magnifying glass, appeared to be the commencement of ulceration.

I did not see either of the children before death, but I ascertained from the relatives, that about twenty minutes after taking the powders, they had been seized with violent vomiting and purging, and great prostration of strength, followed by convulsions and tetanic spasms. Mr. Newman, who was called in after the death of the first child, found the little girl had a remarkable distortion of countenance, with strabismus, violent convulsions of the limbs, and a peculiar tetanic spasm of the jaws, as though she was endeavouring to bite anything within reach; there was also great thirst, and extreme prostration of strength.

The children were said to have been in good health till the morning on which the powders were taken, when they complained of pain in the back, and headach, for which symptoms the mother had usually administered emetics.

Cheltenham, April, 1846.

FRACTURE OF THE HUMERUS, WITHOUT THE APPLICATION OF VIOLENCE.

By J. BERNCASTLE, M.D., M.R.C.S. Eng., Croydon.

THE following instance of almost spontaneous fracture of the humerus occurred to a man named Williams, aged thirty, an excavator on the Epsom line of railway. He was in the act of lifting from the ground with his left hand a piece of wood about a foot in length, and not weighing more than ten pounds, intending to place it on his right shoulder, when he suddenly heard something snap and break. He applied immediately for advice; and on examination, the left humerus was found to have sustained a complete transverse fracture at about the middle of the shaft of the bone. A fracture having taken place from such an unusual cause, led me to inquire minutely into the history of the man, and I found, that six years ago he had gonorrhœa, for which he salivated himself. Three years back, he was laid up with rheumatism at Guy's

Hospital, in Billet ward, under Mr. Cock, and came out cured. A year ago, he had rheumatism of the right arm; and six weeks before the late accident, he had had a severe attack in the left arm, now broken, which was treated with leeches, blisters, &c. All this does not appear in any way to have been likely to produce a predisposition to fracture; and even supposing that there might have been a diseased state of bone masked by the rheumatic symptoms, that supposition is quite done away with by the fact of the bone having perfectly united, without a single troublesome symptom, in the space of one month, the callus being distinctly felt around the part, and the man able to use his arm, showing that the bone is in a perfectly normal state. He expresses himself quite pleased with the accident, because he says he has been easy ever since from the rheumatic pains—rather a novel “modus curandi!” Being a strong, athletic man, anything like a tendency to mollities ossium is out of the question; and the small size of the piece of wood he was in the act of lifting when the fracture occurred, rendering the theory of violent muscular contraction also inapplicable, I am at a loss to account for the occurrence at all in a satisfactory manner, and I consider it a most rare and singular case of fracture.

Croydon, April, 1846.

ON THE OPERATION FOR STRABISMUS.

By F. H. BRETT, Esq., F.R.C.S., late Superintendent of the Eye Infirmary, Calcutta.

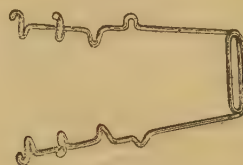
It is curious to trace the history of an operation. Stromeyer has undoubtedly the merit of suggesting, as Dieffenbach deserves that of first practising, this branch of tenotomy; but the germ of the idea may have been the following accident, which occurred to a Dr. Carron du Villards:—“En 1838, un homme, (à qui il donnait des soins pour une violente ophthalmie,) après qu’il eut reçu à la face un coup de fusil chargé à plomb, fut délivré par là d’un strabisme convergent de l’œil droit, qui datait de son enfance. Le globe était très proéminent, et enchassé dans une énorme bourrelet chemosique, dont l’incision donna issue à une grande quantité de sang. Le plomb (says M. du Villards) avait coupé quelques fibres des muscles obliques, donc la contracture brillait l’œil en dedans.”* Was it not rather the “incision” which occasioned the division of the internal rectus muscle? No shot could have cut clean through the rectus internus muscle; and if it had, as Dr. du Villards says, divided a “few fibres” of the superior and inferior oblique, that would not have cured the squint. But it is very possible, the incision made into the chemosed swelling (bourrelet) would have severed the internal rectus.

The success of this comparatively simple operation has been much vaunted, yet frequent observation convinces me it is not always successful. The reason of failure is sometimes owing to the superior and inferior fibres which coalesce with the superior and inferior recti not having been completely divided; and sometimes it is owing to inflammation and deposition of lymph, and subsequent contraction. According to my experience, the operation may be performed with almost invariable success. I shall therefore, from my own practice in India and in Europe, and from the methods of performing the operation which I have witnessed on the Continent, presume to offer a few practical suggestions, which will not, I trust, appear unworthy of attention. I believe the following rules to be of importance:—1st. To use always the scissors in preference to the knife and director, because by the former you can more readily divide every contiguous fibre, both above and below. To the practised hand, the point of the scissors grates along the hard fibrous sclerotic coat, and the operator is quite certain that he cuts every muscular fibre.—2ndly. Never to use the hook to claw out the eye, which has always appeared to me, to say the least, an unsightly instrument, and somewhat painful, but chiefly because it must be entrusted to the hands of an assistant, who, unless he possesses the delicate touch of an artist, and the steadiest hand, may rotate the eye not precisely in the horizontal line. If he gives the instrument the least obliquity, he disconcerts the operator in his search after the muscle which he has to divide, and he finds it either above or below where he expects it. 3rdly. The operator should have the lids and eyeball completely under his command; and this is effectually attained by the use of the speculum of Velpeau. The ordinary speculum often slips, and confuses, or obscures, the operation; so do the fingers. This cannot be the case with the speculum of the Professor of La

Charité. I have always operated with the scissors, and I have never met with an instance of the return of the squint; but I have never seen the inconveniences of that part of the duty which devolves on the assistants so happily obviated as by the mode I witnessed in Paris, adopted by Professor Velpeau.* I now proceed to describe the operation upon the principles by which we should be guided in all surgical operations—viz., with the least possible pain, the greatest facility and rapidity, in the safest, and in the most effectual manner.

The patient is placed before a clear light; the opposite eye is obscured; the head supported by an assistant; the lids separated by the elastic wire speculum, (blépha reirgon.)

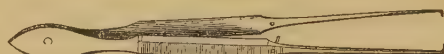
FIG. 1.



The Elastic Speculum.

The surgeon, seated in front of the patient, seizes the conjunctiva, together with the attachment of the muscle itself, by means of the forceps, (fig. 2.) near its insertion into the

FIG. 2.



The Forceps.

sclerotic, about three lines from the margin of the cornea. This gives the surgeon complete control over the eye, and by it he is enabled to draw the eye outward. Immediately after this, the surgeon grasps the belly of the muscle with a second pair of forceps of the same description, (fig. 3.) This

FIG. 3.



Brett's Operation for Strabismus.

latter is entrusted to an assistant. The muscle is thus raised and stretched between the two pair of forceps. The section of the muscle between the two points of transection is now an instantaneous affair. The smooth and bluish-white sclerotic shines beneath the incision, and the operator satisfies himself that every fibre is divided, carrying the scissors above and below until the cornea assumes its central position, and the patient can turn the eye to the opposite side, yet is unable, by any effort, to squint. Finally, the tendinous edge of the muscle, grasped by the first pair of forceps, together with some loose portions of conjunctiva, is excised by a stroke of the scissors. This last procedure prevents a very common occurrence—viz., a fungoid granulation, formed from the ragged edge of the tendinous extremity of the muscle and some cellular tissue beneath the conjunctiva.† The eye is cleansed from blood by syringing with cold water.

After-treatment.—Obscure the opposite eye for some days. Let the patient use the eye which has been operated on in a moderate light. This prevents adhesion and contraction, which might cause a return of the squint.

I have assumed the surgeon to be ambidexter; but the ope-

* Imaginé par Snowden, modifié par Velpeau.

† I am glad to find the Professor of La Charité confirm my experience of the superiority of the scissors in simplifying the operation. His words are—“Ce procédé, d’une extrême simplicité, d’une certitude que je n’ai retrouvée dans aucun autre, offre d’ailleurs toute facilité, toute liberté pour opérer à droite, à gauche, en dedans, en dehors, en haut, en bas, pour diviser les tissus dans un aussi petit espace et dans une aussi grande étendue qu’on peut le désirer, que les circonstances peuvent l’exiger.”

rator can accommodate his mode of procedure to his own habits and facilities.

Fig. 3 shows the operation, which ought not to occupy one minute. The eye should be frequently bathed with cold spring water, or a weak solution of lead. A weak astringent lotion of alum may be used on the third or fourth day. All bodily exercise should be suspended for two or three days, as well as exposure to damp, currents of air, and a brilliant light. Moderate, but not a rigorous diet, is enjoined.

The post-mortem investigations of M. Bouvoir and others afford some explanation of the mode in which the divided muscle recovers its power. "A girl, of twelve years of age, affected with strabismus convergens of the right eye, underwent the operation for strabismus on the 21st Jan., 1841. The result was quite successful. In December, 1842, she died of a tuberculous affection. The following was the result of the autopsy.* Both eyes were preserved with care, so as to compare the one with the other. The divided muscle had contracted a new and solid tendinous adherence to the globe of the eye. This tendon was fixed to the sclerotic at nine millimetres' distance from the cornea, whilst the distance was only seven millimetres from the muscle which had not been operated on. Moreover, in the latter, the fleshy fibres were gradually lost in the substance of the tendon, and were still perceptible at three millimetres from the insertion of the sclerotic, whilst, in the other, they suddenly ceased at the distance of eleven millimetres. This long tendon has no appearance of muscularity whatever. The tendon is therefore newly organized after the operation, and is fixed on the globe behind the primitive insertion, which has disappeared." It is reasonable to infer that the antagonist muscle is generally more or less paralyzed. The diminished power which a shorter lever affords is conceivably adequate to counter-balance the feeble undivided muscle. We must not forget the harmonic action of a set of muscles. The three remaining recti diverge from their origin at the back of the orbit obliquely forward and outward, and, with the superior and inferior oblique, balance the eye in its proper axis. In cases of double squint, complete equilibrium is not restored until both eyes have undergone the operation, which is properly accomplished at intervals of a few days. This is explained by sympathy.

Dorset-street, Portman-square.

ADDITIONAL REMARKS ON

PROFESSOR SEUTIN'S STARCH BANDAGE,

MORE PARTICULARLY IN REFERENCE TO A "CERTAIN MODIFICATION" OF IT.

By ALFRED MARKWICK, Esq., Surgeon, London.

If I have been guilty of leaving a blank in my paper "On the Use of the Starch Bandage in the Treatment of Fractures" (published in *THE LANCET* for February 28th,) in consequence of not having alluded to Mr. Christophers' "modification," I fear I shall be considered equally culpable by M.M. Velpeau, Mayor, Laugier, Lafarguede, St. Emilion, and Van Meerbeck, for having taken no notice of theirs.

My communication was intended to point out the importance and advantages of Professor Seutin's bandage, and his alone, in the treatment of fractures, believing as I do, that all modifications of it, or additions to it, are both useless and unnecessary, and open to far more weighty objections than have at any time been raised against the original. It will not be necessary for me to substantiate this statement, inasmuch as Mr. Christophers has himself already done so in that portion of his paper taken from Dr. Pigeolet's "Esquisse Historique sur le Bandage Amidonné."†

It is true, no objection has been raised, either by Professor Seutin or Dr. Pigeolet, to Mr. Christophers' "Indian-rubber straps," and therefore I ought, perhaps, in this gentleman's opinion, to have made some allusion to them. I would have gladly done so, had I considered that they were in any way essential or indispensable to the construction of the bandage amidonné. Had they been so, M. Seutin would have been the first to immediately avail himself of them. Now I can confidently assert, that during the whole time I was in attendance at the Hôpital St. Pierre, at Brussels, I never once witnessed their application, and I may refer, for confirmation of this fact, to Professor Seutin's writings subsequent to the

publication of Mr. King's paper in the *Medical Gazette*,† in which Mr. Christophers' "modification" is made known, for in these we find that no mention whatever is made of them. I may, however, for this gentleman's satisfaction, quote the following paragraph from Dr. A. Didot's article in the *Abeille Médicale* for July, 1844, p. 155: Et je dois avouer que je ne vois pas le moindre inconvénient à ce que leurs idées, (those of Messrs. King and Christophers,) soient adoptées dans le traitement des fractures lorsque l'opportunité se présentera. But this does not show that the "straps" are an indispensable addition to the perfection of the bandage in question; and I can but think that, had they been of that importance, Dr. Pigeolet would have done more than merely mention them. He would undoubtedly have characterized them as a valuable innovation, free from objection, and would have recommended them as an effectual means for remedying a defect which the starch bandage certainly (but for a very short time only) possesses.

These "straps" are intended to enable the apparatus to adapt itself to all the variations in size which the injured limb is liable to undergo. But it appears to me, that in employing them, we avoid Scylla to fall into Charybdis, as I shall by-and-by attempt to prove. And, moreover, we possess more effectual means (those recommended by Professor Seutin himself) for obviating the evil.

In his reply to the following objection to his bandage, made by M. Mayor—namely, that "it forms a case so resisting that it can neither dilate nor contract on the limb during its alteration in volume," Dr. Seutin says, (p. 195, *loc. cit.*) "How is it, that after all I have said, in order to show that the starch bandage is remarkably *dilatable*, and that it may be *drawn in* at pleasure,—that after having proved that its application permitted of the parts being daily inspected with the utmost facility, when such an inspection became necessary,—how is it, I say, that, after all this, my bandage is represented as a kind of case which must invincibly preserve its primitive form, without being able to adapt itself to the development or the diminution in size of the contained organs? I can only account for this singular circumstance by admitting that M. Mayor has not read the different memoirs which I have published on my method of treating fractures, and by afterwards supposing that the cases he has seen have given him a false idea of the true principles by which my invention has been directed." * * * * "If an apparatus would permit us to constantly maintain the fragments in the same position, from the commencement to the end of the treatment, and is also capable of being tightened or slackened, and will enable us at the same time to inspect the soft parts, and apply to them such remedies as their condition may require,—if, I say, an apparatus permits all this, we shall then be at liberty to state, that it fulfils all the indications that are furnished by sound therapeutical notions on the subject of fractures." "These are precisely the qualities by which my bandage is distinguished." At pages 141 and 142 of the same work, he says, "One of the greatest advantages of my starch bandage, and one which decidedly distinguishes it from the apparatus of the French surgeon, (alluding to Larrey,) consists, then, in my opinion, in the facility one has, notwithstanding its employment, for following step by step, as it were, the progress of the injuries of the soft parts, without the coaptation in the least degree suffering. Strong scissors, which I have had constructed expressly for this purpose, enable me to cut, without difficulty, the anterior surface of the apparatus, which, for this reason, I take care to render of as little thickness as possible. I thus obviate the defects of slight compression, if it is badly exercised; I suppress it if it appears to augment the local stupor, or if it cannot overcome the violent reaction which ensues; on the contrary, I continue it, if I find, on inspecting the limb, that the patient's complaints arise either from his pusillanimity or apprehension. If local therapeutic remedies are thought necessary, I make use of them, and then, in some cases, apply a piece of linen on the internal surface of the apparatus in order to prevent it from being soiled by the applications employed; I afterwards bring the two valves together by means of an unstarched roller. By removing this every day, the dressings can be applied as often as it is thought necessary." * * * "When the incision is made, and the limb is found to require no topical application, the two valves are united by means of

* Translated from Duval, "Chirurgie Oculaire."

† See Seutin's work, "Du Bandage Amidonné."

† Had I not been acquainted with this paper, I might have experienced considerable difficulty in finding it, as Mr. Christophers has referred me to the *Medical Gazette* for February, 1839. The fact is, the mistake has arisen in consequence of this gentleman having unfortunately translated the words, *Gazette Médicale*, in which Journal Mr. King's article was noticed at the date mentioned. The original may be found in the *London Medical Gazette* for August 11, 1838.

a starched roller, and the original solidity thus becomes restored. When the swelling has disappeared, and the bandage has, in consequence, become too large for the member, I remove with my scissors, from its anterior part, a longitudinal band of greater or less width. After moistening it a little, I mould the pasteboard on all the inequalities of the limb, by the aid of a starched bandage."

In another place, (see *Abeille Medicale*, for August, 1844,) when speaking of its advantages in cases of compound fracture complicated with delirium, he says, "If the *modus operandi* of our bandage is known, the security it gives under these circumstances will be understood. By its methodical compression it puts a permanent obstacle to the contraction of the muscles; by forming with the leg, the thigh, and the pelvis, a continuous whole; and by exactly and firmly embracing these parts, it prevents the movements of the rest of the body from being communicated to the solution of continuity, and if we have that, it cannot become deranged; we shall have the principal conditions for securing such a state of immobility of the fragments, that should the patient by chance get out of bed and walk a few paces on the injured limb, few, if any, accidents would be the result." Again, "It (the starch bandage) compresses the muscles throughout their whole length, and momentarily deprives them of the greater portion of their contractile force. By embracing the whole extent of the limb and its sinuosities, it affords to every part of it resisting surfaces which prevent the displacement that is likely to be produced by the remainder of the muscular action, and the natural elasticity of the tissues, and keeps up a degree of extension and counter-extension, which, in opposition to that of other apparatus, we will call passive. In short, by its circular contentive action, it forms resisting splints, which encircle the pelvis, extend over the limb in every direction, and cannot allow of any displacement either in its natural direction or in its diameter." "Its compression is less than in any other, *ceteris paribus*, when it is intended only as a contentive means, because it is more in harmony in its distribution with the physiological and pathological conditions of the organ, and because it more directly counteracts those forces which tend to destroy coaptation, and moreover, there is economy in its employment. It is graduated—that is to say, that in twenty-four hours after the application of the bandage, this is transformed by the longitudinal section into an exact mould of the limb, which is at once supple, elastic, and resisting, and of which we are always able to determine the degree of compression."

In alluding to the space left between the limb and the internal surface of the bandage, by the desiccation of the latter, M. Deroubaix makes the following remarks: "Nothing is so common as to see the inconvenience that is sometimes caused in certain parts by the compression of the newly-applied apparatus, insensibly disappear at the end of twelve or twenty-four hours. These facts seem to deprive the bandage of one of its prerogatives, by showing its compressing properties to be at an end the moment it becomes completely dry. But M. Seutin has had the ingenious idea of constructing it in such a manner as to make it represent a kind of bivalve apparatus, the sides of which, although firmly united, may nevertheless be brought nearer together by certain means, until their primitive relations become completely re-established. This modification appears sufficient to restore to it the properties which its desiccation has caused it to lose, and to definitively maintain its efficacy until the end of the treatment. The manner in which the starch bandage effects the restoration and the retention of the fragments in their proper relative positions, may be considered as composed of two very distinct modes of action: the first comprehends the compression of the ruptured bones; the second consists in a double effort of extension and counter-extension. The compression of the fragments presents an adaptation of the remedy to the evil—a security in its results which would be sought for in vain in the other apparatus to which I have alluded. It is no longer, as is the case with splints, that vague and uncertain property of producing coaptation that is assigned to one or more solid bodies, which appear to cause the disappearance, on one side, of the abnormal bony projections, only to allow them to reappear in another. Neither is it, as in the method 'à suspension,' that contentive force, attributed to a flat surface, which is to support a round body in an invariable position, and which, as it does not act itself, cannot maintain the reduction any longer than during the time the limb remains in contact with it by virtue of its own weight. On the contrary, its

action is uniform, regular, and constant, adapted by its circular quality to the shape of the organs which are about to receive it, and produced by a force which seems to have calculated all possible displacements in order to oppose them on all sides at once." * * * "The projections and depressions are alike under its influence, because the starch bandage is able to present depressions to the former and elevations to the latter. The muscles being compressed on all sides with the same intensity, and in a perpendicular manner, experience an obstacle to their contraction, which would tend to produce displacements, and yet cannot in any way avoid the action of the compressing means. They remain motionless because they can find no place towards which to direct themselves, in order to exercise their functions with more freedom."

MM. Simonart and Pourcelet make the following observations, bearing on this point. "If the shrinking of the fractured limb has left too large a space between it and the bandage, (a fact to be ascertained by percussion of the starched case producing a clear sound, by inspection, and by the introduction of the finger between the soft parts and the apparatus, &c.,) or if the vacuum is trifling, the portions of the bandage intervening between the pasteboard are to be softened with water, and then, by well-directed manipulations, to be adapted to the shape of the parts; assistants contribute with their hands to the contraction, which the surgeon completes, and maintains by means of a starched roller, more or less tightly applied. If, on the contrary, the diminution in the size of the limb is considerable, the longitudinal section of the bandage ought to be preferred; in that case, remove from one or both valves a piece corresponding to the hollow that exists, or else bevil off the borders, each in an opposite direction; moisten with warm water the parts of the apparatus intervening between the splints, and make the thinned edges lap one over the other. The solidity and even the immobility of the bandage may, if necessary, be restored by applying a starched roller round the hardened case, after it has been covered with a coating of starch."

In Dr. Pigeolet's "Esquisse," we find the following paragraph, quoted from a thesis by M. Thomas: "Sur la compression de l'appareil inamovible."—"Perfect contentment of the fragments, immobility continued until the cure is completed, solidity in the apparatus, by which the patient is enabled to move about, simplicity in its composition, economy in time to the surgeon, and in expense to the patient,—such are the advantages of the appareil inamovible amoné. In simple fracture, unattended either by laceration of the integuments or injury to any important vessels or nerves, if the bones are not comminuted, and the soft parts are not reduced to a pulp, one of the best means for preventing the inflammation, or for arresting it at its commencement, is an uniform compression of the injured part."

These extracts will, I think, be sufficient to prove the importance and the capabilities of the starch bandage, and to show the facility with which it can be made to fulfil every indication.

I have not had an opportunity of using Mr. Christophers' invention myself, but I must confess I am doubtful whether it is really a useful one; and I should be disposed to consider the elasticity which his "straps" may give to the bandage as unnecessary, and, indeed, more injurious than otherwise, and for the following reasons—viz., That the apparatus is thus rendered less resisting, and that it does not, in consequence, give to the limb the necessary degree of solidity, firmness, and support; the result of which is, that there is great danger in the fractured extremities of the bones not being securely maintained in perfect coaptation. Such appear to me to be the results when the "straps," or even the "Vulcanized Indian-rubber case," which Mr. Christophers seems now to recommend, are of such thickness as to yield to the increase in size of the limb. But when, on the contrary, they are employed sufficiently stout to give to the bandage its necessary firmness, I can but think that then a much greater degree of force will be required to overcome them than any swelling of the limb can be said to exercise: the consequence of which would be a constriction or strangulation of the affected member. And, moreover, if it be necessary (as it appears to be, from the following remark in Mr. Christophers' paper: "Should the bandage be applied to a limb enormously swollen, and should the swelling suddenly subside, it will be necessary to remove a strip from the whole length of the same, equal in breadth to the diminution of the limb, in order that it may not lay loose in the apparatus, and that correct coaptation may be maintained;") to remove a longitudinal strip from

* See p. 111, loc. cit.

the bandage, "in order that it may not lay loose in the apparatus, and that correct coaptation may be maintained." I cannot see in what the advantages of Mr. Christophers' modification consist; for it is evident from this paragraph, that the Indian rubber is not so efficacious in keeping the bandage constantly and equally applied to the surface of the limb, as has been supposed.

Additional facts, therefore, are still wanting to prove its value, and until these are made known, I must remain sceptical as to its advantages.

However, I trust Mr. Christophers will believe that I had no other motive whatever than that above given, for not noticing his innovation. Had I been giving "an account of the modifications of the bandage amidonné," as Mr. Christophers has done, I should most assuredly have followed in Dr. Pigeolet's steps by alluding to it.

In conclusion, I may state that the objections which have been raised against Professor Sentin's "appareil amidonné" have been made, either by those who are at all times ready to condemn, and unwilling to employ, anything that is new, however valuable it may be; or by those who, although aware of its advantages, have not had the courage to acknowledge them, but, on the contrary, have, merely for the sake of notoriety, pointed out some apparent obstacle to its use, the result either of bad application, or a want of proper attention; or by those who were not sufficiently acquainted with the manner of applying it, or with its mode of action. To these I would say, in the words of M. Seutin, "Expérimentez, mais expérimentez avec impartialité et sans idée préconçue; ne me croyez pas sur parole, mais ne prononcez qu'après avoir vu torgénizer les faits et ils vous montreront la vérité."

Langham-place, March, 1846.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

APRIL 14.—DR. CHAMBERS, F.R.S. K.C.H., PRESIDENT.

SOME REMARKS ON WOUNDED ARTERIES, SECONDARY HÆMORRHAGE, AND FALSE ANEURISM. By ROBERT LISTON, F.R.S., Vice-President of the Society, &c.

THE author states that the subject of wounds of arteries, with the consequences of such wounds, immediate and remote, has possessed, and always must possess, great interest in the eyes of the surgical practitioner. His impression, until very lately, was, that no subject had been better handled, or was better understood by surgeons generally, and that all writers were pretty well agreed as to the rules which ought to guide the practice in such cases. When, however, we hear of an operation being performed upon a large vessel on account of a recent false aneurism, after careful consideration of all the circumstances of the case by six surgeons, and when there is reason to believe that at least an equal number of respectable practitioners (not, however, engaged in the case) were ready to declare the practice pursued very wrong, and contrary to the established principles of surgery, "and that, had the vessel not been tied, the patient might now have been alive," it is surely desirable that an opportunity should be afforded of discussing this subject, and, if possible, settling the question in dispute. The author then proceeded to relate very shortly the leading facts of the case, and to support the line of practice pursued by reference to, and relation of, some similar instances.

Mr. Seaton, aged twenty-eight, an exceedingly corpulent person, who had, it appears, lived excessively freely for a series of years, was wounded on the 20th of May, 1845, by a pistol-bullet. It entered the upper and outer part of the right thigh, and passed out in the middle of the fold of the left groin, thus traversing the course of the femoral vessels. The flow of blood, more especially from the wound on the right side, was described to have been most impetuous and profuse. It was thrown in jets to a considerable distance. The patient was found by Mr. Jenkins, of Gosport, in an almost lifeless state, and he was with great difficulty recovered from the syncope and depression. A considerable swelling soon supervened over the lower part of the abdominal parietes, from extravasation of blood.

May 27th, the seventh day from the receipt of the injury, the swelling in the right groin began to increase in size, and distinct pulsation was then, for the first time, perceived in it. The tumour went on increasing gradually, and it had gained much more in bulk on the tenth day, when Mr. Liston first saw him, than it had done on any of the preceding ones. It was of an oval form, and elastic, but firm, as if it were partly made up of coagulum and liquid blood; but it could not be at all dimi-

nished in bulk by uniform and continued pressure. The skin covering the tumour was discoloured, thin, and incapable of bearing pressure. Pulsation was strong and distinct in all its parts. The opening on the right hip was filled with a dry depressed slough; the wound in the left groin, a jagged slit, was closed by a very thin cicatrix. The patient's countenance was blanched and waxy, and his pulse quick and feeble. He had, in short, all the appearance of a person who had lost a great quantity of blood.

The nature of the case was very apparent. A large false aneurism, not well bounded, rapidly increasing, and arising from a wound of the femoral artery, or some branch divided close to its origin, had to be arrested, otherwise the patient must be left exposed to the risk of perishing suddenly, and at no distant period. After consultations, on the evening of the 30th, and the morning of the 31st, the external iliac artery was tied, with the loss of not more than a tablespoonful of blood, and with the immediate effect of arresting the pulsation, and removing, in a great measure, the tension of the tumour. Symptoms of peritonitis supervened on the evening of the second day, and on the following afternoon the patient sunk.

The author subjoined an account of the post-mortem examination by Dr. Allen, of Haslar. The course of the bullet was traced from the outside through a dense layer of fat, about two inches in thickness. It had divided one of the superficial branches of the femoral artery, about half an inch below Poupart's ligament, and about an inch from the main body of the femoral artery, which had caused a false aneurism. The sac contained about three ounces of blood. No other artery appeared to have been wounded. A considerable quantity of sero-purulent fluid was found in the abdominal cavity, and patches of acute inflammation were observed on the intestines. The peritonæum, adjoining the wound of the operation, was inflamed. It had not been injured by the knife. The ligature had been properly applied to the external iliac artery. The abdominal viscera were healthy, but loaded to an extraordinary degree with fat. There was some enlargement of the right limb, but apparently no mortification. The femoral artery was pervious. The blood in the aneurismal sac was firmly coagulated, and there was no mark of recent oozing from the injured artery. "The ball had passed immediately over and along the course of the artery for about half an inch before dividing it. The artery, although not actually detached, would not have borne a ligature."

That a vessel of this class, the author remarked, should have bled so furiously, in the first instance, could not have been anticipated. Having done so, one can so far understand the active pulsation and rapid extension of the tumour. It was, of course, quite impossible to determine whence the blood flowed into the aneurismal cavity. The principal vessel going to the limb might have been wounded, or some considerable branch. A small branch, divided close to the principal vessel, poured out blood furiously, as much so as if an opening in the coats of the artery itself were made by a portion being punched out, corresponding in size to the area of the branch. "The division of a small branch at a distance from the source from which it springs is of little importance. It contracts, and soon ceases to bleed; but when it is divided close to the trunk, blood issues from it, as it would if an opening, equal in size to the calibre of the little branch, were made in the trunk itself."

The author noticed the risk of secondary hæmorrhage in these cases, in order to show that some active measures were required to arrest the threatened danger. He objected to the operation of opening the sac, and securing the wounded vessel by ligature; that patients who have lost a great quantity of blood often sink and are lost by the sudden effusion of even a small quantity; and after adducing some cases in point, he remarks that the danger must be much enhanced when the tumour is so placed that there is no possibility whatever of making pressure on the trunk of the artery on the proximal side of the opening into it, or of the origin of a branch wounded close to where it is given off, as in the case of Mr. Seaton. The cyst could not have been opened without great loss of blood, and it was not likely that a ligature on the branch would have permanently arrested the bleeding; indeed, it was stated by Dr. Allen that the branch would not have held a ligature.

The author having asked whether there is anything to bear a surgeon out in adopting this practice, adduced a number of cases to show that vessels bleeding outwardly, or pouring their contents into the tissues of a limb or region, have become permanently closed in consequence of the flow of blood

being intercepted and weakened for a time by the application of a ligature upon the principal arterial trunk. He referred particularly to a case to be found in the works of a well-known army surgeon:—A man, thirty years of age, was wounded by a musket-ball, which entered the left groin, and passed through the inside of the thigh. On "the tenth day from the injury, the slough from the anterior wound came away, and was followed by so frightful a hæmorrhage, as to leave no doubt whence it proceeded, nor, from the wound being so high up, any alternative as to the means to be adopted for stopping it." The external iliac was tied, but the patient died of fever. No account is given of any dissection of the parts. "In this case the necessity of the operation is evident, and, as far as it went, also its success. Not a drop of blood was lost after it." So says Mr. Guthrie, who, it is to be presumed, conducted the treatment of the patient. We are left to conjecture what vessel was wounded. It may have been a branch, as likely as the trunk, and those who have attended to the description of the hæmorrhage in the case of Mr. Seaton,—to its impetuosity and amount,—will bear the author out in this assertion.

The author observed that he has endeavoured to show—1st, that the case of Mr. Seaton was one of great and immediate danger; 2nd, that some decisive step was required to be taken, and that without a day's delay; 3rd, that very great risk would have been incurred in attempting to put a ligature on the wounded vessel; 4th, that there was ample authority for adopting the step which was had recourse to in the case. The dangers likely to arise from the operation were considered as weighing but lightly in the scale against those impending from the effects of the pistol-shot. Inflammation of the peritonæum was scarcely taken into account in consulting on this case. Out of the forty-five cases of this operation, collected by Mr. Crisp, nine or one-fifth died, but not one from peritonæal inflammation.

In conclusion, the author remarked that, in the opinion of those concerned, the step most likely to avert danger, and prolong the patient's life, was adopted—the only step, it has been shown, that could have possibly been resorted to with propriety or safety. Upon a candid review of the case, and with a knowledge of all the circumstances connected with it, it now remains for the fellows of the Society to say, if there was left anything undone, or anything done imprudently or unscientifically, as has, it appears, been alleged. It is competent also to consider what might have been alleged against the resources of our art had the patient suddenly perished from hæmorrhage; if, in fact, we, who had all the responsibilities of this important case to sustain, had stood idly by, waiting for some miracle of Nature to save the patient from the inevitable results of his wound, and the author of it from the consequences of his crime.

Mr. EDWIN LEE considered that some of the cases related in the paper did not bear upon the point under discussion, which in reality was the advantage or otherwise of placing a ligature round the external iliac for a wound of that vessel, or more especially of any of its branches, inasmuch as in tying either the femoral, brachial, ulnar, tibial, or other arteries, there were sufficient means in the collateral and anastomosing branches for the supply of the distant portion of the extremities with blood. The iliac, however, when ligatured, was under peculiar circumstances, as it gave off no branches above the ligature; and those from the internal iliac being distributed to the muscles of the hip and the back of the thigh, there would be great danger of mortification of the extremity, leaving out altogether the risk of inducing peritonæal inflammation by the operation. Mortification did ensue in two or three cases detailed in the paper, in which the iliac had been tied for wounds or sloughing in the groin. The case was different when the iliac was ligatured for long-standing disease, as, from the continued obstruction, time was given for the collateral vessels to dilate, and after this the ligatures to supply the limb.

Mr. BAINBRIDGE (Tooting) said, that Mr. Liston's paper appeared to him to have furnished the most complete condemnation which could have been mentioned of the management of Mr. S.'s case. It showed that Mr. Liston was utterly mistaken in his diagnosis, and grievously wrong in his practice; that he imagined a large and important artery had been wounded when all the while it was but a small and insignificant one; and that he performed a painful, difficult, and disastrous operation for the cure of a wound and aneurism in a trumphy little artery of the skin, which might have been easily remedied by the mere application of a compress. He remembered a case very much to the point with respect to the effi-

ciency of the compress for the cure of aneurism, which he had to treat about the period of Mr. Liston's case. About the 9th of August, 1845, a man was seated on a bench, in front of the Bell Inn, Upper Tooting, cutting his bread and meat with his clasp-knife, when the ostler, in passing by, threw a hay-band over his head; the man swung his arm round intending to cut through the hay-band, instead of which, he inflicted a deep wound upon Holland's wrist, dividing the tendons and the radial artery. He was taken to his (Mr. Bainbridge's) surgery, where a few minutes afterwards he found him: his assistant was vainly endeavouring to stop the flow of blood. Mr. Bainbridge applied the tourniquet upon the brachial artery, with of course the immediate effect of arresting all hæmorrhage. After the ligatures &c. were prepared, he loosened and altogether removed the tourniquet, and washed the wound, which, however, did not bleed, to his great surprise. Supposing from this circumstance that the artery was retracted, and that they might do very well without the ligatures, he closed the wound accurately with straps of plaster, and bound it up firmly with compress and bandage. Six hours afterwards, hæmorrhage occurred, but ceased upon the application and securing of a firm compress of lint upon the radial artery higher up than the wound. Fourteen hours after the accident, another bleeding took place, which also stopped upon tightening the bandages. There was no further hæmorrhage for the space of a week, when having removed the dressings in order to examine the wound, (which he found nearly healed,) the blood burst out with a strong jet. He again bound it up firmly, and permitted it to remain for a fortnight; at the expiration of which time, as the patient complained of severe pain in the part, the dressings were removed, and there was revealed a tumour about the size of a large walnut, which was situated at the root of the thumb, and spreading between the metacarpal bones of the thumb and forefinger; there was violent pulsation in it, which ceased upon compressing the radial artery; there was also oedema of the thumb, hand, and forearm. Upon seeing this state of things, Mr. Bainbridge said, that it would most likely become necessary to ligature the artery, yet he would give the compress another trial. He then bound a piece of cord padded with lint upon the aneurism, with long straps of plaster and bandages; and another compress firmly upon the artery. He also placed, as a sort of tourniquet, a bandage loosely round the limb, in such a manner as that it could be instantly pulled tight by the man or his wife upon the occurrence of hæmorrhage. A few days afterwards, the aneurism bled suddenly and freely, but it was immediately checked by tightening the bandage. On taking off the dressings, about the tenth day after it had been bound up as described, he found the aneurism considerably increased in size. He then made a sort of conical compress by means of different sized pieces of cork, covered with lint, with the object of bearing more directly upon the orifice in the artery through which the blood passed, and gradually diminishing the pressure further off, and bound over it a pad of lint, which embraced and extended beyond the tumour, and covered the whole with a layer of sheet lead. He also fastened a pad of lint, covered with sheet lead, upon the course of the artery; and for additional security adapted an extra bandage, loosely as before, to be tightened in case of necessity. He did not disturb this apparatus for more than a fortnight, but merely relaxed the bandages or plasters a little when any complaint was made. At the expiration of that time he examined the part, and was pleased to see in the place of the large aneurism a deep indentation made by the corks, and that pulsation had entirely ceased. He again bound it up with a lighter pressure; and after about two months from the receipt of the injury, the man was able to return to his employment, and he had ever since continued quite well. The thorough success attending the use of the compress in this case convinced him that the same means would have also been completely successful in Mr. Liston's case. The most effectual pressure, and to any amount, might have been obtained from a common spring truss, which being applied upon the groin, would have pressed firmly upon the small wounded artery as it passed upwards over Poupart's ligament, and upon the femoral artery as it laid upon the pubis. He blamed Mr. Liston because he overlooked or disregarded such a very simple and obvious means of cure. They could call to their recollection many instances of perfect recovery after the most dreadful injuries had been received. He remembered seeing, several years since, in the College museum, a sort of trophy of Sir William Blizard's; it was the shaft of a cart, concerning which it is stated, upon a card affixed to it, that it "went right through a man's body," who, nevertheless, quite recovered.

under Sir William's care. In comparison with such a case, Mr. S.'s injuries must have been slight indeed. He stated, therefore, that in the management of Mr. S.'s case, Mr. Liston did not exhibit that necessary caution and correct judgment which might have been expected from one occupying his high station in the profession.

Mr. LISTON was not depressed by the remarks just made by Mr. Bainbridge. The case had already been made the subject of animadversion in various quarters; but he had acted on very good advice at the time, and, after a most careful consideration, had brought the entire case before the profession. Beforehand it was utterly impossible for any one to say what was the vessel wounded; at the time of the receipt of the injury there was much bleeding, forming a large aneurism, having as violent a pulsation as he ever saw in any aneurism, and liable at any moment to give way and destroy the patient. It was no imaginary danger with which the surgeon had to contend. He had, in bringing the case before the Society, written to various gentlemen, who had expressed themselves freely in opposition to the practice he had pursued; they had not, however, for some reason or other, attended, although it would have been desirable to have heard their reasons for condemnation, in order that they might have been answered. With reference to the treatment he had used in regard to this case, he would read an extract from an eminent surgical authority, who having placed a ligature on the external iliac, under somewhat similar circumstances, thus spoke of the attacks to which he had subjected himself:—

"It may be said of these operations, that none of them were required by the strict rules of surgery, which enjoin that, in cases of arterial hæmorrhage, we should cut down to the place from which the blood is observed to issue, and there secure the proximal and distal portions of the injured tube. All most true, and I most gladly subscribe to this aphorism, along with your regular systematic compilers of surgical treatises, manuals, and compendiums; but alas! in actual practice, how many exceptions are we compelled to make. What would such mechanical men of principles have said had death suddenly taken place (as undoubtedly it would) in attempting to secure a sloughing, soft, and diseased arterial tube? Why, that I ought to have first tried what a ligature thrown round the iliac artery could accomplish, and if a clot did not form, as in *all human probability it would*, then recourse might be had to the *dernier ressort*, the ligature on the distal side of the hæmorrhagic spot also. Thus it is that you must lay your account, when you advance in practice, to meet with animadversion and criticism, *do what you will*."

He was at a loss to understand the exact gist of Mr. Lee's remarks, which did not appear to bear at all on the case, and with respect to Mr. Bainbridge's case, it appeared to him to have been mismanaged from beginning to end.

Mr. BAINBRIDGE observed, that in his case the patient recovered, Mr. Liston's case was unsuccessful, and therefore was not managed so well as his own.

Mr. EDWIN LEE said, that his objections to the operative procedure in Mr. Liston's case had reference to the difficulty of carrying on the collateral circulation, and the fear of mortification in the extremity.

Mr. LISTON did not differ from the last speaker in reference to the danger which threatened the limb from ligature of the iliac artery, but even with this fear of mortification, the surgeon would be justified in performing the operation; for he had seen cases, over and over again, in which no such result followed the proceeding; although he fully admitted that cases had occurred in which the lower portion of the limb had perished, and its removal by amputation had become necessary. Should a case similar in every respect, presenting the same difficulties, come again before him, he could only observe that he should pursue the same course he had in the present instance.

Mr. HILTON suggested, that as the chief person implicated in the duel with the patient, whose case was before the Society, was still untried, it would be desirable to discontinue the discussion. He made this motion with every feeling of respect to the author of the case.

Mr. ARNOTT seconded the proposition, and observed that though it was his opinion that the principle in surgery, that an artery should be always secured at the seat of injury, he thought in this particular case Mr. Liston had fully made out the correctness of his practice. Mr. Liston did not see the patient until ten days after the receipt of the wound, at which period an aneurism had formed, and it was impossible to apply pressure to the artery above the wound. The question of practice generally in cases of wounds of arteries had not been

opened by Mr. Liston, but he had confined himself to the details of this special case; and he, Mr. Arnott, could only repeat, that as much blood had been lost, and the patient was rapidly sinking, Mr. Liston acted in the most advisable manner.

Mr. DALRYMPLE, in reference to the remarks of Mr. Hilton, would remind that gentleman, that the question of treatment by the surgeon in this case, had been fully and completely disposed of by the excellent judge who had presided at the late trial. No discussion, therefore, in regard to this case, could influence in any way a future trial. The observations of the learned judge, as well as the style of the previous criticisms on this case, were a full justification of the author in bringing it before the profession, as he had been the subject of unjust prejudices and gross misrepresentation. Mr. Bainbridge's case had no bearing whatever on the one under discussion, it was by no means a rare one, and he, Mr. Dalrymple, was at a loss to understand why the radial artery was not tied at the outset, as the surgeon was aware of the artery being wounded and retracted, and of course would expect the occurrence of secondary hæmorrhage. No analogy could be drawn between this case, in regard to compression, and the one before the Society.

Mr. QUAIN said, that if he thought the discussion of the subject before the Society could in any way influence the result of a trial which may hereafter arise in a court of justice, he would give his willing support to the proposal of adjournment made by Mr. Hilton. But he entertained the opinion, that the manner in which the case of Mr. Seaton was introduced anticipated the objections, inasmuch as the author of the paper admitted all that could be advantageous to the person accused. It was stated in the paper, that, in the judgment of its author, the immediate cause of death was the surgical operation, and no advocate on a trial could desire to prove more than this. Under such circumstances, the discussion could not, it appeared to him, have any injurious effect as regarded the inquiry in a court of law.

He continued to observe, with respect to the management of the case, that the whole subject resolves itself into two questions,—the first question being, was the operation necessary? On this point he directed attention to the fact, that, exclusive of Mr. Liston, other surgeons of experience and eminence in the naval service had been engaged in the treatment of the case. Dr. Mortimer, a man of long experience in the public service, and other surgeons, were unanimous as to the necessity of the operation. They had watched the case, and, to say the least, it must be hazardous for others, who had no personal acquaintance with the condition of the patient, to call in question their judgment.

Then, as to the second question—namely, the operation being necessary, was the one performed the best suited to the circumstances of the case? On this point he entirely concurred in the view taken by Mr. Arnott. But it has been said that the vessel wounded was after all a "trumpery" one. To this it is answered, that it was impossible to determine, by dissection, what artery was actually wounded. It had been shown too that, in some cases, and under peculiar circumstances, arteries of small size have bled profusely, so as even to cause death. He himself had made reference, in a published work, to a case in which hæmorrhage from a small vessel wounded in an operation had been fatal. Mr. Stanley once told him that he had known a person die from the division of a small branch of the epigastric artery in an operation, as well as he remembered, for strangulated femoral hernia. And another similar case is recorded. Moreover, it should be remembered that, in the case under consideration, profuse hæmorrhage is stated to have occurred; and a repetition of hæmorrhage was believed to be imminent. He concluded by observing that, under all the circumstances of the case as they are now before the Society, he expressed the opinion that the operation performed was, notwithstanding the result, the right one.

Mr. CURLING, after a most careful and anxious perusal of the case under discussion, agreed in opinion with Mr. Arnott, respecting the treatment pursued. He could not, however, feel the force of Mr. Quain's statement, respecting the danger to be apprehended from a wound in a small artery near to a main trunk, as he conceived that the coats of the wounded vessel would possess sufficient contractile power to diminish the opening made.* The pulsation in Mr. Liston's was very considerable, an anomaly he thought difficult to explain, considering the small size of the wounded vessel.

* In this case, the contraction of the vessel could not take place, as it will be seen, on reference to the post-mortem examination, that the ball had passed along the branch and bruised it before it was divided.—*Reporter of Lancet.*

MEDICAL SOCIETY OF LONDON.

APRIL 6, 1846.—MR. DENDY, PRESIDENT.

TUBERCULAR MENINGITIS.

DR. WILLSHIRE laid before the Society portions of white matter of each hemisphere of the brain of a young girl, containing a tubercle, and made the following remarks upon the case. When first seen by him, she complained of great pain at the top of the head, the suffering often being very intense; pain also along the neck, left side, and at the epigastrium; the hands hung listlessly at her side, and she was continually sighing; every now and then she was seized with violent trembling; the countenance was exceedingly anxious, and expressive of much suffering. The tongue was foul, the bowels were costive, the pulse was feeble, and the child somewhat emaciated. There had been vomiting also. On inquiry of the mother, it appeared she had sought advice for her child a week before, as she then had *diarrhoea* and severe cephalalgia: she was told that the girl had slight fever, of which she would soon recover. In her opinion, however, she had been daily getting worse. The head was now ordered to be shaved, and rubbed night and morning with compound iodine ointment; a blister was applied behind each ear, and dry cupping at the nape of the neck. She was directed to take eight grains of aloes, and five of the sulphate of potash, night and morning; and one-sixth of a grain of iodine, with two grains of iodide of potassium in distilled water every four hours. From this period until the day of her death, nineteen days afterwards, though gradually getting worse, the symptoms constantly remitted; stupor, slight delirium, dilated pupils, apparent blindness, difficulty of swallowing, coma; slight convulsions, however, finally closing the scene. In addition to the therapeutic measures already alluded to, it was found necessary to blister the scalp, which was afterwards dressed with tartar emetic ointment, and the iodine being omitted, nitrate of potash was given in medium doses instead; injections of turpentine and castor-oil were ordered to be administered. On inspection of the contents of the cranium, twenty-four hours after death, the following pathologic conditions were observed:—Slight congestion of sinuses and veins, very distinct flattening of convolutions and raising of the sulci; on pressure, the brain felt very firm. Along the edges of the convexities of the hemispheres lymph was deposited, along with numerous yellow granular tubercles. No increased vascularity, no congestion of the pia-mater, or of the cerebral substance itself. In the white substance of each hemisphere, rather superficially, was a tubercle of the size of a pea, in a soft cretaceous condition, surrounded by a sort of cyst. Ventricles much distended, containing not less than eight ounces of fluid, perhaps more. No softening of the central portions of the brain. At its base, from the junction of the medulla spinalis with the pons varoli to the commissure of the optic nerves, was a considerable amount of yellowish-green gelatiniform serosity. At one part of the edge of this latter were numerous granular tubercles. The skull was not symmetrically developed round its axis. Dr. Willshire remarked that the case offered the following points of interest:—1st. The cephalalgia not being frontal, as is usual in tuberculous meningitis, but felt at the vertex. 2nd. The disease, putting a stop to the diarrhoea and costiveness, supervening as illustrative of some cases recorded by Gerhard, Pilt, and Green, in which diarrhoea was arrested by the supervision of meningitis. 3rd. In agreeing with the statement of Rilliet and Barthez, that tubercles of the brain proper are more frequently found in the hemispheres. 4th. That yellowish-green gelatiniform serosity in tuberculous meningitis is more common at the base. The great trembling, the sighing respiration, the peculiar expression of the child, denoting severe cerebral disorder, the absence of certain lesions of motility, which in these cases are common, were also alluded to as points for discussion.

DR. G. BIRD inquired whether, previous to death, the lungs had been examined in this case, and if so, whether there were dullness under the clavicle, or any other sign of tubercular disease. Such sign was often a valuable assistance in our diagnosis of tubercle of the brain: dyspnoea, or even orthopnoea, was often present in these cases; was it so in the present instance? He inquired also as to the presence of reflex action.

DR. WILLSHIRE alluded to a peculiar sighing present in this case, and analogous to the "cerebral breathing" of Dr. Graves. There were no reflex phenomena. He had examined the chest, not with the view of determining the presence of tubercular disease, which in general was not sufficiently advanced to aid us, by its physical signs, in diagnosing tubercular meningitis, but rather with the view of

determining whether pneumonia were present. There was, however, no sign of that disease.

MR. BARLOW enumerated three circumstances which were observable in this case, and which led him at once to suspect serious mischief of the brain. The first was the peculiar character of the pain, the second, repeated sighing, and the third, an extreme distress of countenance.

Some discussion afterwards took place between Mr. Linnecar, Dr. Bird, and others, respecting the connexion which the tubercular deposit bore to the symptoms, and whether it was really a cause or effect of them.

APRIL 13.—MR. DENDY, PRESIDENT.

TUBERCULAR MENINGITIS.

The discussion this evening had reference to the case related at the last meeting, by Dr. Willshire. The speaker dwelt chiefly on the pathology of the disease, and the symptoms which denoted its presence in the early stages. Dr. Clutterbuck regarded the affection as a case of low protracted fever, having its seat in the brain, which at some part was inflamed. He could not see the advantage of the iodide of potassium, which he considered was incapable of being beneficial.

DR. WILLSHIRE defended the practice pursued, and referred to cases of scrofulous disease of the brain treated by this remedy in Germany.

MR. LINNECAR could understand that the medicine in question might be serviceable after antiphlogistic remedies had been employed, but not before their use.

MR. HEADLAND spoke at some length on this subject. The early stage of the affection was the only one in which treatment could be of service; it was then, however, difficult to determine whether that treatment should be antiphlogistic or otherwise. As the premonitory symptoms, however, were those more immediately of irritation, and not of inflammation, and had their origin in dentition, bad nutrition, and other causes, he thought that treatment employed with reference to this point was most likely to be of service.

After a few words from other members, the Society adjourned.

WESTMINSTER MEDICAL SOCIETY.

APRIL 18, 1846.

THE Society held its last meeting for the session this evening. The discussion had reference to the case of Mr. Fisher related at the last meeting. Nothing, however, for a report, was elicited. At the rising of the Society, Dr. Sayer, in a short address, adjourned the meetings until the third Saturday in October next.

THE SYDENHAM SOCIETY.—*To the Editor.*—Sir: Nearly twelve months since, the Council of this Society stated that the "works of Harvey and Hewson were in preparation," and "that Harvey's works, it was fully expected, would be issued during the present year." That was the year 1845. Many gentlemen entered the Society under the expectation of becoming possessed of these valuable works, instead of which they have not had supplied to them even a complete work on "Pathological Anatomy," which the report led them to expect, but a part only of Hasse's contemplated volumes on this subject, the translator quietly informing the readers that "the uncertainty that necessarily attaches to the appearance of comprehensive works in distinct parts had induced the Council to prefer publishing the present volume," which embraces only diseases of circulation and respiration. Thus have the subscribers been inveigled into payment for the first volume of a series of seven works which may never be completed, instead of being supplied with the classical and useful productions of their countrymen. It is really too bad that the country practitioner, who has subscribed his hard-earned guinea to this Society, under the just expectation of receiving, in return, standard works at a moderate price, should be thus treated; and many a one, in common with myself, is anxious that you should impress on the Council the justice of issuing such volumes only as are likely to be completed within a moderate time, instead of sending forth odd tomes, which a bookseller, in your journal of last week, values at tenpence!

I am, Sir, yours, &c.,

A READER.

April, 1846.

BRITISH AND AMERICAN MEDICAL JOURNALS.

THE STATISTICS OF SUICIDES.

In the *American Journal of Insanity*, we find some interesting facts and observations under the above title, by Dr. HUNT. The number of suicides observed was 184, being, males 154, females 30. The extremes of ages were 81 and 16; of the latter age there were 3.

In reference to the season, it was observed that—

The quarter commencing with July,	numbered 56 suicides.	
That commencing with April,	" 48 "	
" " " October,	" 36 "	
" " " January,	" 32 "	

—observations which correspond with those made in France by M. GUERRY. In reference to the period of the day, this gentleman found that the greatest number occurred between four and six in the morning; the least, between two and four.

As to the causes which lead to the commission of the act, we find nothing new. Insanity, intemperance, love, jealousy, &c., constitute the majority.

The modes adopted by the suicides were—

- " Hanging in 64 cases, of which 54 were men, and 10 women.
- " Drowning in 26, of which 17 were men, and 9 women.
- " Shooting with pistol, or gun, in 26 cases, all of which were men.
- " Cutting the throat in 25 cases, of which 24 were men, and 1 a woman.
- " Taking laudanum or opium 13, of which 10 were men, and three women.
- " Taking arsenic 4; three women, 1 man."

The remaining numbers adopted various equally effective means, but not beyond one or two adopted the same means. It is therefore unnecessary to continue the list.

The civil condition, so far as could be obtained, was as follows:—Married, 59; single, 32; widow, 1; widower, 1.

To this communication, the editor adds some other facts. He shows that this crime has diminished in New York, notwithstanding the great increase of population. Thus, in

	Population.	No. of Suicides.
1830 ...	197—112	29
1840 ...	312—852	23

And he adds a table which may be found useful to some of our readers.

"Number of Suicides in the chief Capitals of Europe.

Places.	Periods.	Suicides.	Proportion to Population.
Berlin	1813—1822	360	1 in 750
Copenhagen	1804—1806	100	1 " 1,000
Naples	1828	330	1 " 1,100
Hamburgh	1822	59	1 " 1,800
Berlin	1799—1808	60	1 " 2,300
Paris	1836	341	1 " 2,700
Milan	1827	37	1 " 3,200
Berlin	1788—1797	35	1 " 4,500
Vienna	1829	45	1 " 6,400
Prague	1820	6	1 " 16,000
Petersburg	1831	22	1 " 21,000
London	1834	42	1 " 27,000
Naples	1826	13	1 " 173,000
Palermo	1831	2	1 " 180,000

"In all countries, the suicides among men are more than twice as many as among women."

DIAGNOSIS IN CASES OF PELVIC INFLAMMATION, ENDING IN THE FORMATION OF ABSCESS.

Mr. BELL gives the following summary of the indications by which this form of disease may be recognised from some other. There is no novelty in the facts mentioned; they are,

however, of a practical character, and will be usefully presented to those whose memory is defective, or experience limited. Aneurism of one of the larger pelvic arterial branches is a disease with which, in addition to those here enumerated, pelvic abscess may be confounded. We recollect an instance in which a large cyst, filled with coagulated fibrin, was saved from the operator's lancet, by the patient's reluctance to submit to an operation. It presented in the vagina, was highly elastic to the touch, and did not pulsate.

"The diagnosis in the early stage is attended with difficulty; the pain, of a peculiar character, along with the constitutional symptoms, are sufficient to arouse suspicion that inflammation has commenced, and to authorize a vaginal examination, which is of the utmost importance in a diagnostical point of view. It not only enables us to distinguish the affection with certainty, but is also the only mode by which we can either establish a differential diagnosis, or arrive at a satisfactory conclusion respecting its seat, position, extent, and connexions. But as a vaginal examination cannot be always obtained, it may not be improper to allude to the principal diseases with which the one under consideration is likely to be confounded, and to point out their differential marks.

"1st. Peritonitis.—From the inflammation of the abdominal peritonæum, the neuralgic pain, and the absence of the several symptoms of peritonitis, will enable us to make the distinction. In protracted cases, peritonitis may exist as a complication, either from the bursting of the abscess into the abdominal cavity, or in consequence of the extension of the inflammation from the uterine peritonæum, between which and phlegmonous inflammation it is exceedingly difficult to establish a diagnosis, as all the tissues of the parts involved, more especially the peritonæum, become affected to a greater or less extent, as has been already observed. But this does not take place until the disease has existed for some time, and it is easily recognised by an increased severity of pain, and aggravation of the febrile symptoms.

"2nd. Neuralgic affections of the Abdomen, and Hysteria.—The persistence of the pain in the lower abdominal regions, the effect which pressure has of increasing it, and the presence of the tumour, will be sufficient to distinguish the disease from these affections.

"Indeed, the tumour, when it exists, enables us to distinguish the abscess from almost every other malady, except the ovarian disease, and hypertrophy of the uterus.

"a. Ovarian disease.—The acuteness of the symptoms, and the high constitutional disturbance, will guide us here, as in ovarian disease these symptoms are seldom so acute. Of course, when the ovaries become implicated by the extension of the inflammation, the iliac tumour may principally consist of the enlarged and diseased ovary.

"b. Hypertrophy of the Uterus.—Sometimes the uterus remains morbidly enlarged after parturition. The organ may also become hypertrophied from other causes. The diagnosis may be easily established by the uterine sound recommended by Professor Simpson of Edinburgh. In a case in which I committed a mistake myself, the introduction of the bougie at once pointed out the error.

"3rd. Sciatica; lumbar abscess; disease of the hip-joint; pregnancy.—A careful examination, both externally and internally, together with the history and progress of the case, ought to be sufficient in all these instances to enable us to form a correct diagnosis."

Mr. Bell further considers the terminations, and other subjects connected with the disease. The former he finds fatal in twenty-two cases out of ninety-three—nearly one in five. And

"In forty-five cases in which the abscess burst spontaneously, I find thirteen opened through the abdominal walls, twelve per vaginam, seven into the rectum, four into abdominal cavity, one both into vagina and bladder, two both into vagina and rectum, one into bladder, one into both bladder and uterus, two into uterus, one behind hip-joint, and one at the femoral opening.

"From this (which is merely approximative) it would appear that the abscesses burst with nearly equal frequency through abdominal parietes, vagina, and rectum; more rarely into the peritonæum, and still more so into the uterus—indeed, I have only read of three cases in which the matter found its way into this organ, and all these instances proved fatal. One is recorded by Husson and Dance, another by Bourdon, and the third by Wainwright."—*Medical Gazette*.

THE LANCET.

LONDON, SATURDAY, APRIL 25, 1846.

THE Reports of the proceedings at the Meetings of the NATIONAL ASSOCIATION, and the COMMITTEE OF SURGEONS, which have just been held in the metropolis, will, doubtless, be read with feelings of great interest by the majority of the profession. With two or three exceptions, the "plan" proposed by the Committee of the National Association has strong claims to general support. A detailed statement of it is included in our report of the meeting of that body. We have printed it, verbatim, as we received it from the office of the Association. The difficulties which have been raised with reference to the adoption of it by the Committee of Associated Surgeons, are founded on the construction of the fourth and fifth paragraphs. They certainly require explanation. As there is to be a conference on the subject between the deputation from the Committee of Surgeons, and the Sub-committee of the National Association, and as we sincerely hope that an amicable adjustment of the existing obstacles to a combined action between the two Committees will be effected, we shall, for the present, abstain from all further commentary on the subject.

WE received last week the following letter from Dr. MARSHALL HALL, and also the various documents which will be produced in the present article:—

To the Editor of THE LANCET.

SIR,—I have long resolved never again to enter into controversy, and I have publicly and privately expressed this determination; but all the documents which I possess, relative to the treatment which I have experienced at the Royal Society, and every explanation which I can give, are at your service and disposal. I make this offer on principle. I should be glad if anything which I could do, should prevent any future inquirer into Nature's ways, however humble, from occupying the position which I do, as long as the Royal Society itself shall endure.—I am, Sir, your obedient servant,

April 11, 1846.

MARSHALL HALL.

WE consider this resolution a wise one. It has always been a grand object with Dr. HALL's opponents and enemies to prove him a controversialist, and, at the same time, to nibble down his discoveries by trifling, and often grossly ignorant, discussions. We hope his honour and his fame will not suffer by the manner in which we shall acquit ourselves of the trust reposed in us. What we propose to do is, to give a short history of the official conduct of the Royal Society towards him, from the first paper he presented to the present time.

The first communication of Dr. MARSHALL HALL to the Royal Society, was a paper "On the Anatomy and Physiology of the Minute and Capillary Vessels." To this Dr. WILSON PHILIP immediately wrote a counter-paper, not a very delicate proceeding, considering that he was at the time a member of the Council, and, consequently, a judge. The paper, moreover, merely contained a *rifacimento* of his well-known work. Dr. PHILIP's paper was printed in the *Philosophical Transactions*—Dr. HALL's was rejected. The works of both, upon the circulation, are before the profession, and we scarcely need to say, that *now*, Dr. PHILIP's name is seldom mentioned by the

physiologist, save for the purpose of contradiction or disproof. Any one who looks into the abstracts of the two papers by the Secretary, will see that one paper is treated as incontrovertible, the other as supposititious. Dr. WILSON PHILIP and Dr. ROGET felt the approach of a greater man than themselves, and instead of giving him a generous welcome, they resented the intrusion, and were willing, if possible, to humble him at the threshold of his career.

Dr. M. HALL's two next papers were "On the Inverse Ratio which subsists between Respiration and Irritability in the Animal Kingdom," and "On Hybernation," both of which were printed in the *Philosophical Transactions*.

Long before this time, while engaged in his experiments on the circulation, he had observed the tail of the eft move, after its separation from the body, on being irritated by the point of the scalpel. This observation, fertilized and fructified by the right mind, was the germ of the discovery of the spinal marrow as a distinct division of the nervous system. Simple in itself as the famed fall of the apple to the eye of NEWTON, as the sight of the vein-valve to the eye of HARVEY, or as the dry bones in the caves of Montmartre to the eye of CUVIER, it had been seen, but without being understood, by thousands before. But Dr. M. HALL at once caught sight of its importance, and determined to trace this mysterious form of motion back to the physiological principle which produced it, and onward to the functions of the animal economy to which it ministered. The subject of his investigation was forthwith communicated to Mr. CHILDREN, the junior Secretary of the Royal Society.

The next communication was the first "Memoir on the Reflex Function of the Medulla Oblongata and Spinalis," which was printed in the *Philosophical Transactions* for 1834. This memoir contained the first announcement of the doctrine of the independent function of the spinal marrow. Hitherto, the nervous system had been thought to consist of two elements only, the CEREBRAL and the GANGLIONIC; but in this memoir the nervous system was decomposed experimentally, and the existence of another element, the SPINAL, was first demonstrated. It was there shown that the spinal marrow, with its incident and reflex nerves, is the organ of all the involuntary acts of INGESTION and EGESTION in the entire animal kingdom. This was at once hailed by Professor MÜLLER, then held to be the first experimental physiologist in Europe, as "an important step in physiology." Before this, Sir CHARLES BELL had acquired great fame by decomposing the cerebral nerves into those of sensation and motion. As in the case of Dr. M. HALL, the Royal Society had been his audience, and Sir CHARLES BELL had deservedly received a Royal medal in Physiology, and the honour of knighthood, in company with HERSCHEL and others, as his reward. The fate of the author of the greater discovery was very different!

In 1836, a Royal medal in physiology was to be awarded for the most important paper printed in the *Philosophical Transactions*, in the triennial cycle which had preceded. Consequently, as Mr. NEWPORT stated in his letter, Dr. MARSHALL HALL's first Memoir on the Reflex Function "did come within that cycle." From Dr. ROGET's letter it appears that a committee, consisting of Mr. GREEN, Dr. HOLLAND, Mr. LAWRENCE, and Mr. MAYO, was "specially appointed to report to what paper on animal physiology that medal should be

awarded!" These gentlemen did not even *place* the paper as a competitor, which every one now sees to have merited the reward, and Mr. MAYO, it should be remarked, one of the judges, had actually advanced an unjust claim to Dr. M. HALL's discovery! The competing papers were, that of Mr. KIERNAN, on the Intimate Structure of the Liver, and Mr. NEWPORT's two papers on Insect Physiology; the ultimate award falling, as our readers already know, on Mr. NEWPORT. The justice and even the legality of this award we shall have to discuss on another occasion.

While the award of the Royal medal in question was *sub judice*, Mr. KIERNAN stoutly maintained the claims of his own paper, and prevailed on Dr. M. HALL to make one of three to inquire into the real extent of the originality of Mr. NEWPORT, "the pseudo-discoverer," as Dr. GRANT aptly calls him. Though Mr. NEWPORT, for himself and friends, professes not to have heard of the rumour that he was to have the Royal medal, the labours of Mr. KIERNAN supply sufficient evidence that such a rumour existed. After these proceedings it became well known to Dr. ROGET, that in Dr. M. HALL's opinion the medal had been jobbed away, and thenceforth the open hostility of the secretary, which he will deny in vain, began.

The maze now to be unravelled is the mal-animus contained in an obscure note appended to Mr. NEWPORT's next paper, "On the Temperature of Insects," published in the *Philosophical Transactions* for 1838. We reprint the insinuation entire.

"In submitting these observations on the temperature of insects to the consideration of the Royal Society, I have felt myself imperatively called upon to make the above remark, in explanation of the nature of my supposed obligations to Dr. MARSHALL HALL, with regard to this and other subjects connected with the physiology of insects, in consequence of certain misrepresentations which were made on a recent occasion respecting my communications with that gentleman; and I beg further to state, that many of the views here advanced respecting the temperature of the hive bee, from the commencement of my observations to the month of May, 1836, were communicated by myself to Dr. MARSHALL HALL, at his own particular request, in the beginning of July, 1836, in the presence of my intelligent friend and late pupil, Mr. JOHN OSBORN, who assisted me in making the observations, and to whom I am indebted for much valuable assistance during my investigations."

The "recent occasion" refers, of course, to the inquiry into Mr. NEWPORT's claim to originality. The insinuation, if it mean anything, means that it had been represented that Dr. MARSHALL HALL had communicated certain facts to Mr. NEWPORT, instead of Mr. NEWPORT to Dr. M. HALL. But there neither was nor could be any such misrepresentation, for the letter from Mr. NEWPORT to Dr. M. HALL, from which the following is an extract, was at the time in the hands of Mr. MAYO and Mr. KIERNAN.

July 23, 1832.

"I am highly delighted and flattered at your entrusting me to make the important inquiries respecting insect respiration. I began them immediately, and they are still in progress, and I am happy to say that everything yet observed agrees with your ideas of a low degree of respiration, with a high one of muscular irritability; and also with the degree of respiration in the larva, or young state, being less than in the *imago*, or perfect one. The series of these observations I am noting very particularly in a separate book, and which, when you require it, will be entirely at your service. I cannot as yet see how we can discover the exact time when an insect has decomposed the whole of the atmospheric air in which it is confined, excepting by means of your pneumatometer."

If any "misrepresentations" were really made, they must have been made by Mr. KIERNAN and Mr. MAYO. But what

misrepresentations could they make, with this letter in their hands, which so clearly and indubitably sets forth the relation which existed between Dr. M. HALL and Mr. NEWPORT? The allegation or insinuation is FALSE, and a blot upon the *Philosophical Transactions*. Feeling this, Dr. HALL, within half an hour after the receipt of his copy of the *Transactions*, sent an express to the new junior secretary, Mr. CHILDREN, with the facts, and a request that the paragraph might be removed. It must be remembered that the secretaries have the charge of conducting the *Transactions* through the press. This justice was demanded in vain, though everything rendered it imperative that the leaf accused of a lie should be cancelled. Truth required it, and the Jesuitical usages of the Society itself, which is wont to defend its fellows even against truth and justice.

Dr. M. HALL then applied to Mr. MAYO and Mr. KIERNAN, in whose hands Mr. NEWPORT's letter had been, to sign the following document. Mr. MAYO consented. Yet Mr. NEWPORT, in giving himself a character, says that Mr. MAYO congratulated him, and assured him "that he came off with great honour!"

"We, the undersigned, having compared the note to Mr. Newport's paper, just printed in the *Transactions* of the Royal Society, (p. 259,) with a letter shown to us in November, 1836, by Dr. Marshall Hall, and perfectly recollecting our conversations with Dr. Hall at that period, declare that the *insinuation* contained in that note is totally unfounded, and that no 'misrepresentation' on the point in question was made by Dr. Marshall Hall, or by any other person, on the recent occasion 'to which allusion is made.'"

The next communication made by Dr. M. HALL to the Royal Society was the second "Memoir on the True Spinal Marrow and the Excito-motory System of Nerves." In a former article we accused the joint Secretaries of a double sneer at this important paper during its transit through their hands. Dr. ROGET denies that there is anything in his abstract "that can be construed into a 'sneer.'" We must therefore turn to the proofs. Dr. M. HALL commenced this memoir as follows:—

"My former memoir, 'On the Reflex Function of the Medulla Oblongata and Medulla Spinalis,' published in the *Transactions* of the Royal Society for 1833, was speedily translated into the German language, and inserted in the *Archiv für Anatomie und Physiologie*, of Professor Müller, of Berlin, (for 1834.) Professor Müller has also given a peculiarly interesting notice of the subject, in his 'Handbuch der Physiologie.' This eminent physiologist was led, indeed, altogether independently of me, to form similar views, founded upon similar facts and observations: he assigns to them the same designation, and speaks of them as 'new, and constituting a decided step in our science.'"

We now quote from Dr. ROGET's abstract:—

"The author begins by observing, that a former memoir of his, entitled, 'On the Reflex Function of the Medulla Oblongata and Spinalis,' published in the *Philosophical Transactions* for 1833, has been translated into German, and *favourably spoken of* by Professor Müller. He states that his object is to unfold WHAT HE CALLS a great principle in physiology," &c.

It is one thing, and a very common thing, for a paper to be translated into German, but it is quite a different matter to have had it translated by Professor MÜLLER for his own "*Archiv*." To have stated the former, as Dr. ROGET has represented, would have been to appear ridiculous; but to be able to state the latter, as Dr. HALL had done, when Professor MÜLLER himself had been investigating the same department of physiology, was honourable both to the author and to the translator

The sneer intended in this is evident enough. Let any one who doubts it compare the passage with the ordinarily suave style of the writer. The sneer was felt where it was intended it should be, and when the memoir was published in another channel, the passage relating to Professor MULLER, which the author had in his enthusiasm adduced, was omitted. At the end of Dr. ROGET's abstract, it was stated, "reference is made in the course of the paper to several drawings and diagrams, which, however, have not been supplied." Will it be believed that these drawings and diagrams were then, and had long before been, in the care of the junior Secretary, to whom the custody of such things properly belongs? If Dr. ROGET continues to deny the "sneer," we suppose he will admit the words of his coadjutor, "Will they live after they have been made soup of" to be something worse?

We now come to another point. We stated that this paper was "blackballed as unworthy of publication." Dr. ROGET flatly contradicts us, and says that it "was never blackballed," but that "it was withdrawn by Dr. HALL himself *previously* to any decision by the Committee of Papers on the question of its being published." Mark the word "*previously*!" We can show that this assertion is in fact, and still more in spirit, untrue. Either Dr. ROGET is ignorant upon the point he decides so positively, or he descends to a mean and paltry quibble.

We quote the following from that portion of the Statutes of the Royal Society which treats "of the publication of papers."

"I. The members of the Council for the time being shall constitute the standing committee to whom the consideration of the publication of such papers as shall have been read, or communicated to the Society at their weekly meetings, shall from time to time be referred."

Compare the assertion of Dr. ROGET with this quotation from the Statutes, and with the following letter from Mr. CHILDREN, the junior Secretary, on behalf of the Council.

British Museum, 11th May, 1837.

MY DEAR SIR,—The council of the Royal Society have not thought it right to print your paper in the *Philosophical Transactions* in its present form. It has therefore been postponed till the next meeting in June; that you may, in the meantime, if you please, withdraw it. I remain, my dear Sir, faithfully yours,

Marshall Hall, M.D. &c.

J. G. CHILDREN.

Here at this point, is it not apparent, upon the face of Mr. CHILDREN's first letter, that "the Council," "the Standing Committee of Papers," had come to a decision, and had "not thought it right" to print the paper in question. What, then, becomes of Dr. ROGET's assertion, that it "was never blackballed," but that it was withdrawn "*previously* to any decision by the committee of papers"?

But to proceed. The following is the reply of Dr. M. HALL to this communication:—

MY DEAR SIR,—No. I will *never* withdraw my paper. But I should be greatly obliged to you, if you would, 1, give me some idea of what is meant by "its present form," and, 2, give me the opportunity of taking a copy. To the Royal Society shall belong all the honour or all the disgrace of *rejecting* that paper. Time will determine which of the two that may be.—I am, my dear Sir, yours very truly,

MARSHALL HALL.

Manchester Square, May 12, 1837.

This is Mr. CHILDREN's answer. We have marked the insolence of its commencement.

British Museum, 12th May, 1837.

DEAR SIR,—JUST AS YOU PLEASE. I have done what I thought due, in delicacy you, by suggesting the postponement of

your paper till the next meeting of the Council. I shall lay your letter before that body in June, but can make no further communication respecting your paper till I receive the direction of the Committee of Papers.—I am, dear Sir, faithfully yours,

Marshall Hall, M.D.

J. G. CHILDREN.

P.S.—I cannot order a copy of your paper to be given you; nor can I allow one to be taken without application to the Council.

Finding it impossible to get a copy of his paper, and that its postponement was the act merely of Mr. CHILDREN before returning it directly from the Council, Dr. HALL demanded the paper in the following letter:—

MY DEAR SIR,—No one can be more sensible to kindness than myself. I did not know that *you* proposed the postponement of my paper in delicacy towards me, and to give me the opportunity of withdrawing it. Now that you have told me this, I thank you with all my heart, and I withdraw my paper accordingly.—I am, my dear Sir, yours very sincerely,

MARSHALL HALL.

Manchester-square, May 15th, 1837.

Thus the paper was only withdrawn after having *previously* been "blackballed" or rejected as unworthy of appearing in the *Transactions* by the Council—the Standing Committee of Papers. Our readers must now see clearly the paltry subterfuge under which Dr. ROGET thought to ensconce himself. The same thing has long been busily reported by the creatures of Dr. ROGET. They also have industriously denied the rejection of the paper, and have untruly said that it was withdrawn by Dr. M. HALL himself, *previously* to any decision.

It must, indeed, be gratifying to Dr. HALL to see the Secretary of the Royal Society so anxious to shift the odium of repulsing that paper, and of throwing contempt on this discovery, both from himself, and from the Council. But to have been of any avail, it should have been done at a shorter interval than nine years. The attempt to escape is now mean and contemptible. Most assuredly the name of Dr. ROGET will remain in disreputable connexion with these transactions, as long as the Royal Society or physiology itself shall continue.

This correspondence took place in May, 1837. A correspondence on the same subject had previously commenced between Mr. LAWRENCE, a member of the Council, and Dr. HALL. We insert these letters because they prove distinctly three things:—1. That Dr. HALL had a suspicion that his paper would meet with foul play; it had, indeed, been rumoured that Dr. ROGET's influence was to cause its rejection. 2. That Dr. HALL, in honourable imitation of LOUIS, wished, if he had received any encouragement, to retire from practice, and to devote a series of years to the prosecution of his discovery without fee or reward. 3. That the Council did adopt the "resolution" communicated to Dr. HALL by Mr. CHILDREN, thus furnishing an additional proof of the error and misrepresentation of Dr. ROGET.

(FROM MR. LAWRENCE TO DR. MARSHALL HALL.)

Whitehall-place, April 28th, 1837.

MY DEAR SIR,—I received from you yesterday a letter explaining your views and wishes in reference to a paper which you have communicated to the Royal Society.

I have never seen in the Council any disposition to neglect or to behave unfairly towards those who have paid the Society the compliment of addressing communications to it; I cannot think, therefore, that you need a friend in the Council as a security for fair treatment.

I am not aware that the Council, in its collective capacity, can do anything to assist or promote your investigations; but I am sure that they are disposed to look favourably on all who are engaged, like yourself, in furthering the great object

the Society—the advancement of natural knowledge; and that it will give them great pleasure to learn that you are disposed to continue and complete your investigations at so great a sacrifice as that of relinquishing your profession for a time. I am most ready to comply with your wish of making known to the Council your intention or disposition on this subject, though you do not desire, nor am I aware, that this body could do anything in the matter.

I shall be most happy to be the medium of any communication or explanation you may wish to bring before the Council, in reference either to your paper, or to your researches generally; indeed, I feel that it is merely a part of my duty to do this. In reference to what you ask of me individually, I fear that my other avocations would not allow me to devote the necessary time to the subject. I shall, however, be most happy to see you in reference to it, as I could probably learn what you desire more clearly and effectually in an interview than by correspondence. I am at home every morning till twelve.—I remain, my dear Sir, very faithfully yours,

W. LAWRENCE.

(MR. LAWRENCE TO DR. MARSHALL HALL.)

Whitehall-place, May, 1837.

MY DEAR SIR,—Being at this moment much pressed for time, as several persons are waiting for me, will you excuse my merely sending you the short answer, that I will attend carefully to every part of your letter, and endeavour to accomplish what you wish on the subject of your paper.—Very faithfully yours,

W. LAWRENCE.

(MR. LAWRENCE TO DR. MARSHALL HALL.)

May 23rd, 1837.

MY DEAR SIR,—I was unexpectedly prevented from reaching the Council on the day when your paper was under consideration, until after the adoption of the resolution communicated to you by the secretary, and therefore know very little more of the matter than what you have heard from that quarter. The resolution not to print that paper in its present form clearly implies that it might be printed in another form and under other circumstances. I should infer, that if you persevere in your intention (which, of course, was made known to the Council) of pursuing and completing your investigations, so as to fill up the present outline or sketch, that they would wish to receive and give publicity to your views in their finished state.—I remain, my dear Sir,

W. LAWRENCE.

But Dr. HALL did not rest here: he was indefatigable in his attempts to keep the Royal Society from the perpetration of injustice. He addressed a dignified and eloquent note to the members of the Council, every word of which—then anticipation, but now truth—should have received attentive consideration:—

“May I beg, then, gentlemen,” (we quote from its concluding portion,) “that you will do me the favour to appoint a *commission*, to witness my experiments—to examine my plain deductions from them—to look over my paper with care before you finally condemn my labours? My conviction, with that of many, who are not only most competent to judge, but who have kindly devoted much time to my inquiries, is, that I have discovered a new and important principle in physiology, only comparable to the *irritability* of Haller, and of much more extensive application. To the Royal Society I naturally looked for countenance—for reward. I had, indeed, seriously contemplated the project of abandoning the practice and emoluments of my profession for several years, in order that I might devote myself to exclusive researches into the anatomy, physiology, pathology, and therapeutics, of the excito-motory system. I mentioned this project to the members of the Council. Have I not, then, an unusual claim to the consideration of a Society established for the express purpose of ‘promoting natural knowledge’?”

“I have been told that my paper is too long; that certain parts are approved, others disapproved. I can only reply, that I should gladly receive and adopt any suggestions that can render it more worthy of the Royal Society.

“I think I have some reason to complain of the treatment of my paper whilst it was before the Council. Having quoted from Whytt an experiment of Redi, on the movements of the *tortoise* when deprived of its head, some one has written, ‘will they live after they are made soup of?’ Such an observation needs no remark from me: it is rather an indignity put upon the Royal Society itself.”

Some expressions in Mr. LAWRENCE’s letters convey an impression that the Council would have been glad to receive the paper in an amended form. The answer of the Council to this note entirely quashed any such idea. Indeed, it would have been preposterous in the Council to have suggested any alteration in a contribution so far in advance of their own knowledge at the time. They wished to get rid of the subject, and for the time they were successful. The following is the pert and uncourteous reply of the Council.

I am directed to acquaint you that the Council of the Royal Society cannot accede to the proposal contained in your letter addressed to them on the 8th of June last.

(Signed)

J. D. ROBERTON, Assistant Sec.

How the character of the Discoverer gains by comparison with that of his judges! Where will posterity fix the brand! Where place the laurel!

The offices of the Royal Society, the pages of the *Philosophical Transactions*, were now shut against Dr. HALL, unless he could brook these indignities; for indignity it was that all inquiry, all explanation, should be denied to him, while the fullest investigation was given, but a short time before, to the trumpery affairs of Dr. ROGER’s supple friend, Mr. NEWPORT, through Mr. MAYO, a member of the Council.

After these events Dr. HALL called, with an introduction from Lord DENMAN, on the Earl of BURLINGTON, the Vice-President of the Society, who was in the chair at the time of the reading of his paper; and he wrote to Sir JOHN HERSCHEL. From one of these, himself the child of science, he should have met with support and encouragement, but he rather received rudeness and repulse.

The course he had originally marked out for himself was to quit practice entirely for five years, and to proceed to Vienna, intending, in the great hospitals of that city, to pursue his discovery in its applications to anatomy, physiology, pathology, diagnosis, and therapeutics, under the most favourable circumstances which the world could afford. Other noble objects connected with the advance of physiology and practical medicine also occupied his attention. Under great discouragement he has done much; what he would have performed had his career been cheered as it deserved, we can only conjecture. As it was, the conduct of his opponents, in a great measure, drove him with disgust from physiology. The same indifference was bred in HARVEY by the similar crew that assailed him in his day. If this great man pursued physiology in the latter part of his life, it is known to have been solely from the pleasure it afforded him, not from any idea of giving the results of his labours to the public. If we regret such events, we must, at the same time, blame those who have brought them to pass.

Years after, an opportunity of grace occurred. A COPLEY medal being at the disposal of the Council, the Physiological Committee, under the presidency of Sir B. BRODIE, recommended to the Council that it should be given to Dr. M. HALL. On being told the circumstance by Sir B. BRODIE, Dr. HALL replied, “I shall never get a medal while Dr. ROGER remains Secretary of the Royal Society.” The event verified his words. The medal was given to Professor WHEATSTONE, one of the Council, for a friend of his! We hope it will not be supposed that we think Dr. HALL could now, or for the future, accept a medal, or any other favour, from the Royal Society. Now, a distinction of this kind would do

him as much injury as it would formerly have done him service.

Some of the many points we have recounted might have been accidental; all could *not* have been so. Only the continuance of a malignant spirit in authority can account for such long-continued injustice. To have exposed these matters thoroughly, will be, in some measure, to have healed their effects; for it is a noble characteristic of our countrymen, to give their warmest suffrages to the man who has been unfairly dealt by.

Such were the unseemly greetings which fell to the greatest discovery in physiology of our times. The facts furnish forth but pitiable materials for the history of science. History, unfortunately, they must become. To the present hour, those unjust judgments, and their correlative events, have hounded on coarser spirits, to vilify, injure, and annoy one who pre-eminently deserves the respect of his day and generation. When he has spoken of his labours, he has been unjustly accused of egotism, bad taste, and bad temper: when he has been silent, enmity has construed his silence into moroseness: when he has worked, jealousy and ignorance have censured him for going too fast: when he has held his hand, the grumblers have called him idle: when he has written profound books, dullness has criticised them as unintelligible; and when he has thrown off the lighter produce of his mind, pertness has taxed him with want of depth. Justice is a blind Goddess; but in his case, she has been made blind to the truth instead of blind for the truth.

A great gift has been freely presented to science and to mankind, and it has resulted in no amenities to the giver. We have lived in a slough of professional mediocrity, when any man presumptuous enough to lift his head from the stagnant surface, was, if possible, dragged back again to the torpid level. And in the cold formality of chartered bodies, such as the Royal Society, there is no appeal, no sympathy with injured genius. In all the common affairs of life there is the right of appeal against injustice. In science, there is no appeal, save to time and to posterity. But does not this render the most delicate and punctilious sense of honour in those who exercise such almost irrevocable authority, a matter of the most imperative and religious necessity? It is difficult to conceive an obligation more sacred, and which should more carefully be guarded from the mere shade of suspicion. But looking to the circumstances we have detailed, we ask, has there been any such loyal and true nicety of honour in the medical department of the Royal Society, which holds in its keeping the highest rewards to which the professional man can aspire? Have not its proceedings in the matter we have been considering savoured more of the jockey club, or the inquisition, than the pure faith of a scientific sodality? Such things are profoundly painful to the individuals who are made to suffer; but they are equally deplorable in their results to the medical profession and to science at large. The proceedings of the Royal Society have not only wounded individuals, but they have inflicted a blow on the honour of the medical faculty, from which it will not easily recover. Present punishment and future opprobrium are the least inflictions that the instruments in such transactions deserve.

escaped us. But what we have already written, and then admirable letter of Dr. GRANT, have developed the answer to some portions of those letters, by facts, still better than by words.

The chief points of Mr. NEWPORT's letter were, that he gave himself a good character out of the mouths of the Duke of SUSSEX and Mr. MAYO, and gave Dr. ROGET a good character out of his own. Respecting the certificate of his own character from Mr. MAYO, we may fairly place against it the document we have given above, and we may add, that Mr. MAYO said to others, whatever he may have said to Mr. NEWPORT, that the latter gentleman "had done nothing to deserve a medal." With respect to Mr. NEWPORT's testimonial to Dr. ROGET's honourable dealing, we can only say that, considering the great probability which exists, that Dr. ROGET, as Secretary, wrote the speech of the Duke of SUSSEX, so patly quoted beforehand by Mr. MAYO, considering the probability of this, we say, the account between them is pretty well balanced.

The question of the rejection or non-rejection of Dr. HALL's first memoir we have already disposed of, and we believe there cannot be two opinions about the matter. Dr. ROGET admits that Mr. NEWPORT assisted him in the compilation of the Bridgewater Treatise. It is known that he has received the honours (so called) and emoluments of the Royal Society. Dr. ROGET also admits that he was charged by Dr. GRANT with taking the materials for his treatise from Dr. GRANT's lectures. Dr. ROGET states, that he wrote, on hearing the accusation, to Dr. GRANT, and "offered to make the fullest acknowledgment of any views or modes of illustration which he might claim as originally his." This may seem fair enough, but from Dr. GRANT's reply, it appears that this offer was coupled with another proposition of a most extraordinary kind, one of the most extraordinary specimens of literary and scientific brigandism that ever was made public.

Sending the proofs to Dr. GRANT seems, too, a semblable honesty, but it is quite possible that they were sent in the belief that Dr. GRANT would not like a personal altercation, and that then all subsequent complaint would be prevented. Dr. GRANT, however, resented the piracy, and treated the attempts at its justification as they deserved. We quote the latter entire.

"I would beg to observe, in the first place, that I consider myself as having the full right to make whatever use I please of the information I may derive from my attendance as a regular pupil on the lectures of a public professor. Facts, and details of facts, communicated in that mode, become the property of those to whom they are communicated, and there can be no breach of confidence in making them public, nor any obligation to quote, in every instance, the authority on which each statement is made, more especially when no claim is made by the lecturer to originality in giving these facts."

Dr. ROGET wonders that he never received any answer to this letter; he does not perceive that Dr. GRANT considered him a literary pilferer with whom he could thenceforth hold no communication whatever. The proposition is monstrous. It is neither more nor less than this—that any person who hears a lecture may publish it as his own and conceal the name of its real author.

Such is Dr. ROGET's morality. Can we wonder, after this,

THE letters of Dr. ROGET and Mr. NEWPORT had well nigh

any proceedings, however discreditable, that have occurred in the Royal Society during his secretaryship? This proposition as indicating Dr. ROBERT's ideas of *meum and tuum*, furnishes some clue to the transactions we have been called on to expose. We again ask, ought any individual, broaching such doctrines respecting "la probité scientifique" to remain longer a chief officer of the Royal Society of London? Dr. GRANT has expressed his surprise that Dr. ROBERT should have provoked publicity; others will wonder at the same thing. The whole of the transactions involved seem morally to be like a piece of Photography,—the more brilliant the light thrown upon it, the blacker it becomes.

A HUNDRED and fifty members of the profession assembled on the evening of Tuesday, the 14th instant, at the ROYAL MEDICAL AND CHIRURGICAL SOCIETY, to hear a paper, from the pen of Mr. LISTON, read and discussed, on the case of the deceased Lieutenant SEATON. The rooms were thronged to excess, the members crowding the very doorway. The practice of the celebrated surgeon whose name we have mentioned, had, as is well known, been unjustly impugned. It had been alleged, that his anxiety to operate had blinded his judgment, and led him to interpose where Nature required no interference; but these remarks proceeded from critics who had not seen the case, and knew nothing of the urgent circumstances which preceded the operation. In order, therefore, to afford to these individuals an opportunity of stating their objections to the operation, Mr. LISTON boldly, and in *propria persona*, submitted the course he had pursued to the consideration of a medical society which embraces amongst its members the first surgeons of the day. What was the result? Not one of those persons who had been so industriously engaged in attempting to whisper away the reputation of the operator had the courage to appear. Such persons, however, were not wholly *unrepresented*. Two gentlemen, who are not generally regarded as authorities on the operation of tying the external iliac for false aneurism, stood forward in their defence. One of these disputants related a case of injury done to a small artery in the palm of the hand, which was cured, after the lapse of *ten months*, by compression of the radial artery, and this he considered to be "a case in point," and proceeded straightway to lecture Mr. LISTON on the impropriety of tying arteries in general, and that of Mr. SEATON in particular, when "compression would do the business as well"! The voice of the other, *seemingly* on the same side, was inaudible. Apparently, neither Mr. LISTON nor any other member of the Society could hear what he propounded. Consequently his criticisms were lost to posterity. The feeling of the Society was manifestly in favour of the course of practice adopted by Mr. LISTON, and the subsequent apposite remarks of Mr. ARNOTT, in support of the treatment pursued, were received with general approbation.

In bringing the case before the MEDICO-CHIRURGICAL SOCIETY, Mr. LISTON adopted the right course. It was the act of a man who felt that he had done neither more nor less than his duty in an emergency, when he was called upon to exhibit, promptly, the acuteness of his observation, the soundness of his judgment, and the exercise of his skill, as an operator. Henceforth his adverse critics must be dumb on the treatment he adopted in the case of Mr. SEATON.

MEDICAL REFORM.

THE NATIONAL ASSOCIATION.

HANOVER-SQUARE ROOMS, APRIL 17.

ON Friday evening last, a meeting of General Practitioners in Medicine and Surgery took place in the Queen's Concert Rooms, Hanover-square. The meeting was convened by the committee of the National Association, for the purpose of hearing read a report of the proceedings of the committee, agreeing to certain *pro forma* resolutions, some of which were suggestive of the establishment of a National Institute of medicine, surgery, and midwifery; steps to be taken in the meantime to ascertain the opinion of the members of the Association, and of the profession generally, on the subject.

R. R. PENNINGTON, Esq., President of the Association, was voted into the chair. He said that in occupying the chair, which he did with the greatest satisfaction, he felt called upon to make a few remarks on the past and present state of the medical profession. Since the passing of the act of 1815, he had felt a lively interest in everything concerning the prosperity of the general practitioners, and although he had passed the age of fourscore, (cheers,) he still felt the same interest in their well-being, and came forward as readily in support of their cause, as he did at the time of the Apothecaries' Act. (Hear.) He saw with pleasure the steps the Association were now taking to place the general practitioners in a situation of respectability and advancement, which so useful a body of men deserved. (Hear.) It was only within the last year that a prospect had opened, of placing themselves in a still higher rank than they had hitherto held, by steadily following the direction that had been adopted by the Apothecaries' Company. Their views must be unanimously stated to the Secretary of State for the Home Department, if they wished for an Act of Incorporation. That would render them independent of the councils of corrupt colleges. The able report which they would hear read to them that evening would tell them the causes of the evils they had been beset with, and they would hear of a plan which, in his opinion, was such as would afford the general practitioner every satisfaction. He begged to call their undivided and earnest attention to the useful explanations given in the report, which must strengthen their hopes as to the ultimate success that would follow their undertakings. He would be wanting in gratitude, and so would the whole Association, if they did not express their approbation of the zealous conduct of the Committee, whose able efforts entitled them to the respect and thanks of the whole profession. (Cheers.) That admitted of no contradiction, and decided unanimity should be manifested by the meeting on that point, in order to dissipate some unjust aspersions that had been attempted to be cast on the Committee. (Hear.) In paying his tribute of unqualified praise to the Committee, he could not refrain from offering, at the same time, his cordial thanks to the two honorary secretaries, Messrs. Bird and Ancell, for the zeal, diligence, disinterestedness, and ability, which had marked the discharge of their important functions. (Cheers.) They would be wanting in justice if they did not express their approbation of the care those gentlemen had taken of the interests of the Association, and of the parts they had taken in their consultations with Sir J. Graham. No eulogium of his could convey the high opinion he entertained of their disinterestedness, which was deserving of the highest praise; and in concluding, he would express his conviction, that if the same amount of integrity, ability, industry, and union, to keep the Association together should continue, they would obtain for the general practitioner that distinction to which he was so justly entitled. (Cheers.) I, concluded the venerable chairman, "as your president, shall be still employed for the furtherance of the great objects you have in view; as long as I have the power, it shall be exerted in carrying them out, and I hope I shall live to see the day when I shall be enabled to congratulate the Association on the accomplishment of all these views." (The Chairman sat down amidst loud applause.)

The report was now read by the hon. secretaries. It was a very elaborate document, and elicited much applause. In it an account was given of the causes of the failure of the Committee to obtain a Charter of Incorporation. The following is the scheme recommended by the Committee as detailing the plan of constitution and government of the new voluntary institution.

"THE NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY."

"QUALIFICATIONS FOR MEMBERSHIP:—"

"In the first instance,—"

"Gentlemen who were in actual practice previous to the first of August, A.D. 1815.

"Licentiates of the Society of Apothecaries.

"Members of the Royal College of Surgeons in England, Ireland, and Scotland"

"Doctors or bachelors in medicine of any university of the United Kingdom, and fellows or licentiates of any college of physicians of the United Kingdom, who shall have been in actual practice as general practitioners in medicine, surgery, and midwifery, or who shall satisfy the Council of their qualification to practise in medicine, surgery, and midwifery, and who are at present members of the National Association, or who shall enrol themselves previous to the expiration of six months from the date of the formation of the institute.

"Subsequently,—"

"Such persons only as shall satisfy the Council as to their qualifications to practise in medicine, surgery, and midwifery.

"THAT ITS GOVERNMENT SHOULD BE"

"One President,—"

"To be elected by the Council triennially and eligible for re-election.

"Three Vice-Presidents,—"

"To be elected by the Council from their own body by ballot, one to go out every year and not to be eligible for re-election for a year.

"A Council,—"

"To be composed of forty-eight members, one-half practitioners residing within ten miles of the General Post-office, and the other half country practitioners, residing beyond that distance.

"No member of the institute to be eligible as a member of Council under ——— years from the date of his qualification to practise.

"The Council to be elected by the members of the institute, every enrolled member to be entitled to a vote.

"One-third of each metropolitan and provincial branch of the Council to go out of office annually, and the vacancies to be filled up in equal proportions from the respective branches, but the retiring members not to be eligible for re-election for a year.

"The election to be by voting papers, and decided by a majority of votes.

"The Council to prepare a code of laws for the regulation of the affairs of the institute, subject to the approval of a general meeting of the members."

Mr. PURSELL, of Winchester, rose to propose the following resolution:—"That the report just read be received, entered upon the minutes, and forthwith published, and that the thanks of this meeting be cordially given to the Committee, for the zeal, intelligence, and discretion displayed by them in advocating the claims of the general practitioners, and also for the able and consistent manner in which they have endeavoured to carry out the objects of the National Association." He said he had great pleasure in proposing and supporting the resolution, and in expressing the confidence he felt, as well as that felt by the body of provincial practitioners he represented, in the proceedings of the National Association.

Mr. LIDDELL, of the Tower Hamlets, said, he experienced much pleasure in seconding the resolution. There could be no difference of opinion on the subject, and all must feel deeply indebted to the committee for the pains taken and time sacrificed by them in preparing and drawing up the able report just read, and for all their previous transactions. He could speak from personal experience of the extreme liberality of all those who

had acted on the Committee. They had always shown every disposition to meet all questions with uniform deference, and the result was, that they separated with unanimity with respect to questions on which they had previously differed. It was altogether owing to that spirit that they were now a reconciled body, which previously they had not been, and he sincerely hoped that now all differences would disappear, and that their efforts would be concentrated in one object—viz., that of obtaining, for the advantage of all, an institute of medicine, surgery, and midwifery. (Hear.)

The resolution was put from the chair, and carried unanimously.

Mr. BEDINGFIELD, of Stowmarket, proposed the second resolution. He said, that the humble individual before them had come to that place without the slightest expectation of taking any part in the discussions of the meeting. He would take the liberty of stating, that many years ago, through the medium of the pages of *THE LANCET*, he had proved himself one of the earliest advocates of medical reform. He had first seen the necessity of that reform, in consequence of what he thought the defective state of the Royal College of Surgeons after he had completed his medical education. Inoculated with military ardour, he resolved to pass the Royal College of Surgeons, and go to Portugal to distil real, royal water, under Sir Arthur Wellesley. Very well. His diploma of surgeon from that college was held in such little repute, that he would be obliged to submit to re-examination by the military medical board. He then felt that if such little value was set on the diploma of the Royal College of Surgeons, there must be something rotten in the state of Portugal-street. (Hear, and laughter.) He then gave up all idea of going into the army, and went into the country where it was not necessary to possess the diploma of the College of Surgeons. He went, and in the town where he settled, he saw four out of five of the hospital surgeons not members of the College of Surgeons. And he believed that some of the chief officers of the institution did not belong in any way to the College of Surgeons. No degree was necessary to belong to that hospital then, and he did not think any degree was necessary to belong to it now. What little advantage ever was attached to belonging to the College of Surgeons had been destroyed by the recent charter, which enabled the council to elect fellows. A rush was made to become fellows, and out of the twenty-two that first presented themselves, eight were rejected. Was it to be supposed that the one-third who were rejected were incompetent men? It would be a great libel on them to think so. The College had perpetrated that libel, therefore they would do well to establish a national faculty of members of the general practitioners, who would be much more respectable by separating themselves entirely from the College of Surgeons, and leaving them as a private company. The Association should endeavour to have a national institute of their own, leaving the College of Surgeons to their own consciences and their own particular business. Having said thus much, he would speak of some of the advantages derivable from a national institute of general practitioners, but they were so fully detailed in the report of the committee, that he feared it would be only an unnecessary waste of time to say anything further on the subject. He would only say that he very much regretted such an establishment did not exist previously to the passing of the New Poor-law Bill, for if it had, the steps since taken to disgrace the profession would never have been attempted. The poet had told them not to place any trust in princes, and he felt sure that they ought to place less trust in the ministers of princes. They should not consent to any ministerial scheme to degrade the profession, and they would be disgraced by accepting any clause that would make medical men not only surgeons but servants of the crown. (Cheers.) He would read to them the resolution that had been placed in his hands—"That the indefinite postponement of the settlement of the medical question in parliament, and the consequently unsuccessful issue of the exertions of the committee to obtain a charter of incorporation for the general practitioners, is chiefly to be attributed to the existing colleges having unduly exercised their influence, and thrown unwarrantable obstacles in the way of the Secretary of State for the Home Department; that in consequence an absolute necessity exists for the general practitioners to maintain a permanent collective organization, with an authoritative council to protect their interests. It is therefore the opinion of this meeting, that the recommendation of the committee, in the report which has just been read, that the National Association should be established on a more permanent basis, be forthwith adopted, and that the members of the Association, and of the profession

* It will be perceived that there is no stop (.) at the end of this paragraph. In another official manuscript copy of the plan, the like omission is observable. Hence, several members of the Committee of Associated Surgeons believe that it is intended to exclude all physicians and surgeons from the proposed Institute, unless they either be in practice as *apothecaries*, or are qualified by law to practise as *apothecaries*—a regulation which would necessarily exclude many of the first members of the profession, and would cause it to be anything rather than a *voluntary One-Faculty*. As we have elsewhere stated, there is to be a friendly conference between the Committees on the subject.

generally, be canvassed as to their willingness to co-operate in the formation of a 'NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY,' on the plan recommended in the report."

Mr. BONNEY, of Brentford, in seconding the resolution, said, that though the framers of the report were well entitled to every deference, still some suggestions presented themselves to him, requiring, he thought, their attention. In taking into consideration the proposed institution, they should not lose sight of the grievances entailed by the recent uncalled-for acts of the College of Surgeons on all those who had not the privileges of their diploma. It was a grievance to be shut out from the management of the affairs of that college; and he suffered from it, though he was a member of it as well as of the Apothecaries' Company. No person who intended to practise generally, could be satisfied with the mode of examination at the College of Surgeons. Were that body to examine for midwifery, a science, the undertaking of which was necessary to the general practitioner as long as the world should continue to be peopled as it is at present? How could colleges—no matter how long they were established, if it was on the principle of self-election or capricious exclusion—stand in competition with an institution which every one properly qualified could enter, and become a representative member of? The proposed institution offered the nearest approach to universal suffrage—not the universal suffrage of a mob, but of educated men, who could not be ranked with demagogues, who sought the elevation and independence of their profession, not for personal, but for public advantage. He thought that eventually this proposed institution would, by the co-operation of all classes, be placed on such a foundation as to offer places that might be held with honour by the highest practitioners in the country. No one would be denied its distinctions on any other ground than that of scientific unfitness; and there would be no superior class of medical men in the empire, unless they showed superior attainments in their profession. He begged to support the resolution that had been just read.

The CHAIRMAN then put the resolution, which was carried *nem. con.*

Mr. DANIELL, of Newport Pagnell, rose to propose the third resolution, and said that he would take the liberty of reading it first, before he made it the test of any observations. It was, "That it is expedient, in the meantime, that the National Association should maintain its present position; that it may be prepared to act in any emergency that may arise, and be ready to avail itself of every suitable occasion to urge upon the legislature the pressing necessity, on public grounds, of a revision of the laws affecting the medical profession; and also, as a numerous and important collective body, that it may exercise all the means at its disposal, to produce a satisfactory settlement of the complicated question of medical reform." The observations he felt disposed to make on the resolution had more immediate reference to provincial medical men than to those of the metropolis. "That it was expedient that the National Association should maintain its present position," was clear to his mind, because, as general practitioners, they now had no proper home of their own. The College of Physicians would not recognise them—the College of Surgeons did not recognise them, so as to furnish them with a home. They needed a home, and the National Association offered them the only home they were likely to get, provided the Association received that support which he was sure it deserved. There were many points connected with the medical profession that made it necessary to have some authorized body to apply to, and particularly with respect to the new poor law. It was tremendous to reflect on the manner the general practitioners were degraded by the operations of that Act. (Hear.) When he commenced practice he contracted with new heart and new arms to attend five parishes, from which he received 100*l.* a year. Those identical parishes he now attended, in consequence of certain provisions of the new poor law, for 25*l.* a year. (Hear.)—They would ask, why do this?—why not abandon it at once? It was a very uncomfortable feeling to find that if he declined there were others ready to take the contract, and ride over the same ground, and very likely get the private practice that he had spent years in obtaining. (Hear.) They should show the government, by united and energetic steps, that they were not to be degraded as they hitherto had been. He had a contest, some time ago, with a person employed to enforce the income tax. These persons rate you at what they think rather than at what you know. When he wished to pay the collector, and represented to him his expenses, those of his horses, and so forth,—when he pre-

sented to him his bill for drugs—"Why," said the collector, "the horse-doctor makes more of his drugs than you!" (Hear and laughter.) A horse-doctor! The collector was perfectly right. His situation is preferable and better paid than that of the union-doctor. (Hear.) Infinitely better will the farmer receive and pay the horse-doctor than the human doctor, though the latter should employ all the medicines in his shop, and cure the whole family. The horse-doctor gets his travelling expenses paid, and is well treated by the farmer, who thinks more of his cattle than of his poor suffering fellow-creatures. (Hear.) He pays more liberally for the cure of his cattle than he does for the cure of the poor, or even of himself. (Cheers and laughter.) The farmer paid the horse-doctor's bill without grumbling for the treatment of a valuable horse, or a flock of sheep; but when the surgeon took in his bill for the cure of the farmer's family, the latter invariably exclaimed, "Bless me, doctor, what a great charge!" (Cheers and laughter.) Country surgeons know the truth of all this experimentally. Well, then, he said that it was his feeling that the National Association should be supported, that it might found an institute, which would become the home of the general practitioner, and a medium to make known and redress his grievances. (Hear.) "That it may be prepared to act in any emergency that may arise, and be ready to avail itself of every suitable occasion to urge upon the legislature the pressing necessity, on public grounds, of a revision of the laws affecting the medical profession, &c." On this part of the resolution he had very little to say, for he would not presume to dictate to them how long a time they would require to found the institution, or of what precise and detailed nature it should be. He spoke the sentiment of many persons of the profession, living in his county, who were connected with the "Provincial Medical and Surgical Association," and who expressed themselves ready to support the National Association, knowing that a metropolitan central home was much needed. He hoped and believed that every medical man in the country would unite and give his assistance to found a national institute, which would do so much good to the profession and the public at large, and which was now so imperatively wanted.

Mr. ROBERTSON, of Liverpool, said that he felt great pleasure in seconding the resolution, and in doing so, would remind them that they ought to place reliance on the counsels of the National Association. Its past conduct was the best proof that it merited the confidence of the general practitioners. It had shown praiseworthy forbearance in the consultations and interviews it had had with other bodies, whether corporate or not. It had made its way through numerous difficulties, and was now unfettered, and not bound by any antecedent circumstances: it was now at full liberty to work for what they had long contended—viz., for medical reform.

Mr. SPARKES said he wished to make a few observations before the resolution was put from the chair, or rather, he rose to ask a few questions which appeared to him of a most practical character at the present stage of their proceedings. He had listened to the report of the committee with the unqualified pleasure and satisfaction every honest mind must feel at such a production. He had been an observer of the committee from its first commencement, since attempts had been made in Lincoln's Inn-fields to depreciate nine-tenths of the profession; and the consequences of those attempts would have been fearful to contemplate, had they not been stemmed by the steps taken by the general practitioners. There had been great differences and dissensions amongst the members of the profession at first, and not a few thought it sufficient to merely bring the College of Surgeons to their proper senses. If all had been of that opinion, the great object they had in view would never be accomplished. If they had been selfish, and not sincere, they would never attain what they wanted—to raise the general practitioner to the status from which he had been excluded, and which the present state of society and its interests, and those of the profession, called for. He thought the object was still to be obtained. (A voice, "What object?") The combining of the whole profession in a way that might suit the principles and temper of all that had become members of it since 1815. Since that year a new body had arisen. The legislature had provided for them formerly, but recent acts had disqualified, in a great measure, the general practitioner. A strong object they should have in view, not to continue the Association of Apothecaries, but to merge it in a general institute of medicine, surgery, and midwifery. He understood from the first resolution, that they had adopted the principle that there should be now formed a national institute in medicine, surgery, and midwifery. He

did not think the second resolution comported with that. The continuing of the National Association as such, would not be palatable to the great body of medical men in the country, who looked upon the Association merely as a centre of management. He had thought that a provisional committee in connexion with the proposed institute of medicine, surgery, and midwifery, would be proposed and agreed to that night. He hoped the principle would be adopted, of consulting the feelings of all medical men throughout the country. If it went abroad that there was to be formed a provisional committee to take the general sense of the medical practitioners, that would be a great step to induce either the present Secretary of State for the Home Department, or his successor, to provide for them that national institute which they so much wanted; for the College of Surgeons never had, and never would have, an improved curriculum of education for the instruction of persons studying medicine, surgery, and midwifery, throughout the country. Finding from the report that the time had arrived when an institute should be adopted and provided for by legislative enactment, he preferred taking the initiative by means of a provisional committee appointed for the purpose he had just indicated.

Dr. WEBSTER, of Dulwich, said, Mr. Sparkes had mistaken the resolutions, which he (Dr. Webster) considered consistently shaped. They merely proposed that the Association should continue only for a short time, and then dissolve, and finally pass into a national institute of medicine, surgery, and midwifery. The next resolution to be proposed would contain what Mr. Sparkes alluded to; and show the meeting that the committee had anticipated his wishes, and that they were desirous that their proceedings should obtain what he (Dr. Webster) thought they merited,—the unqualified praise and satisfaction of all parties. Prospects of success now presented themselves for results, to accomplish which he had been labouring for twenty years. The doctor again explained the resolutions, stating that they were merely formal and temporary, previous to the foundation of an institute; in the constitution of which every member of the Association would have a vote. On former occasions, he had contended for the greatest liberty connected with the new institute—that all its members should be considered competent to take part in the management of their own affairs, as he considered it a disgrace that any man qualified to give a vote should not be considered qualified for taking a share in the management of his own concerns. There was no concession whatever to be expected from the College of Surgeons, which had lately doubly insulted the profession at large; by the distinction drawn between fellows and members, which was a disgrace to any collegiate body; and by the libels contained in the late Hunterian Oration. It was a grievous injury to the profession generally to suppose that the council could make and appoint the heads of the College. That power originally was never contemplated to be placed in the hands of a self-elected body—it was never contemplated to draw a line of distinction between fellows and members, which would make the latter be looked upon as a degraded class, and be treated as such.

Mr. BOLTON, of the Tower Hamlets, supported the resolution, and pointed out some of the advantages that resulted from keeping a retail shop. It was only through having kept a retail shop that he had been saved from the degradation of begging for the situation of parish surgeon, to gain a scanty livelihood. Now, after fifteen years' practice, he was enabled to do without serving drugs over the counter, still he did not know how he could be degraded, or any other body of the profession, by keeping good assistants to dispense and sell drugs in their shops. (Hear.) The minds of young medical men were cultivated by serving drugs in little shops when they had no opportunity of going out to visit patients. Poor persons came for the medicines they wanted, and the dispensing surgeon or student, by questioning them, would gain knowledge the College of Surgeons did not afford them. (Hear.) If the Association threw themselves on the College of Physicians and Surgeons, on whom would they have to lean for sympathy? On no body of medical men. They could expect to find none. The degrees of the proposed institute, supposing it to be founded in the way held out, would soon become more valuable than the degrees of the older colleges. He hoped that the Association would unite as one man—that all medical associations, of whatever denomination, would hold out the hand of fellowship and liberality, and they would obtain a charter from government conferring on them rights and privileges which they never could expect from existing colleges—they would obtain what they wanted

—perfect emancipation from the trammels of those corrupt, self-elected, corporate bodies. (Hear.)

The CHAIRMAN then put the resolution, which was carried.

Mr. WOOLDRIDGE, of Southampton, moved the fourth resolution, and said, he had to claim their indulgence, as it had only been recently placed in his hands. The resolution was, "That the committee of the National Association be requested to continue their functions as a provisional committee, and with power to add to their numbers, for the purpose of carrying out the two last resolutions; and that a future public meeting be called, as soon as the committee may be prepared, to give a report for the committee of their proceedings, and of the opinions of the profession in the formation of a national institute of medicine, surgery, and midwifery." He said that the objections of several medical gentlemen of Southampton and its neighbourhood had been to the name of the Association, before altered. He was now sure that all of them would receive with gratification the alteration that had been effected in the name of the Association. At the same time that he approved of the alteration, he thought, that before they entered the arena by acts affecting surgeons generally, they might call it the Association of the Surgeons of England. In his neighbourhood, there had been a meeting of medical gentlemen on Wednesday last, (the 15th instant;) and they had resolved to assist the Association in carrying out its objects; and they had immediately entered into a subscription for carrying into effect their intentions. (Cheers.) They were prepared, he ventured to say, to aid in effecting all that was said in the resolution. Though they felt they had a right to the name of surgeons, they joined with the Association, as they considered it would benefit medical science and surgical experience. In his opinion, the present College of Surgeons was not in a position to examine in medicine, and therefore he was pleased to see a prospect of bringing about what medical men in the country wished to see accomplished—the getting over the difficulty they now experienced in the practice of medicine in the country. In all these reforms, some parties must suffer; but as the profession at large would not be injured, partial suffering should not stand in the way of allowing medical science to advance in the manner it had a right to do. He trusted the report would be speedily printed and circulated, and he hoped also that the Committee would bear in mind that the country practitioner could not prescribe at home, as was done in London, but was obliged to carry his medicines in his pocket, just as Mr. Lawrence was compelled to carry his surgical instruments. This obligation should not be considered as a disgrace to either party.

Mr. MILES BEALE, of the City, seconded the resolution. He said that he was a member of the City Association, which had resolved to convey its unanimous approbation to the National Association, because the latter had prevented much mischief. He was quite sure the members of the City Association would be glad to view the continuance of the National Association, as proposed, because they believed, that if they acted in the way held out, it would lead to the establishment of an institute of great national benefit. They had nothing to hope from the Colleges of Physicians and Surgeons, and the Council of the latter had recently endeavoured to inflict marks of degradation on the whole body of general practitioners. A vice-president of that College had stigmatized most grossly the general practitioners, and he had not yet been reproved by the College for having done so. The present resolution was likely to do much good, and he therefore cordially supported it.

Mr. SPARKES made a few observations, which

Mr. THOS. H. COOPER, of St. Pancras, said he thought marked by good common sense, and that if taken into consideration by the committee, a great deal of good would be done to the cause. If they were to carry out all they contemplated—considering what difficulties they had to encounter—they would never succeed unless they were united to a man. He did therefore think that every step should be immediately adopted to remove all differences of opinion, and that the resolution should be altered.*

Mr. CLIFTON said, that he fully concurred in the sentiments of Messrs. Sparkes and Cooper, and he was sure the Committee would not hesitate for one moment in adopting their suggestions. (Cheers.) He was confident that the resolution, as originally framed, did not go beyond the extent of appointing a provisional committee to ascertain the sentiments of country members, and of other members of the Association who were

* The reporter has given the resolution as altered, and not in its original shape, which provoked the remarks of Messrs. Sparkes and Cooper. The alteration consisted in the introduction of the words, "as a provisional committee, and with power to add to their number."

within their reach, and then to report what their intentions were to a general meeting, to be afterwards held. (Hear.) He would take upon himself, because he knew the sentiments of the committee, to promise that the representations just made should be acted on. (Hear.)

Mr. SPARKES expressed himself quite satisfied with the explanation and promises of the last speaker. It was of the highest importance to obtain the sentiments of the whole profession with respect to the contemplated national institute; and when the committee had ascertained these sentiments, they should report thereon at a general meeting called by previous notice.

Mr. CLIFTON.—The first object was to ascertain the sentiments of the general practitioners: until then, the name of the projected institution, and other matters, would remain undetermined. When the committee had reported the sentiments of the profession at a future meeting, all details could be discussed and settled in a conciliatory manner.

Mr. WOODBRIDGE urged forbearance on all sides, and considered that the Association had already displayed much of it. He had authority from the medical practitioners of Southampton and its vicinity to say, that they were prepared with their purses and time to support the Association elsewhere as a representative body; but they reserved to themselves the right of discussing, at a fit season, the details of the projected institution. If any attempt at conciliation with the College of Surgeons should be made, the latter must take the first steps, as the National Association were the first to offer conciliatory measures, which were repudiated by the College.

Mr. DAVIS, of Hampstead, addressed the meeting from the back part of the platform, and was very imperfectly heard by the reporter. He spoke in terms of indignation of the attack made by Mr. Lawrence, in his notorious Hunterian Oration, on the members of the College—in fact, on thousands of persons in whose professional education he (Mr. Lawrence) was concerned. Mr. Lawrence's father was a general practitioner at Cirencester, Gloucestershire; and he believed that calumniating man had been his father's dispensing assistant. (Cheers.) What was a pure surgeon? Was it one that cut into a bladder and found no stone? (Laughter and cheers.) One that did not even find gravel there? (Continued laughter and cheering.) The speaker then went on to ridicule the pretensions of pure physicians and surgeons, and showed the danger to the public consequent on their absurd adherence to professional etiquette. The court of examiners signed dishonest deeds, when they afterwards turned round and said, those who were possessed of them were no surgeons. If Mr. Keate, in his day, had told him that he was no surgeon, he would have answered by telling Mr. Keate that he was either a fool or a rogue. (Laughter.) He remembered once saving, at Gibraltar, a pure physician on the staff, named Dowling, from the consequences of a court martial, by attending a case for him, which he said "he'd be damned before he would attend, because it was not a pure medical case." Mr. Davis concluded by supporting the resolution.

Mr. BOWLING, of Hammersmith, spoke in favour of the report and resolution, and hoped that no private feelings would be allowed to interfere with the establishment of a national institute.

The amended resolution was then put, and agreed to.

Mr. FULLER proposed the following resolution:—"That this meeting is fully sensible of its deep obligations to the Society of Apothecaries, for the enlightened policy with which the Society has striven to create and maintain a high standard of qualification for the general practitioners—that this meeting highly applauds the conduct of the Society during the recent discussions on medical affairs; also for their recently expressed determination to put in force the provisions of the Act of 1815 against unqualified practitioners, and it desires to convey to them the best thanks of the meeting for their able and disinterested advocacy of the claims of the general practitioner of this country." As they had heard already sufficient about the state of the profession, previously to the passing of the Apothecaries' Act, he had no intention of dilating on that topic. He would merely ask them to contrast the state of medical education, anterior and subsequent to the passing of that Act, and they would then see the vast improvement that had taken place, for which the chief credit must be given to the Apothecaries' Company. (Hear.) The medical profession and the public at large were everlastingly indebted to the Apothecaries' Society for the exertions they had successfully made for the promotion and dissemination of medical knowledge, and for the exertions they were now making to check charlatans. The National Association should

follow the example set to them by the Society of Apothecaries, and if it did he was sure they would receive every support from that excellent corporation. He believed that the Apothecaries' Society would even divest themselves of their act of incorporation and join a national institute of medicine, surgery, and midwifery, founded on liberal, enlightened, and useful public principles. (Hear.) Let the Association of general practitioners show them that they have united in striving to obtain their rights—let them put their shoulders to the wheel, and imitate the conduct of the apothecaries in obtaining the Act of 1815, and the profession would join them in promoting a similar result.

Mr. MARTIN, of Reigate, said he felt the greatest satisfaction in seconding the resolution, so happily commented on by the last speaker. He was one of those senior practitioners that could well remember what the medical profession was before the Act of 1815. He had been for forty-six years an observer of the position the profession held in society, and he could testify that it had risen in public estimation extensively ever since the establishment of the Company of Apothecaries and its court of examiners. (Hear.) He hoped the resolution would meet with the unanimous approbation of the assembly gathered before him. Resolution agreed to.

Mr. NUSSEY said he had the very sincere pleasure of asking them to adopt the resolution he held in his hand, for he did not think, with respect to merit, that any one had deserved more support than was due to the two worthy individuals—their honorary secretaries. (Loud cheers.) From the position they occupied in the Association, they had most difficult and important duties to perform, and all would acknowledge that they had distinguished themselves by great zeal and extraordinary talent in forwarding the interests of the Association. (Hear.) He could say that no public body, be it what it might, was ever before blessed with such zealous functionaries as the individuals alluded to. (Hear.) He thought they deserved a better reward than that which he was then about to propose; and that, whatever may be the fate of their exertions, something more valuable and substantial than mere praise ought to be given them. He would propose a resolution to the effect, "That the meeting unanimously desired to offer their thanks to Messrs. Bird and Ancell, for the great services rendered to the Association by those gentlemen."

Mr. BOWLING, of Hammersmith, seconded the resolution, and referred the meeting to the document drawn up and read by the two honorary secretaries.

Mr. BONNEY spoke in favour of the resolution, which was put from the chair, and adopted.

Mr. CLIFTON said he believed the business of the evening was then concluded, and he hoped that all present would not forget what had been said and suggested during the proceedings just now, and that they would be zealous and united in founding an independent national institute of medicine, surgery, and midwifery. His principal object in rising was to ask them to join him in paying a tribute of respect, where they all knew it was well deserved—he meant, to their venerable president—to their excellent friend, Mr. Pennington. (Cheers.) A vast deal of the success that had marked the progress of the Association was owing to the *prestige* that surrounded that gentleman's name, and he would propose the most cordial thanks to him, not only for the manner he had discharged the duties of chairman that night, but for the authority and respect his zeal had obtained for all those who had acted with him. (Cheers.)

Mr. ROBERTS seconded the resolution, which was carried amidst loud applause.

The meeting separated at ten o'clock.

COMMITTEE OF ASSOCIATED SURGEONS.

Freemasons' Tavern, Monday, April 20th.

GEORGE BOTTOMLEY, ESQ., OF CROYDON, IN THE CHAIR.

PURSUANT to the motion of adjournment adopted at the late meeting, the Committee assembled this evening to take into consideration the plan for establishing a National Institution in Medicine, proposed by the Committee of the National Association, on Friday evening, at the Hanover-square Rooms. There was a numerous attendance of the Committee, and amongst the visitors, the members were delighted to see the distinguished Professor Grant, of University College.

The discussion of the evening was strongly illustrative of an anxiety to witness a perfect unanimity amongst all classes of the profession, in the hope of producing a final

settlement of the long-agitated question of medical reform. A large proportion of the members of the Committee had attended the meeting held at the Hanover-square Rooms; but they had previously determined, in order to prevent dissension, not to take an active part in the proceedings on that occasion, because it had been intimated by the Committee of the National Association that no vote would be taken on the plan they intended to propose, but that it would be merely suggested for the future consideration of the members of the Association and the profession generally. Universally was the desire expressed, that all sources of dispute amongst medical reformers should sink for ever into oblivion.

Being strongly influenced by these feelings, Mr. OTTLEY had applied to the Secretary of the Committee of the National Association for a written statement of the plan of the projected institution; and Mr. WAKLEY, actuated by a similar motive, had also obtained a copy of it from Dr. WEBSTER, a member of the sub-committee of that body. The copies thus obtained were compared before the Committee, and found to agree perfectly; but an opinion generally prevailed that the proposed scheme embodied a restriction which would have the effect of rendering the new institution exclusively a society of general practitioners, and that the *only certain ground of admission* into it (if the provisions stand as they are at present framed) would be, *the licence of the Apothecaries' Company*. This conviction appeared to produce a very strong feeling of regret. Several of the members expressed a hope that the language in which the provisions were detailed had been misconstrued; but two or three gentlemen stated that they confidently believed that it was the intention of the Committee of the Association to arrange that all legally-qualified members of the profession, whether physicians, surgeons, or apothecaries, or practising (in combination) all branches of the profession, should be eligible to be admitted into the new institution. Strong apprehensions, however, existed that if that establishment were not founded upon a basis thus broad and liberal,—that if it were tainted with a spirit of exclusiveness, and in that respect exhibited the most odious features of the corrupt and monopolizing colleges, the new institution would not receive any support from a majority of the profession.

But in order that there might be no misunderstanding on the subject, and that the views of the Committee should be clearly expressed, the following resolutions, after an interesting discussion, were adopted without a dissentient voice:—

Proposed by Mr. THOMAS ABRAHAM, and seconded by Dr. J. R. LYNCH,—

“That this Committee remains firmly and decidedly of opinion, that it is the duty of the great body of the members of the Royal College of Surgeons of England to continue, with unabated earnestness and zeal, to insist on their right,—founded as it is upon every principle of equity and justice,—to be reinstated in the position and rank which they occupied in that College until the Charter of 1843 received the sign-manual of the Crown.”

Proposed by Mr. WILLIAM BLOXAM, and seconded by Mr. DREWRY OTTLEY,—

“That this Committee, influenced by a most anxious desire to witness a perfect and lasting union amongst all ranks and classes of the profession, has deliberately and earnestly considered the scheme which has been proposed by the Committee of the National Association of General Practitioners, for the voluntary establishment of a National Institute of Medicine, Surgery, and Midwifery; and this Committee feels much pleasure in being enabled to approve of many of the chief provisions of the plan, but decidedly objects to that portion of it which excludes from the proposed Institute all physicians and surgeons who are not licensed or legally qualified to practise as apothecaries. Believing such an exclusion to be characteristic of the feelings which have too long animated the councils of the existing medical colleges, that it is calculated to perpetuate divisions in the profession, and knowing that it would have the effect of depriving the new institute of many medical and surgical practitioners, who,

from their discoveries and genius, and the high offices they occupy, shed a lustre on the profession to which they belong, and considering that such a restriction is in complete opposition to the principle of uniting and embracing ALL the different classes of practitioners in this kingdom into a single faculty of medicine, this Committee cannot refrain from expressing the opinion that such an exclusion would be exceedingly impolitic, that it must militate strongly against the success of the projected institution, and might probably prevent its permanent establishment.”

Proposed by Mr. JOHN HUNTER, and seconded by Mr. T. G. PHILLIPS.

“That the deputation from this committee be re-appointed for the purpose of conferring, at the earliest convenient moment, with the Provisional Committee of the National Association, on the propriety of modifying the projected plan so as to render ALL legally qualified members of the Profession, whether physicians, surgeons, or apothecaries, or whether belonging to the English, Irish, or Scotch Colleges, both now and in future, eligible candidates for admission into the proposed National Institute of Medicine, Surgery, and Midwifery.”

Before the sitting of the Committee terminated, nearly all the members present reiterated the hope, which they believed generally prevailed, that all ranks and classes of the profession in this country might be united under a representative system of medical government, and that if, for some time to come, renewed efforts to obtain an Act of Parliament should fail, then, in the absence of a protective power in the law, they would endeavour to protect themselves, in a voluminous and multitudinous association of their members, but that into such an institution *all* legally-qualified members of the profession should be equally and unreservedly admitted.

The meeting of the Committee having terminated, the DEPUTATION addressed a letter to the honorary secretaries of the National Association, stating the object for which the deputation had been re-appointed. Arrangements, we understand, have been made for holding the conference on Friday, April 24th. On the result much depends.

HOSPITAL REPORTS.

UNIVERSITY COLLEGE HOSPITAL.

REPORTS OF THE “FELLOWS’ PRIZE” CASES, ADMITTED DURING THE SUMMER SESSION, 1845, UNDER DRS. WILLIAMS, THOMSON, AND TAYLOR.

(Reported by C. H. J. ROUTH, M.D. Lond.)

URINARY DISEASES.

CASE 1.*—A man, taken ill with symptoms like influenza, accompanied, especially, by intense headache; in the course of treatment, a blister is applied to the head; bloody urine follows, subsequently it contains pus; inflammation of the penis, and abscess of the corpus spongiosum; general symptoms of torpor, latent, of pneumonia; gradual weakness; loss of sensation; death on the ninth day.—*Sectio cadaveris:* meningitis; coagulum in posterior part of left hemisphere; a larger coagulum in the right posterior lobe of the cerebellum; abscess of left kidney; congestion of both; abscess of prostate gland and corpus spongiosum; ulceration and constriction of descending colon and sigmoid flexure.—Remarks on the case.

James F—, admitted under Dr. Thomson, May 5, 1845; aged forty-six; tall of stature; spare conformation; nervous and sanguine temperament; complexion fair; a japanner by trade, for the last thirteen years without interruption; is a widower, and has had four children; resides in Marchmont-street, which is a dry and open situation, and where he has lived for the last twelve years; in London all his life; he says he never has been accustomed to take more than one pint of beer and a quart of gin daily; has never been tipsy; generally accustomed to animal food, of which he has always had enough; sleeps well in health; of rather a melancholy disposition.

Hereditary predisposition.—Father died young, of consumption; his mother is alive, aged seventy-six, and healthy; has

* The particulars of this case were obtained from the patient himself, and subsequently corrected from the statements of his brother, and the ordinary medical attendant.

four brothers all healthy. He has always been rather thin, but healthy and strong; had scarlet fever, small pox, measles, and hooping-cough, when a child. About ten years ago, had two attacks of what he calls nervous fevers: these were characterized by continued shakings and tremblings, and picking of his bed-clothes; he was delirious at the time, and much tormented by illusions, as of animals disturbing him. The treatment for these fevers consisted of a shower-bath daily: the effect of these shower-baths was to check the tremblings for the time, and he thinks they subsequently gave rise to perspirations, though he is not quite sure on this point. Each of these attacks lasted for about one or two months; the second came on about two months after the first; never had rheumatism or paralysis; never had hæmaturia before; had stricture of the urethra many years ago, but not lately.

Present attack.—About three months ago, the patient had a suspicious connexion, and was subsequently affected with chancres and gonorrhœa, the former preceding the latter by some weeks. There was no bubo. He consulted a medical man, who gave him the usual remedies, amongst others, copaiba balsam, and latterly, the acetate of lead, as an injection. Under this treatment he got comparatively well. On the 20th April, he called upon his medical man; he was not very ill at this time, complaining only of a slight dyspeptic ailment, for which a tonic was given; he was quite able to pursue his usual avocations. On the 29th, he went to see his brother, and then was suffering under a severe cold, his eyes and nose running, and a violent cough; but there was no pain at the chest, nor did he notice any expectoration. The following day, he saw his medical attendant. From this gentleman's account, he was then suffering under what he thought the influenza, accompanied by intense headach. He was then ordered to lie in bed, and the next day, when the medical gentleman visited him, he found him labouring under the same severe headach and general pyrexia, and much pain across his loins, increased on pressure. Leeches were applied to the temples, a blister was put behind each ear, and a fever-draught was prescribed. The next day, the 2nd of April, he began to experience great pain in making water, and was obliged to force a good deal in order to micturate; there was also, occasionally, a purulent discharge from the penis, with bloody urine. The blood followed the urine, and did not precede it. There was severe pain across the loins, extending down along the outer side of the leg; he was also slightly delirious, and his penis began to swell. On the 3rd, he was somewhat better—i. e., his urine was not bloody, and he was not so delirious, nor was there any difficulty in making water; but the penis was more swelled, and had assumed an unhealthy reddish appearance, not unlike erysipelas. During the night of the 4th, he was again delirious, the pain in the loins was undiminished, and the penis was much more swollen, and red. He was brought to the hospital early on the morning of the 5th. He had kept his bed ever since the 1st.

State on admission.—No rigors at present; skin hot and dry, but he says he perspires at night; no general pains about the body, but feels weak, tired, and very restless; colour of skin natural; no eruption; sensation not impaired; prefers to lie upon his back; no pain in the joints; at present he is not delirious, but seems confused, and his memory is much impaired, so that he has to think some time before he can answer; he varies, however, in this particular, appearing at sometimes much more intelligent than at others. From his brother's account, it appears it is not unusual for him to be lightheaded whenever he is ill. There is some pain across the forehead, and giddiness; sleeps very well; the countenance is expressive of great indifference; cheeks rather flushed; lips natural; his eyesight is somewhat impaired; pupils natural; conjunctivæ slightly yellow; hearing not affected; there is considerable pain in the lumbar region, and weakness; also tenderness on the right side, not the left, on deep pressure; his respiration appears easy—twenty-four in a minute; complains, however, of a pain in his right shoulder on taking a deep inspiration; voice rather hoarse; expectoration trifling; no cough at present. There is dulness behind on percussion, in the position of the middle lobe of the right lung, and the respiration is also bronchial at this point; no fine crepitation can be detected, even on deep inspiration; inferiorly the respiration is healthy; there is no pain whatever in the chest; no palpitation of the heart, and the sounds are healthy; pulse full, 120; there is some slight regurgitation in the jugular veins, especially on the right side. Complaints of a bad taste in his mouth; there is some sore throat and difficulty of deglutition; appetite very bad; not very thirsty; tongue dry, brown along the centre,

covered with a thick white fur along the edges, deeply furrowed; there is some slight nausea; no vomiting; no tenderness in the gastric region; bowels open twice since his admission. There is some tenderness in the situation of the right kidney on deep pressure from the front, but there is none in the left. The penis is much enlarged, nearly three times its natural size, very red, and firm, especially towards the root of it; there are two cicatrices on the glans, apparently from chancres; there is no urethral discharge to-day, or pain on making water, which comes in a full stream, and freely. Urine is acid, specific gravity, 1017, of a dark colour, containing a dark precipitate, consisting of mucus or pus, and here and there several small clots of blood; it is very albuminous, and there is rather a deficiency of phosphates; no excess of urea by the common test.

Supposed exciting cause.—About three months ago he lost his wife suddenly, which affected him a good deal at the time, and he has never been the same man since. The patient himself imagines the present attack was brought on by his venereal ailment, as he has not been exposed to cold, or got wet in any way.

May 5th.—Ordered, calomel, five grains, for a pill, to be taken immediately; a draught of house-medicine to be taken an hour afterwards. Mercury with chalk, five grains; powdered ipecacuanha, a grain; mucilage, sufficient to form a pill, to be taken every six hours. Low diet. Solution of acetate of ammonia, two drachms; nitrate of potash, fifteen grains; camphor mixture, an ounce and a half. Mix for a draught, to be taken between each dose of the pills.

7th.—Colour of skin natural; no eruption; sensibility equal on both sides, and not impaired; no anasarca; no rigors; skin still hot and dry over the chest; complains of severe headach to-day; countenance has the same reckless expression; pupils rather contracted; is unwilling to answer questions; there is some dimness of sight; sleeps very well; his memory seems more affected than it was yesterday, and intellect duller, and his answers occasionally unconnected, but there is no actual delirium; there is still slight tenderness across the loins. The physical signs of the chest as before; no cough, or apparent dyspnoea; his voice is somewhat hoarse; pulse 120, weaker than yesterday; tongue is browner and drier; no appetite, but he feels very thirsty; some nausea; bowels open; the patient's shirt seems to be stained with a purulent bloody discharge, and the lips of the prepuce are also bloody; on squeezing the penis, some discharge escapes from the urethra; the appearance of the organ is much the same as yesterday; the urine is of a dark-amber colour, slightly turbid, very acid, contains no albumen, but some excess of phosphates, specific gravity, 1019. Ordered by Dr. Thomson, twelve leeches to the temples; the head to be shaved, and a cold lotion to be applied to the scalp.

8th.—Ten A.M.: The skin is still hot and dry over the chest, but the extremities are rather cold; there is considerable tremor of both extremities; the expression of his countenance is unaltered; the head is decidedly hotter; the pupils more dilated, especially the right; his hearing is unaffected; the headach still severe; there is no giddiness; there is a much greater degree of torpor to-day; he cannot speak, except in monosyllables. He puts out his tongue when required; it is very dry and black; his teeth are covered with sordes; his sensibility seems greatly affected; he does not seem to feel the skin of the extremities when pinched very forcibly, but there is apparently still some tenderness on deep pressure over the kidney; pulse is weaker, 120. The breathing seems natural; no appetite, but he is extremely thirsty; the bowels are not open to-day. The penis continues much the same; it is less red, but equally hardened towards the root; the urine contained a thick sediment, apparently flocculent mucus or pus clotted together, which, on analysis, was found to give with liquor potassæ a thick ropy fluid; a portion of the supernatant urine was examined under the microscope, and found to consist only of mucus and epithelium particles, without any pus or blood globules; a portion, however, of the sediment, examined later in the day, was found to consist, beyond all doubt, of pus globules; it was strongly albuminous, specific gravity, 1016; no excess of phosphates.—Two P.M.: The patient is in a state of torpor; he is very thirsty, and swallows water with avidity; the nervous tremors of the body are generally more developed, and once or twice we observed his countenance to be agitated by twitches on the left side. The pupils are much contracted at present, the left more than the right; his tongue and gums are quite black and dry, and he cannot put the tongue out when required; he appears conscious, but his sensation is quite gone; bowels not opened;

pulse weaker, 144, quite compressible. Ordered, oil of turpentine, twelve ounces; castor-oil, four drachms; barley-water. Mix for an injection, to be given as soon as possible. To have white-wine whey, made with two wine-glasses of sherry to a pint of milk. At a later period in the day it was found there was a large collection of matter in the course of the urethra. It was opened by Mr. Quain, and a quantity of dark fetid chocolate-coloured pus escaped. He was ordered the following:—Powdered opium, powdered ipecacuanha, of each half a grain. Mix for a pill, three times daily. Four ounces of wine; four eggs. He continued, however, to get weaker and weaker, and died at about six p.m.

Examination of the body eighteen hours after death.—The body was rather emaciated; the walls of the abdomen contained about half an inch of fat; there was considerable cadaveric rigidity; there was no eruption or abrasion of skin; the muscles were of a dark, unhealthy colour. The calvarium and dura mater being removed, a number of opaque spots were observed on the surface of the arachnoid; these were very generally diffused, extending backwards to the base of the brain; these spots varying from the size of a pea to that of a penny piece. Beneath the arachnoid was a small quantity of serum; the membrane peeled off readily. The pia mater was unusually injected; indeed, the whole brain appeared too vascular. On cutting through the hemispheres, a coagulum was observed, about the size of a small pea, in the posterior lobe of the left hemisphere. There was no fluid in the ventricles; the choroid plexus was dark and unusually congested. A coagulum about the size of a small hazel nut was observed in the right posterior lobe of the cerebellum.—*Lungs*: the bronchi were rather thick and firm; there was a slight amount of emphysema at the apex and margins of the left lung; there were some opaque tuberculous deposits at the apex of the right lung, but in the pleura posteriorly, covering the middle lobe of the right lung, was an opaque deposit, about the size of a shilling; this was very firm and resisting to the knife. But below this there was a circumscribed softening, of a dark colour, about the size of a hazel nut, with induration of the parenchyma around, intensely fetid, of a distinctly gangrenous odour. The seat of this morbid appearance corresponded to the situation of the dulness during life. Right lung weighed eighteen ounces and a half; left, sixteen ounces.—*Heart*: was large, pale, and softer than usual; the aortic valves were slightly thickened; the left side contained a very small coagulum of fibrine; the right side was empty. The pericardium contained about six ounces of serum. Weight, twelve ounces and a half.—*Spleen*: was quite pale and soft, and broke down under the finger with the greatest ease; it was much larger than usual. Weight, fourteen ounces and a half.—*Liver*: The gall bladder was very large; the texture of the liver itself was firm; there was a small opaque spot on its surface. Weight, three pounds, eight ounces and a half.—*Kidneys*: the left was much congested, not generally granular, but here and there, on its surface, was a number of white spots, about the size of a pin's head. Some of these came away with the capsule; others did not, but could be easily turned out with the point of the knife, not being, apparently, adherent to the cortical substance. The right kidney was rather more congested than the left, and also contained many serous cysts.

Dissection of the penis.—About three inches down the urethra, situated posteriorly, (in relation to the pendulous state of the organ,) was a ragged opening, about an inch long, such as might have been produced if it had been torn by a blunt instrument; this communicated, posteriorly, with a large abscess that would admit the finger, extending downwards to the bulb, and upwards to the glans; it contained grumous, bloody pus. The posterior wall of the corpus spongiosum was much thinned, especially at the part where it had been opened during life by Mr. Quain. On a closer examination, it was found that the corpus spongiosum had been in most part disintegrated and broken up by the pus, there being no pyaline membrane to circumscribe the latter. The membranous portion of the urethra was rather narrower than usual, and several openings, of about the size of large pins' heads, were observed on the floor of it; two especially large, situated one on each side. These, however, were found to be mere sacs, not deeper than a quarter of an inch. On squeezing the prostate, a number of other smaller openings were observed in the same part, giving exit to what appeared to be grumous blood and pus. The left lobe of the prostate was hollowed out into a ragged abscess, about the size of a walnut, and several smaller abscesses seemed to open into it. These abscesses did not communicate directly with the urethra, but opened first in the prostate ducts. The muscular structure of the bladder was hypertrophied; the

lining membrane healthy; the uvula unnaturally prominent.*

Intestines.—The stomach was healthy; the small intestines were also healthy, excepting here and there patches of ecchymosis. About the middle of the jejunum was a constriction of the gut, which, however, would admit the index finger; there was no thickening or other morbid appearance about the constriction. The ascending and transverse colon were healthy, but small. In the descending colon there were three constrictions, and the mucous membrane at these parts was indurated, and exhibited marks of cicatrization. At the commencement of the sigmoid flexure was a stricture that would not admit more than a goose quill, and two inches lower down, a similar stricture; the gut was bent upon itself at both. On cutting open the former, three ulcers were observed; one larger, about the size of a small bean, placed longitudinally to the axis of the intestines, and two smaller. Portions of the edges of these had begun to cicatrize, and caused corresponding wrinkling of the mucous membrane. The centre of these gave an appearance as if the mucous, submucous, and muscular tissues had been removed by a punch, the peritoneal investment only remaining entire. The lower constriction presented equally the same general characters, but only the ulcers were smaller and more numerous.

Remarks.—Diagnosis: The patient was evidently labouring under hæmaturia; and the fact, that this symptom had immediately followed the application of the blisters, seemed to point out to these as the cause. In addition, some portions of the urinary passages were certainly inflamed. There was considerable hardness and redness of the root of the penis, which was tender. Was it erysipelas? It appeared not. We know that in the absorption of cantharides, even of such minute particles as can be taken up by a blister, it is conveyed to the kidneys, may produce acute inflammatory action in the urinary passages, and may give rise to bloody urine, insupportable abdominal pain, strangury, delirium, &c.† It was therefore likely this inflammation was due to the blisters. But there was also pain in the right kidney. Was this organ also inflamed? The symptoms did not justify this supposition. It was obvious the hæmaturia did not proceed from the kidneys.—1st. From negative evidence. Though carefully looked for on several occasions, none of those cylindrical pieces of fibrine which are evidently moulded in the ureters, from hæmorrhage there or in the kidney, and subsequently washed down in the bladder by the descending urine, were detected.—2ndly. The blood did not appear diffused throughout the urine, or mixed with it, which is usually the case in renal hæmaturia. On the contrary, the clots appeared deposited as a precipitate at the bottom.—3rdly. A purulent bloody discharge was subsequently observed in his shirt, and pressure on the penis caused the same fluid to exude from the urethra. These circumstances tended to confine the inflammatory action in the urethra, which last view was confirmed by the acidity of the urine, which is generally, if not always, alkaline in inflammation of the kidneys or bladder.

2. Was there disease of the brain? There was no positive evidence of this. It is true there was headach on admission, and some slight confusion of intellect. There had been more active delirium, and the headach had been severe; but he was liable, whenever ill, to be lightheaded; and there was no paralysis or convulsion, and the organs of the senses were not affected, except as to little dimness of sight, which might be due to age.

3. There was disease of the chest; but it was, on his admission, revealed by the physical signs alone. The previous history simply gave evidence that there had been cough; and besides a slight pain in his shoulder on taking a deep inspiration, there was no other general sign present on admission—no cough, expectoration, quickened respiration, &c. But there was dulness on percussion in the position of the middle lobe of the right lung, and the respiration was bronchial at this part. What was the nature of the disease? Practically, there were three possible lesions:—1. Cancer: Of this there was no other evidence. 2. Pleurisy, but the pain was considerable; no dulness in the most inferior parts where the respiration was healthy. 3. Pneumonia: It has been said there was no cough, or characteristic rusty expectoration, and the respiration was scarcely quickened; but limited pneumonia has been known to exist in such cases. With regard to the full pulse,—that might have been due to the inflammation about the penis; but the tongue, black in the centre, is not uncommon in cases of pneumonia.

* The preparation is at present in the museum of University College.

† Dr. Thomson's *Materia Medica*.

There is one symptom to which we would draw attention—namely, the remarkable expression of indifference in the countenance of this patient, which the writer has recognised in two or three instances of extensive organic and serious mischief.

Causes.—1. Of the urethral disorder: The predisposing appears to have been the venereal affection; the exciting, certainly the application of the blister. The disease followed so speedily upon the application, and the symptoms were so characteristic, as, we think, to leave no doubt on this head. 2. Of the pneumonia: No tubercles were detected during life, but there was the hereditary predisposition; and if present, this would render him obnoxious to inflammatory disease of the lungs. Again, the anxiety of mind he laboured under since his wife's death. We know that mental anxiety is a powerful predisposing cause of disease. With regard to the exciting cause of the pneumonia, there is more room for doubt. An epidemic might have been the cause. The months of March and April are peculiarly dangerous in this respect, for although the days are warm, the nights are cold, and the wind and weather very variable; and pneumonia has frequently been known to be induced by sudden changes of wind or vicissitudes of temperature. But it is questionable how far there may not in this case have been superadded another cause—namely, excrementitious matter circulating in the blood. The function of the kidneys had been suspended for a time, and thus might have been left this irritating matter in the circulation, which determined a more active inflammation in a weak organ.

Progress and treatment.—The patient was evidently much weakened by previous treatment; he had also suffered much mental anxiety. Knowing, therefore, how apt such a condition is to determine the typhoid character in inflammations, general depletion was avoided. An expectorant antiphlogistic was at first ordered every six hours, and a diaphoretic saline between each dose of the former, with low diet. The mercurial was selected as equally calculated to remove absorption of the inflammatory induration, and also to remove any venereal taint in the system that might possibly remain. The next day, however, head symptoms, which were apparently arising from some more local affection, became more obvious, and it was thought more prudent to try local depletion, and cold to the head. But on the 8th, a considerable change for the worse supervened. There were signs of an affection of the brain, organic as well as functional. His speech was very indistinct, tremors had come on, his head was hotter, and one pupil was more dilated than the other. His sensibility was greatly impaired. That these symptoms might depend in some degree on effusion might be supposed; but the absence of paralysis, and the circumstance, that afterwards the pupil was contracted, were presumptions against this opinion. The other symptoms, it is true, might arise from the urethral disease, but what more especially fixed their cause in the brain was, we think, the absence of sensation. We believe we are correct in asserting, that whenever this symptom supervenes in the course of an acute attack, and in the absence of any disease of the spinal cord, it must arise from disease of the brain. This diagnosis was rendered still more probable by the twitchings of the left side; but consciousness still remaining, was opposed to its being effusion, or, at any rate, effusion to much extent at that period. The rapid supervention, however, of the typhoid symptoms, indicated something more, and taken in connexion with the abscess, afterwards opened by Mr. Quain, would probably be due to the absorption of putrid pus; and though wine was subsequently given, it proved without success.

The post-mortem revealed the correctness of the diagnosis in some points, but also manifested organic lesions to an extent quite unexpected. There was meningitis present, and the whole brain was vascular. This accounted for the contraction of the pupil, and nervous twitches present, with the delirium. There was some effusion, but it was moderate. A small coagulum was found in the posterior part of the left hemisphere, probably connected with the loss of sensation, though it is curious the loss of sensation should have been equal on both sides, and the lesion restricted to one. The coagulum in the right posterior lobe of the cerebellum was probably connected with the tremors. One of the functions of the cerebellum being to regulate motion, it is natural to presume that any cause which will tend to effect it specially, would cause such irregularities in the movements.

One remarkable feature in this case was the appearance in the right lung. The pleura was found inflamed for a limited space, and there was actual gangrene of the parenchyma of

the lung. During life, pneumonia of the lung had been diagnosed, but there was no suspicion of the extent to which it had reached; there was no fetid expectoration observed, and no foetor in the breath. There was also very slight pain, if any, during life, and yet the pleura was inflamed. This, however, might be accounted for in supposing that it was the torpidity of his intellect which prevented him giving utterance to it.

About the urethra the disease had reached to a frightful extent. No doubt many of the symptoms during life that marked the disease originated from this source. The post-mortem appearances confirmed the diagnosis, that the urethra was the source of the hæmaturia. The kidneys, however, presented some interesting points. There were signs of Bright's disease in two stages, in connexion with which, it is interesting to notice, that the specific gravity was not very low; on the contrary, it was, on the 7th, above the average laid down by Becquerel for the healthy range. It is also important to notice here the great difference observed between the sediment and supernatant fluid—a proof that both, in all examinations of the urine, should be examined. In this case, the former alone gave indication of the disease. The peculiar clotted flocculent character of the mucus and pus is important also, as probably being diagnostic that the discharge came from the urethra, and not the kidneys. There had been here, however, inflammation of the left kidney, for a small abscess was discovered in its lower part, and yet he only complained of pain in the right, and the urine was not alkaline.

The rapid supervention of the typhoid symptoms may, perhaps, be equally explained by the gangrene of the lung, or the abscess in the corpus spongiosum. But the cause of the gangrene is less apparent. We may attribute it to the bad condition of his system, but it is probable that here the abscess in the corpus spongiosum may have been the immediate cause of it. We know, in pneumonia, that the inhalation of foetid gases will determine the gangrene. To do this, it is manifest that these must enter the circulation. The putrid pus might have a similar effect.

The appearances in the intestines are very interesting, as establishing the fact, that stricture to a considerable degree may exist, and yet give rise to no unusual symptoms during life, and ulcerations exist at the lower part of the colon, and yet no diarrhoea be present.

Causes of the disease of the brain.—We are not enabled, at present, to explain its occurrence. In the absence of any exciting cause to account for it otherwise, and taken in connexion with details in a paper read before the Medico-Chirurgical Society by Dr. Taylor, on the causes of pericarditis, we may fairly attribute it to the disease of the kidney. In Bright's disease, there is a diminution in the amount of urea excreted; an unusually large portion of this is thus retained in the circulation, and the blood, by its irritating qualities, tends to set up inflammation in the several organs in the body.

The prognosis was doubtful from the first. Delirium arising in adults, in connexion with diseases of the chest, is an ugly symptom, and it was the only serious lesion detected at first; but still, as the pneumonia was limited, and the hæmaturia appeared to be urethral, there were hopes of recovery. The state of the patient, however, on the 7th and 8th, was such as to enable us certainly to predict a fatal termination.

DR. ROGET'S BRIDGEWATER TREATISE.

(DR. ROGET'S REPLY TO PROFESSOR GRANT.)

To the Editor of THE LANCET.

SIR,—I should scarcely have deemed it worth while to notice the letter of Dr. Grant, which appeared in your last number, if he had not given garbled extracts from the letters that passed between us in November, 1833, and if he had not suppressed the most material passages; thus rendering it necessary for my vindication that the whole correspondence should be published. It is as follows.

(LETTER FROM DR. ROGET TO DR. GRANT.)

Bernard-street, Nov. 15, 1833.

DEAR SIR,—It has been mentioned to me that the proof-sheets of my forthcoming Bridgewater Treatise, which I have from time to time left with you in order to have the benefit of your suggestions, have been shown by you to other persons. I hope that is not the case, for I wished nobody but yourself to see them, and I entrusted them to you in full confidence that you would have kept them private. But what has surprised me more is, that I have at the same time heard that you have charged me with making use of the substance of your lectures, in a manner which I was not warranted in

doing—a charge which is so entirely without foundation, that I am very unwilling to believe you can have made it. As the report has reached me, however, I think it right immediately to communicate with you on the subject, that I may perfectly understand from yourself, and not through a circuitous channel, if there be really anything in my conduct on this occasion which you think reprehensible. That I could have no design of publishing anything to your prejudice, is perfectly clear, from my submitting to your inspection the proof-sheets before sending them to the press. I have always, indeed, mentioned to you the plan of every part of my work, and told you my views and sentiments on every subject connected with it, with the most perfect openness; and I hope you will now be equally explicit with me in communicating to me the nature and grounds of your alleged grievance, if any such there be; but which I sincerely trust there is not. Dear sir, yours very truly,

To Dr. Grant, &c., &c.

P. M. ROGET.

(LETTER FROM DR. GRANT TO DR. ROGET.)

10, Seymour-place North, 15 Nov. 1833.

DEAR SIR,—I already mentioned to you several parts of your interesting work which contained details identical with those which I am accustomed to communicate to my class, and I have also expressed to you my feelings on that subject when the views or illustrations appeared to be peculiar to myself. Where you have had occasion to refer to my printed papers you have cited the authority, but only on these occasions. Neither during the composition of your book, nor since, have I had the slightest means of knowing anything regarding your plans, your views, or your details, excepting those contained in the proof-sheets of a part of the first volume, which you put into my hands for inspection. Your figure and description of the elements of a vertebrae are (perhaps by accident) nearly identical with those of my lectures, and the parts developed from these elements, and the cranial vertebrae, &c., but without acknowledgment. I compared your figure of these vertebral elements (without mentioning your name) with the copy taken by one of my pupils from my usual chalk diagram; but no one, to my knowledge, has read a single page of any proof-sheet which you have put into my hands. From your notes of my lectures you will perceive, as well as I can, where we coincide and where we differ in our views. I remain, dear Sir, yours most truly,

ROBERT E. GRANT.

(SECOND LETTER FROM DR. ROGET TO DR. GRANT.)

Bernard-street, Nov. 16, 1833.

DEAR SIR,—I am glad to learn, from your letter of this morning, that what had been stated to me respecting the proof-sheets which I put into your hands having been seen by others, is not correct. With regard to the allegation that several parts of my work contain details identical with those you have been in the habit of communicating to your class, I would beg to observe, in the first place, that I consider myself as having the full right to make whatever use I please of the information I may derive from my attendance as a regular pupil on the lectures of a public professor. *Facts, and details of facts*, communicated in that mode, become the property of those to whom they are communicated; and there can be no breach of confidence in making them public, nor any obligation to quote, in every instance, the authority on which each statement is made, more especially when no claim is made by the lecturer to originality in giving these facts. My object in attending your excellent lectures was, of course, to gain information; for although I have, as you know, been a lecturer myself on the same subject, I am still anxious to omit no opportunity of instruction, and I have never been backward in acknowledging the value of that which I have derived from you. It ever was my intention, as I have already mentioned to you in conversation, and is so still, to make this acknowledgment in the Preface to my work. *But I shall be most happy to do so more specifically with regard to any views or modes of illustration which are originally yours, if you will have the goodness to point them out to me.* I certainly was not aware that you claimed as your own the theory of the development of a vertebra from its elements, and that of the formation of the cranial vertebrae; for, if I am not greatly mistaken, the same views of the subject have been taken by G. St. Hilaire, Carus, Oken, and others. (I would refer in particular to a paper in the 9th volume of the *Mémoires du Muséum*, pages 89 and 79.) The diagram you speak of is so similar to those given in the plates of St. Hilaire and Carus, that I can see very little difference between them. *If, however, you think that it is novel, I am perfectly willing to give you credit for it.*—Dear Sir, yours truly,

P. M. ROGET.

This last letter has remained, to this day, unanswered.

Can Dr. Grant be really ignorant, as he pretends to be, that I have been before the public as a lecturer on comparative anatomy and physiology from the year 1806, when I gave a course on these subjects at the Medical School at Manchester, succeeded by another course the following year: and that, for nearly every succeeding winter, I have been engaged in lecturing on those subjects at the Russell, Royal, and London Institutions; and afterwards, in 1826, at the Medical School in Aldersgate Street, the introductory lecture to which last course I published in the same year? Has Dr. Grant forgotten who was his immediate predecessor as Fullerian Professor at the Royal Institution, in which capacity I had been lecturing for the preceding three years? And does he now write "*I never heard of his (Dr. R.'s) delivering, in the course of his life, a lecture on comparative anatomy or zoology?*"

Does Dr. Grant pretend to say that after reading the proof-sheets of one-third of my Bridgewater Treatise, he knew nothing of the plan and details of the work? If I had harboured the design of publishing what belonged to him, he surely would have been the last person in whose hands I would have thought of placing the proof-sheets. Does the thief display the stolen goods to the view of him whom he is robbing? In the purest spirit of candour and of courtesy, I made him the offer of acknowledging my obligations to him for any views or illustrations he might think proper to claim as being originally his: from that offer he turned away in sullen silence. In a charge of plagiarism so vague and indefinite as that preferred by Dr. Grant, it is with the accuser, not the accused, that the *onus probandi* rests. After he had refused to specify any one instance in which I had failed to do him justice, and had shrunk from the open declaration to myself of his supposed grievances, was Dr. Grant warranted in disseminating injurious imputations, which, in the course of circulation, have chanced to reach my ear? Has he waited so long that he might seize the opportunity of attacks made upon me in other quarters, in order to rake up by-gone matters, which he had failed at the time to clear up, and foster feelings, the rancour of which it might have been expected would have been softened by the lapse of thirteen years? "*More candour,*" to quote his own words, "*would have been better policy; and that quality is never manifested by imputations.*"—Your obedient servant,

Upper Bedford-place, April, 1846.

P. M. ROGET.

THE ROYAL SOCIETY AND ITS ROYAL MEDAL.

WHICH IS THE FIRST MEDAL OF THE ROYAL SOCIETY?

To the Editor of THE LANCET.

SIR,—I believe many more persons than the secretary of the Royal Society seems to suppose, consider the Royal medal as the very highest honour of that learned body. I pretend to no acquaintance with the matter, but before the communication of that gentleman, (the secretary—see THE LANCET, ante, p. 420,) I concluded it to be so, for the following reasons:—

1st. I considered that the Royal medal would take precedence of every other, merely out of a spirit of due homage to the august donor of it.

2ndly. I thought it a matter of course for the first medal to have the priority of presentation.

And, Sir, it seems not untimely to ask your attention to a discourse* of a former president of the Society,—the illustrious DAVY,—on the first occasion of the Royal medals being awarded. The awarding of both the Royal and Copley medals is thus entitled:—

"Award of the Royal medals to Mr. JOHN DALTON, F.R.S., for his development of the theory of definite proportions, commonly called the atomic theory of chemistry; and to JAMES IVORY, Esq., F.R.S., for his various mathematical papers, published in the *Philosophical Transactions*; and† on the award of the Copley medal to JAMES SOUTH, Esq., F.R.S., for his observations on double stars."

The medals were presented, in the order here stated, by Sir HUMPHREY DAVY, who, before bestowing that of Sir GODFREY COPLEY, made the following remarks:—

"There is another annual medal, gentlemen, on which I have to announce to you the decision of your Council, that founded on the donation of Sir GODFREY COPLEY, Bart. This for a long while was the only mark of distinction which you had to bestow; and when the illustrious names to whom it has done honour are considered, and the great and extraordinary advances in natural knowledge with which the award

* Discourses, 1820-6.

† Discourse understood.

has been connected, it will, I trust, continue to retain all its dignity, as a mark of our respect, and all its importance, as a pure honorary reward."

It would appear that the president made these remarks lest the old, and long the only, honour should be too much undervalued, as being preceded by the Royal medals. Surely, it must have been intended to have bestowed on DALTON the foremost reward on this occasion!

Is the *first* medal the *last* to be given away? or is it to be understood that the *Royal* honours only *seem* to be complimented?

Having no controversial aim in writing this, I will here end these few remarks on these important medals, the object of which should be ever regarded as identical with that which DAVY states to have animated his inimitable discourses—"to endeavour to keep alive the spirit of philosophical inquiry and the love of scientific glory."

I am, Sir, your obedient servant,

INQUIRER.

April, 1846.

ON THE DISCOVERY OF THE TRUE PHYSIOLOGY OF THE SPINAL MARROW BY DR. MARSHALL HALL, AND THE AWARD OF THE MEDALS AT THE ROYAL SOCIETY.

To the Editor of THE LANCET.

SIR,—Your masterly exposition of the hidden proceedings of the Royal Society deserves the thanks of the whole profession—nay, they cannot thank you sufficiently for laying bare to their eyes the abominable disregard of all justice in the awarding of medals, which every one has a right to see honourably and meritoriously adjudged.

I have often wondered (and I am only one among many) at the neglect with which Dr. Grant has been treated for so many years; but the wonder has been transient, not knowing what there might be in the back ground to keep him from occupying a prominent public position in the esteem of his profession. It now appears that the lowest trickery, false assumptions of merit, and unworthy jealousies, have been the cause of this disgraceful omission in his case. Those at whose instance this fault has been committed, doubtless will have their reward, and so be it. But I never dreamt of the great and immortal discoveries of Dr. Marshall Hall having been ever offered for competition (ridiculous) with any papers published of late years in the *Philosophical Transactions*! Why, Sir, 'tis a thing *per se*, and infinitely above deserving the award of a Royal medal—a discovery, by this time, one would hope, engrafted into the minds of all physicians. It would be the acme of ignorance and of presumption for any man to visit the bedside of a patient without a knowledge of the discoveries of Marshall Hall: his name should be dear to all, for his labours, and for the light that has been shed upon medical science. The whole kingdom would be loud in his praise, did they but know the great boon which has been conferred on the community and the world by such godlike revelations. How much pain has been alleviated!—how much suffering averted! How have the minds of men been opened in the investigation of a most important class of diseases, heretofore considered anomalous, and to which no clue to symptoms altogether puzzling and annoying to the physician could be obtained! What confidence has been given to us, and how grateful we ought to be for such rare gifts vouchsafed to man through the Providence of Almighty God! It may be said, that Dr. Marshall Hall was not at first aware of the immense importance of his discoveries, and of their aptitude to receive so thoroughly a practical adaptation; but this is to say only that little things may be added to great ones, and speaks powerfully in favour of the merits of the original discovery.

This is no exaggeration, nor does it partake of any excess of praise to the individual—the truth of the discoveries stands before the whole world, and will continue to be truth, whether it is believed or not. And what is to be the reward of the author?—A Royal medal! Had there been no other awarded, but that to Sir C. Bell, it might now have been bestowed with honour, and have been honoured by its reception; but it is too late. The Royal Society and its secretaries will have their reward, and moreover, the satisfaction of having deprived themselves, by their own hands, of the greatest honour that could have been granted them. Truly, it will be a long time again before they will have an opportunity of rejecting such another offer. But, what is the reward? The acknowledgments and gratitude of all England

will, ere long, be at the feet of the author; the hearts and minds of a great many are at present at his disposal; and I can scarcely believe that the very highest place in the profession will be withheld from one who so richly deserves all the honours it is in our power to bestow.—I am, Sir, your obedient servant,
Clifton, April, 1846.

J. BARRINGTON PROWSE, F.R.C.S.

NEWS, REMARKS, AND CRITICISMS.

A Dublin paper reports that fever is greatly on the increase in Dublin at the present time; and that within the last few weeks, some of the worst cases of typhus have occurred that have been witnessed there for many years. A brother of the Attorney-General (Dr. Greene) died from fever at Dublin, on Monday, the 5th inst.

MEDICAL TESTIMONIALS. A Correspondent, *Quidam*, has called our attention to the following disgraceful corn-cutting testimonial in a Liverpool paper:—

(From Dr. Macnaught.)

I certify that Mr. L— has extracted from me, effectually, a very painful corn, of long standing, and with immediate relief.

JOHN MACNAUGHT, M.D.

Bedford-street, Liverpool, March 27, 1846.

In the same paper we also find these testimonials:—

(From Dr. Pennell.)

Dr. J. P— has extracted several corns from me with great dexterity and success; and from the opportunity I had of observing his method when removing corns from the feet of one of my children, I am induced to consider his method calculated to effect a permanent cure.

RICHARD LEWIN PENNELL, M.D.

Castle-street, Exeter, July 3rd, 1844.

(From J. Wilson, Esq., M.D., M.R.C.S.)

I have much pleasure in according my most cordial praise of the manner in which Mr. P— extracts corns. He has just removed several corns of a very severe nature from my feet, without causing me any pain, and I strongly recommend any one suffering from a like complaint to immediately call to their aid this experienced gentleman.

J. WILSON, M.D.

38, Charterhouse-square, London, March, 1843.

The members of the profession, in endeavouring to obtain a little notice for themselves, assist in destroying the respectability of the medical body. We verily believe that sweepers of the streets might successfully apply to some practitioners for medical testimonials. In London the odious practice has reached a frightful extent.

NON-PAYMENT OF MEDICAL MEN FOR MEDICO-LEGAL INVESTIGATION.—Mr. Greatwood, of Usk, has addressed a letter to the treasurers of the county of Monmouth, stating, that on Friday morning, the 6th of March, he was requested by Mr. McDonnell to ascertain the facts of an assault having been committed on the person of a female, and afterwards to attend at the clerk's office, to give evidence; but on his arrival there, he was informed that an adjournment had taken place till six o'clock that evening. At the hour appointed he again attended, and made his deposition. A further adjournment then took place till the following Monday, at one o'clock. On that day, when on his way to attend, he saw the constable, who asked him to attend at six o'clock that evening, which he did; and each witness was bound over to give evidence at the assizes held at Monmouth last week. From the nature of the examination, Mr. Greatwood was led to expect that the fee would have been one that would have been just for a magistrate to allow; but on receiving the amount due for attending and giving evidence at the assizes, he found that for all his services, prior to the committal of the prisoner for trial, the magistrate had allowed him the paltry sum of five shillings!

* * Medical practitioners should be made acquainted with the fact that magistrates have no power to compel their making such investigations as referred to by Mr. Greatwood; and whenever, in future, surgeons are requested to do so, they should stipulate beforehand for an adequate fee for their professional services.

Dr. BENCE JONES has been elected physician, and Dr. PITMAN assistant physician, to St. George's hospital.

Dr. SNOW has been appointed lecturer on medical jurisprudence at the Aldersgate School, in the room of Dr. DAVIS deceased.

QUACKERY.—To the Editor.—Sir: Will you do the respectable portion of the profession of Swansea the justice to place the "magic wand" of your all-powerful judgment upon the enclosed advertisement:—

DR. NICOL having been apprized of the practices of certain persons interested in creating an impression on the public mind that his professional charges are high, thinks it no impropriety to have recourse to this method of opposing their intentions. He begs to state that, as a Surgeon, he charged three shillings for each visit in town, including medicines; and that, since he became a member of the College of Physicians, he has continued to charge only the same fee; but, being prohibited by the statutes of the College from dispensing, the expense of the medicine prescribed now falls upon his patients, as the only equivalent they are required to pay for any advantages they think they may derive from a professional experience of thirty years.—5, Dynevor-place, Swansea, April 14th, 1846.—*Cambrian Advertiser*.

Is it an honourable way to resuscitate a vanishing practice? Is it worthy of an extra-licentiate? Would it not be contemptible in any tradesman? Are we all to resort to such soliciting advertisements!—Your obedient servant,

April, 1846.

A SWANSEA PRACTITIONER.

* * Any criticism from our pen in this case is, surely, unnecessary. Dr. Nicol has written himself down,—has penned his own proscription from the pale of the profession. But is not the advertisement a forgery? Is it possible that an extra-licentiate of the College of Physicians of London has thus disgraced himself? Such an advertisement would be a fitting placard from a chimney-sweep, or a hawker of tin-kettles. The author of it cannot be considered as belonging to the ranks of the respectable members of the profession. Sincerely do we hope that it will prove to be a forgery.

MILITIA SERVICE.—To the Editor.—Sir: You some time since recommended that every surgeon should endeavour to interest the members of Parliament for his particular locality in obtaining exemption from the militia service for medical men of all denominations. But should such a liberal measure not be granted by the legislature, it appears to me that, at least, the ill-paid union medical officers (for whom Sir Robert Peel seems to entertain some compassion) should be placed on an equal footing with tax-gatherers and other servants of her Majesty, who, by the present Act, are not eligible to serve. Your notice of this suggestion, either in your far-famed journal, or at the proper time, in Parliament, will add to the many obligations which are due to you from all branches of the profession.—I am, Sir, your obedient servant,

ONE OF THE ILL-PAID.

THE CHOLERA IN THE EAST.—An Indian Gazette speaks of the recent occurrence of cholera at Secunderabad, in the Nizam's dominions, from which a British officer, his wife and child, died in the course of two successive days, and one of their servants subsequently. A fatal epidemic is also said to be raging at the present time amongst cattle in Russia, Northern Persia, and Central Asia.

RESTRAINTS FOR QUACKS.—To the Editor.—Sir: I quite agree with your correspondent, Dr. R. Barnes, in his note on "New Restraints for Quacks," reported in *THE LANCET*, April 11th, p. 422, but for the more effectually carrying out his proposition, beg to suggest, that in addition to Registrars, that every Coroner, Justice of Peace, Clerk of Court, and others, should be possessed of a copy of the Medical Directory, which contains a faithful record of every qualified medical practitioner, within five miles of the General Post-Office. Without some such recognised guide, the former must be much at a loss to decide whether they shall register in the qualified or unqualified column, consequently, the returns, as at present made, must be exceedingly incorrect, particularly where the registrars are non-medical. In all the latter, it would direct them who to pay, and who not, as witnesses.—I remain, Sir, your obedient servant,

WILLIAM SELF.

Lucas-place West, Commercial-road, April, 1846.

MIDDLESEX HOSPITAL.—The annual distribution of prizes at this school took place on the 9th ult., on which occasion, Mr. Hunt, the treasurer of the hospital, presided. After an address on the state of the school by Mr. Arnott, one of the surgeons, and chairman of the school, the prizes and certificates of honour were awarded to the following gentlemen:—

Medicine.—First prize, Mr. A. D. Home; second ditto, Mr. Sydney G. Bousfield; honorary certificate, Mr. Augustus Grant.

Surgery.—Prize, Mr. Bousfield; honorary certificate, Mr. Grant.

Physiology.—Prize, Mr. Bousfield; honorary certificate, Mr. Boyers.

Anatomy.—Prize, Mr. Boyers; honorary certificate, Mr. Pates.

Materia Medica.—First prize, Mr. Boyers; second ditto, Mr. Clapham.

Chemistry.—Prize, Mr. John Day.

Midwifery.—Prize, Mr. Arthur Smith.

Forensic Medicine.—Prize, Mr. Bousfield; honorary certificate, Mr. Roberts.

Botany.—Prize, Mr. Clapham; honorary certificate, Mr. A. Smith.

A theological prize, the gift of the Rev. D. Laing, the chaplain to the hospital, was gained by Mr. Boyers. At the conclusion of the meeting, a vote of thanks was moved to the chairman; and it was proposed by Dr. Merriman, and resolved, that the thanks of the governors were due to the lecturers for their endeavours, during the past session, to uphold the character and advance the prosperity of the school.

THE APPOINTMENT IN THE HALSTEAD UNION.—To the Editor.—Sir: Your Halstead Correspondent (page 451) accuses our Board of Guardians,—1st, Of "actually appointing as medical officer, a man who was neither a licentiate of Apothecaries' Hall, nor a Member of the Royal College of Surgeons;" 2ndly, of subsequently appointing the unqualified assistant of this non-qualified officer. As to the first charge against an absentee, I answer, that when I became assistant, I believed my employer to be a qualified man, and so did the guardians, and so did your correspondent, for years, and they are no more to blame for our belief than is your correspondent. How unjust, then, to reflect on the Board of Guardians! And what becomes of the force of such a charge? What the object of it? As to myself, when I was honoured by the appointment, I had for years held the diploma of surgery and medicine of the University of Glasgow, in which school I studied six years. No man knows better than you, Sir, that the poor-law commissioners sanctioned such appointments, provided the candidate held a like qualification, and my becoming a licentiate of the English Hall was voluntary on my part. As to being liable to attend 5000 paupers, the number in our schedule never much exceeded 1000, and the entire population last census was 5710! I, for my part, think that all misrepresentations are bad, but the accused absentee, who holds both a Scotch diploma and a London physician's licence, if publicly attacked at all, ought to have been attacked when he was present to answer for himself. It is not my business to defend him, but if any blame was attachable to the guardians, it equally belonged to your Halstead correspondent for tolerating the really unqualified but apparently qualified practitioner as his rival, especially so with regard to a medical man; surely a rival medical man ought to have been more competent to detect a want of real qualification than a Board of Guardians.—I remain, Sir, your most obedient servant,

Halstead, April, 1846.

D. SINCLAIR.

QUACKERY.—To the Editor.—Sir: It is almost impossible for those who reside among the better educated masses in large towns, to form any idea of the extent to which the rural population is imposed upon by ignoramuses and impostors. We have white-witches, and black-witches, charmers of burns and scalds, casters of nativities, and foretellers of the fate of parturient women. Within a few miles of this town, a large district is medically superintended by one of the "Gipsy tribe," and in such estimation is he held by the people, that when opposed by a regular practitioner as candidate for surgeon to a club, the latter stood no chance at all. There are many such adventurers in this part, who, if we may judge from their outward appearance and their physiognomies, are better off than some of those who are entitled to attach M.R.C.S. &c. to their names. I was in a chemist's shop last week, when the following prescription was presented by one of these general practitioners, in his own hand-writing, to be made up, as I understood, for the servant of a noble lord living in the neighbourhood:—

"Jolop; Pil a Coshia; Bitter Hallos; Rubbub; Saint James, in Powder; Ass petito; Craim a torter—two pen-north of each; Bolis Powder [*Anglice*, borax]; Bold Alma-nack."

The case for which all these things were prescribed was one of pericarditis and dropsy. It may appear inconceivable how such men can find patients, yet, if we may judge by their frequent orders on the chemist, they must have much to do. Besides, they do nothing else; and some of them keep a horse or a pony. I will not pretend to find a remedy for such evils, but content myself with exposing facts.—I remain, Sir, your obedient servant, O. O. O.

Mr. GREEN, one of the council of the College of Surgeons, has been appointed a Commissioner of the Pentonville prison.

TREATMENT OF QUACKERY IN FRANCE.—Jean Canard was brought before the Correctional Police, charged with the sale of secret remedies, the composition of which is not indicated in the codex. He pleaded that these medicines, which were composed of a powder, were given by him for the relief of the unfortunate. It was, however, proved that he had demanded from some persons whom he had supplied with this vegetable powder, thirty, fifty, one hundred, and even two hundred francs. He was condemned in a fine of six hundred francs, and further sentenced, as being a former offender, to ten days' imprisonment. A herbist, named Repiquel, at the barrier of Fontainebleau, accused of illegally practising medicine and pharmacy, was fined fifteen francs for his practice of medicine, and five hundred francs for the sale of pharmaceutical preparations. Charles Drouhin, herbist, living in the Rue des Tournelles, was fined five hundred francs for illegally practising pharmacy. Denis de Saint Pierre was fined five hundred francs for the sale of secret remedies and pharmaceutical preparations.—*Prov. Jour.* April 22.

QUACK ADVERTISEMENTS.—*To the Editor.*—Sir: I regard the accompanying little pamphlet as the *ne plus ultra* of empirical advertisements. Can we wonder that obscure practitioners should seek notoriety by attaching their names to certificates in favour of "Solomon's spectacles," "Green-ginger wine," or anything else, when the *élite* of the profession sanction such monstrous proceedings? The following is emblazoned on the cover:—

"SO-AND-SO'S EMOLLIENT TEETHING-STICKS,

"Patronized by the most eminent physicians. The following names are inserted by permission:—Dr. MEERRIMAN, M.D.; Dr. JAMES CLARK, Bart.; Dr. JAMES JOHNSON; Dr. LOCOCK; Dr. ASHWELL, M.D."

Mr. Squire has "certified" that these sticks contain nothing deleterious. How should they, being composed of nothing in the world but bees-wax and sugar? Continue your exertions, Sir, and this "offence in high places" must come to an end. Faithfully yours, A. B.

London, April 20th.

ROYAL COLLEGE OF SURGEONS.

The following gentlemen were admitted fellows of this college on the 16th inst.—viz., Messrs. J. Nottingham, Liverpool; C. B. Rose, Swaffham, Norfolk; G. D. Pollock, Sackville-street; H. B. Norman, Duchess-street, Portland-place; H. Bell, Yarmouth.—17th inst.: J. R. Reece, A. Halley, J. Brady, F. F. Allen, A. M'Mahon, E. L. West, D. L. Morgan, F. G. Broxholm, A. G. Fenwick, W. C. Tucker, C. Broughton, W. Delpratt.

CORRESPONDENTS.

In reply to several letters which have been addressed to us on the subject of a proposed plan for the subject of an institution—many of them being strongly condemnatory, on the supposition that it is to be confined to general practitioners,—we think it right to withhold their publication until the result of the conference between the sub-committee of the National Association and the deputation of the Associated Surgeons is communicated to the profession. Far better would it be that all the medical reform associations should cease to exist, than that their continuation should be the means of maintaining a spirit of hostility amongst the different classes of the profession, and in perpetuating those divisions which are calculated to detract from the respectability and influence of the surgeons who are engaged in the general practice of their profession. We sincerely hope that the provision in the scheme, to which so many of our correspondents have taken an angry exception, has not been by them correctly interpreted. In a few days, the required explanation will be obtained.

Our columns are extremely crowded; but we will endeavour to find room for the letter of Mr. James Arnott (Brighton), although, as a principle, we have found it to be necessary to exclude from our pages notices on the offences of ignorant reviewers.

M.R.C.S. and L.A.C.—It is a grossly impertinent demand on the part of the registrar, and there does not exist the slightest legal authority for making it. Such a scandalous insult ought to be reported to the Registrar-general of births and deaths, at Somerset House.

The note of Mr. James D.—(Birkenhead) has been received. The title that he names should be placed within the power of legal adoption on the part of every member of the profession.

M. D., (London).—after reading the report of the Associated Committee of Surgeons, on Monday evening last, will acknowledge the propriety of not publishing his letter in *THE LANCET* of this week. The question is still *sub judice*, and sincerely do we hope that it will have an amicable termination. So long as the dissensions and distraction in the profession last, precisely so long shall we remain without any just law for our government.

A Licentiate and Member of Two Colleges.—The Committee could scarcely have taken a more decisive step in the right direction, than that of voluntarily abandoning its permanent character and becoming again a provisional committee, for the execution of specific purposes, a description of which is to be submitted to the consideration of the profession at a public meeting. After such a proceeding we are not disposed to dwell upon past occurrences. We want peace and union.

The letters of D. S. E. and Mr. Thomas Wilson (Hull) will be inserted.

To the Editor of THE LANCET.—Sir: What may be considered to be a fair remuneration fee for reducing a large inguinal hernia, in the case of a person in tolerable circumstances, living at a distance in the country, at three o'clock, a.m., with detention during three hours.—Yours respectfully, Scotland, April 9th, 1846. A SUBSCRIBER.

. Two or three guineas.—Ed. L.

To the Editor of THE LANCET.—Sir: It is the practice of some physicians and surgeons, who are not apothecaries, to supply their patients with medicines, without charging for the same. Such practitioners are paid for their advice and attendance only. Is this practice legal? or, in other words, are these gentlemen practising as apothecaries or not?—I am, Sir, your obedient servant, W. P.

. If they supply medicines to their patients in such cases, such physicians and surgeons are practising as apothecaries.—Ed. L.

QUACKERY.—*To the Editor of THE LANCET.*—Sir: The card referred to by your correspondent (page 452), was printed by me some years back, at that over-anxious period the first onset of practice, and was never circulated. It must have been obtained by *stealthy means*; and therefore I am not surprised that no name and address accompanied same. I would beg to add that the only card circulated in my practice is the enclosed. [A mere visiting card. Ed. L.] I am, Sir, yours respectfully, HENRY TAYNTON.

7, Bedford-place, Commercial-road East, April 20th.

To the Editor of THE LANCET.—Sir: In your notice to correspondents last week, it appears that one of them has only done things by halves, respecting Mr. Taynton, of Bedford-place, Commercial-road East. I beg to remind you that this is the same gentleman whose twin compilation of card and pamphlet, headed "Medical Aid in Time of Sickness," purporting that the advertiser would attend patients *within three miles, and include physic in the charge of one shilling*, I sent you, accompanied by a letter showing the advertiser's contemptible appropriation of an observation that fell from you at an inquest, so ingeniously turned to his own account. Three thousand copies of these card-pamphlets, I stated, were circulated three days after the advertiser had signed his name at the Tower-Hamlets Medical Association in favour of upholding "the respectability, and supporting the interests of the profession." Your answer to this will be found among the notices to correspondents, November 9th, 1844. Signing myself now, as then, your obedient servant,

ONE WHO GIVES VALUE FOR A SHILLING.

Tower-Hamlets, April 21, 1846.

O. P. would not be prosecuted as a quack, but he might, nevertheless, be proceeded against by the Company for violating one of the clauses of the Apothecaries' Act.

Mr. S. S. Faulks.—The medical gentlemen in question are legally qualified practitioners, and as they do nothing more than practise medicine, (for however numerous the branches, the science is but one,) it is not wise to find the same kind of fault with them for embracing in their proceedings all those branches as should be visited upon them for encouraging the quackish labours of unqualified practitioners.

Assuredly, it would prove to be an error. What would be that NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY, which excluded from it such surgeons as Sir BENJAMIN BRODIE and Mr. LISTON; and such physicians as HARVEY, CULLEN, DENMAN, and HUNTER? It is impossible to believe that the stipulation has been properly interpreted. A general union of this kind would prove the salvation of the profession. The system of quackery is now receiving a check, but it can only be put down and kept down by obtaining increased power for the respectable and qualified members of the profession.

Mr. Herapath's paper is unavoidably postponed this week.

Communications have been received from—Mr. Dickinson, Wigmore-street; Dr. Taylor, University College; Mr. Jones; Mr. Gate, Tunbridge Wells; one of the Ill-paid; a Subscriber for seventeen years; a Reader; Dr. Bird, Swansea, (with a pamphlet and newspapers); Mr. Chelton; Mr. Horne; Mr. S. Hall; Adelphos; and Mr. S. Rodick.

CONTRIBUTIONS TO CLINICAL MEDICINE.

BY JOHN TAYLOR, M.D.,

PROFESSOR OF CLINICAL MEDICINE IN UNIVERSITY COLLEGE, AND
PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL, LONDON.(This report is taken chiefly from that drawn up for the hospital case-book by
Mr. H. BENCRAFT, the resident physician's assistant.)

PERICARDITIS.

CASE 30.—A female, aged thirty-one; admitted, after an illness of fourteen weeks, supposed to be ague; had had rigors and diarrhoea. On admission: emaciation; sallow and blanched complexion; pungent heat of skin; pains in hypochondria; signs of condensation of upper lobe of right lung, and of enlargement of the heart with valvular disease; signs of enlargement of the liver and spleen; death after a fortnight. Morbid appearances, with remarks. Numerous imperfectly-cicatrized ulcers in the colon.—Symptoms: The disease probably dysentery; absence of tenesmus and bloody stools common in dysentery; and in what circumstances; means of diagnosis; cause probably malaria. Bright's disease of the kidneys; characters of the urine fallacious. Why no dropsy. Causes of the renal disease; sequelæ. Moderately recent adhesion of the lungs, liver, and spleen, to the surfaces of the diaphragm; lobular pneumonia, especially in the right lung; signs of it; difficulty of distinguishing it from chronic disease of the lung; diagnostic value of pungent heat of skin; hypertrophy, with dilatation of left ventricle of heart. Old disease of mitral valve; signs. Anemic murmur in aortic valves; acute endocarditis, without any signs. Cause of the jerking pulse. Universal softish adhesions of pericardium; pericarditis latent. Signs of adhesion of pericardium. Causes of the mitral-valve disease; of the hypertrophy with dilatation; influence of mitral-valve disease, and of adhesions of pericardium, upon hypertrophy. Causes of inflammations in pericardium, endocardium, pleura, peritonæum, and lungs; infection of the blood consequent on endocarditis the probable cause of the pneumonia; liver enlarged; cirrhosis in very early stage; microscopic appearances.—Causes: Signs of acute hepatitis fallacious; spleen enlarged; tubercle in spleen, yet none in lung; pancreas enlarged and indurated.—Causes.—Summary view of the pathology of the case.—Treatment: Cure of inflammation of the pericardium and of the colon by the natural powers.

ELIZABETH T—aged thirty-one, admitted Friday, Oct. 17th, 1845; rather tall; of slender figure; fair complexion; married two years; has one child; has always been able to procure a sufficiency of the necessaries of life; has taken spirits occasionally, but never to excess, and only about a pint of beer daily; has lived in Woolwich for some time past, and before her marriage served in a canteen shop; both parents are living and have enjoyed good health; has two brothers and two sisters, all of them delicate, but she does not know that they have been subject to any special disease. The patient has had several attacks of rheumatic fever, the last of which occurred eight or nine years ago; the attacks were very severe, and during one of them the heart was affected. When about eleven years of age, she had scrofulous abscesses about the neck; these got well on her removal to the sea-side, and have never returned; she continued well until her confinement, twelve months ago. The labour was protracted, flooding followed, and she has not been perfectly well since; she continued weakly, and had cough and pain in the chest, but recovered sufficiently to perform her household duties.

Present illness.—Fourteen weeks ago, without any assignable cause, on rising in the morning, she felt giddy; soon afterwards she was cold, and then shivered very much for about an hour; next followed increased heat of the surface and free perspiration, which lasted about an hour and a half; she likewise had pain in all parts of the body. In the afternoon, the attack was repeated. She consulted a medical man, and took medicine, which proved to be aperient; the next day she felt pains all over, but had no rigor until several days after; the rigors have returned at irregular intervals, sometimes every two or three days, and sometimes at intervals of a week, or even a fortnight, and at no regular hour; she had a slight one on the morning of her admission, and had been free for a week before. About a month since she had an attack of acute rheumatism, which ceased a week ago. She has noticed, that during her illness her stools have been very white, "like a baby's," but at what precise period she does not remember. At various times in the course of her illness she has been much purged, and (she was carefully questioned on this point) is quite sure it was independent of any medicine. The urine, eight

No. 1183.

or nine weeks ago, was of the colour of porter. Her medical attendant called her disease ague; she never had ague before, and believes the disease does not occur in the part of Woolwich in which she has lived.

Symptoms on admission.—She is very much emaciated; the face and general surface are quite blanched, and, at the same time, sallow; no oedema of any part; the lips, although pallid, have a slightly livid tint; countenance anxious; skin burning hot; pulse 120; great prostration of strength, with pains and soreness in all the limbs; no redness, swelling, or tenderness, in any of the joints; sleeps little, but has no pain in the head; she lies recumbent, and upon the right side, the breathing being easiest in this position; the respirations are short and frequent, being forty-eight per minute; they are chiefly costal; the diaphragm moving very little; the ribs on the left side move more freely than those on the right; has no pain in the chest; coughs but little, and expectorates, in small quantity, a glairy, colourless, pituitous fluid; the circumference of the chest, a little below the mammæ, is twenty-eight inches and a quarter; the right half measuring fifteen inches; the respiratory sound is louder under the right clavicle than the left, and is somewhat bronchial; over the upper part of the right side, behind, it is extremely bronchial; no crepitation; on percussion, the sound is distinctly duller under the right than the left clavicle; behind, there is dulness on the right side from the apex to opposite the fifth dorsal vertebra; then, for the space of two inches, the sound is clearer on the right side than on the left, and, lastly, there is dulness again over the lower third; on the right lateral surface there is dulness in the axilla, below this, an interval of clearness, and, lower again, a dull sound over the hypochondrium; an undulatory movement is very distinctly visible in the cardiac region, over a space extending from the left nipple to within an inch of the right; dulness on percussion in the cardiac region extends upwards to the third rib; on both sides of the sternum downwards to the margin of the chest, and as far towards the right side as the nipple; the impulse is much increased, and is felt over a far greater space than in health; the apex beats between the fifth and sixth ribs; there is a loud systolic bellows murmur, most intense at the apex, but very distinct at the base and top of the sternum, audible also above the right clavicle, and at the lower angle of the left scapula; the murmur is less loud over the space intervening between the heart's base and apex than at either of these two points; the second sound is not materially altered. Pulse 120, full, soft, jerking, and has a slightly thrilling character; inordinate pulsation of the carotid arteries; tongue furred; no appetite; considerable thirst; abdomen much fuller than natural. There is general tenderness on making firm pressure, but not on merely pinching the skin; the tenderness is greater in the upper than in the lower region of the abdomen, and over the right side than the left; there is no dragging sensation felt in the right hypochondrium either when lying down or walking; the liver can be felt a little below the ribs, and more so in the epigastric than in the hypochondriac region; percussion over the lateral surface of the hypochondrium yields a dull sound, no higher than opposite to the lower end of the sternum; bowels freely open; stools dark-coloured, and of a moderate consistence. Over the region of the spleen there is a dull sound on percussion over a space of four inches perpendicularly, and of six or seven inches transversely; urine copious, strongly acid, specific gravity 10.12; contains a slight excess of phosphates, and about one-sixth of its bulk of albumen. To have ten leeches over the right hypochondrium, and afterwards a linseed-meal poultice, and to take two grains of calomel every four hours.

Oct. 18th.—After the application of the leeches, the pain diminished much; has now no pain, and very little tenderness over the right hypochondrium; has pain of a cutting character in the left hypochondrium; it is aggravated in paroxysms, and also by lying upon the back; tenderness on pressure between the last rib and the crest of the ilium on the left side; the left side of the chest moves as much as the right in respiration; pulse 100, smaller, and less jerking; bowels moved four or five times, motions dark-coloured; had a sinapism on the left side this morning. To have eight leeches over the left hypochondrium, and to take half a grain of opium with each dose of the calomel.

20th.—The patient is paler; the surface is still hotter than natural; complains of pain when she lies upon the back; more pain in the left hypochondrium than the right; the ribs on the left side move more freely than on the right; the intercostal depressions are less visible over the lower part of the right side than the left; the pulsation of the arteries of the

neck is more visible than natural; pulse 108, slightly thrilling, soft, and jerking; vomited this morning; bowels moved once only; urine acid; contains a slight excess of phosphates, and one-fifth its bulk of albumen; specific gravity 10.13. To take two pints of milk and half a pint of beef-tea daily.

21st.—She was purged very much last night; has less pain in the left side, and can now lie upon it; has still pain in the right hypochondrium; respiration bronchial over the upper half of the right side behind; pulse 88, moderately full; urine of spec. grav. 10.12, strongly acid; albumen less; phosphates in excess; no crystals of uric acid. To take an ounce and a half of chalk mixture, with 10 drops of laudanum after every loose motion.

22nd.—Slept badly; bowels moved two or three times in the night; stools darker-coloured than natural; her aspect has improved; countenance less anxious; surface hot; pulse 120, full, soft, and jerking; pain equally in both hypochondria; she vomits the beef-tea; tongue aphthous; mouth not so sore as it was; urine, spec. grav. 10.14, strongly acid, contains one-seventh its bulk of albumen; omit the calomel. To take four grains of mercury with chalk and one-fourth of a grain of muriate of morphia three times a day.

23rd.—Lips perfectly blanched; skin cooler; pulse 92; tongue less aphthous; she takes four pints of milk in the twenty-four hours; omit the beef-tea.

24th.—Vomited this morning a good deal of curdy fluid of a sour odour and verdigris-green colour; bowels have been moved, and the evacuation was dark-coloured; appears more prostrated; has a little pain in the left side; not much tenderness of the abdomen; pulse 96; breath fetid; gums tender; urine, sp. grav. 10.15, strongly acid; albumen about the same; omit the pills and the milk; to have two ounces of port wine and some beef-tea.

25th.—Looks very pale and much prostrated; pulse 90, small; has vomited some yellow-coloured fluid; dislikes the wine and has had some brandy; has less pain; bowels moved once only.

27th.—Appears very languid; pulse 96, small; tongue less aphthous; has taken four ounces of brandy in the day but hardly any food.

28th.—Countenance anxious; complains most of pains in all the limbs; considerable tenderness of the right hypochondrium; bowels moved two or three times.

30th.—Skin cool; pulse very small; prostration of strength very great.

31st.—Continued to sink, and died at 2 A.M.

[The post mortem examination, and summary of the case, in the next LANCET.]

ON MEMORY, ITS INFLUENCE AND IMPORTANCE AS A SOURCE OF ACTION IN ANIMALS.

By J. JOHNSTON KELSO, M.D., Lisburn.

THAT several interesting genera belonging to the insect world—the ants and hive-bees more particularly—are gifted, not without obvious purpose or design, with some degree of memory, if not a species of recollection, through whose active agency, (either directly and simply in itself, or indirectly and in fundamental relation to some truly very humble and limited mental processes which they seemingly evince,) a separate and distinct class of actions, of no trivial extent and importance, are being constantly willed and executed, with a view—however faint and indistinct in many instances it may be—to certain definite ulterior purposes, whether of a self-conservative, social, or economic tendency,—is a conclusion to which we are forcibly, indeed irresistibly impelled, from a dispassionate review of the facts and considerations that have already been adverted to, not to mention many others of a similar import, that, did space permit, I might readily here adduce. Hence, in addition to those volitional movements or actions, in these or other tribes still more elevated in the scale, which have their accredited and veritable spring in the common power of instinct, on the one hand; and those which, with equal reason, may be rightly regarded as the genuine offspring either of the active or emotional feelings, or of the processes of intellectual operation, and involving, too, in some degree, an exercise of memory, on the other,—they very clearly and decidedly evince (on the same principle of reasoning from phenomena to causation, from the outward and self-interpreting organic signs or movements, and their results, to the originating and impellent influence within) a goodly category, an extensive and infinitely varied class of actions that belong exclusively to the exciting and determining agency and operation, more or less

active, of the widely diffused power of memory. And this merely is the position, it may be allowed me, for which I would in all earnestness contend; and its importance, as a matter of philosophy, may be here urged as my apology for the occasion of the present lucubrations. If, indeed, in speculative science, it were a doctrine generally received, especially in connexion with the many applications of which it is more obviously susceptible, they were quite uncalled for in this place.

However, with reference to the higher orders of animals, the influence of memory as a stimulant and regulator of a vast variety of actions that go to constitute what has been called their habits, as well as many others of a less common or incidental character, certainly cannot be rightly otherwise regarded than as reposing on evidence the most unexceptionable. But to attempt anything like an exposition of this evidence, profuse and varied as it is,—to essay a review of the more prominent and characteristic of the host of proofs supplied us in the history of their habits and incidental traits of conduct or deportment, even in the briefest possible compass, would be a labour, which, however interesting or instructive, dare not, for obvious reasons, be thought of in this place. Any facts or observations, therefore, more pertinently illustrative of the habitudes and workings of this common principle or spring of action in them, that can here be noticed, will necessarily be of a very general nature; but before proceeding to glance at these very casually, it may be as well, perhaps, at once to dispose of the question which naturally suggests itself in the outset—What is the kind or quality of memory which animals, many of them, thus so clearly share in common with ourselves? What, in the main, are its distinguishing characteristics? Do these characteristics so consort and harmonize as to betoken in all instances a common source or parentage in one and the same sort of psychical energy, or the reverse? The reply to these questions, which will exhaust, it is to be feared, all our present available space, evidently involves, in some measure, the consideration of another,—that, namely, which has reference to the higher memory, or recollection, of man, its more salient and distinctive features, the objects or subjects with which it has more especially to do, and its uses or final cause in his mental economy. With the many other topics which this question comprehends, I do not, for obvious reasons, at present concern myself; and only with those now specified, in so far as they may serve to illustrate, by contrast, the main features and bearings of the inquiry which is here more immediately to engage us.

In order to facilitate as well as simplify, perhaps, the investigation, abstruse and slippery as it is, it may be right here to state, that all memory, whether human or animal, naturally divides itself into

1. Memory of sensations or perceptions, and
2. Memory of ideas, facts, or transactions.

Memory, again, offers itself to our contemplation under a twofold aspect—namely, as either *active* or *passive*, using these terms not in an absolute, but merely in a relative sense.

Active memory, or recollection, usually so termed, whether sensory or ideal,—whether of impressions derived from the world without, or the results of processes of the subjective principle within, evidences itself, in its greater development and perfection, alone in connexion with the $\psi\chi\eta$, or immaterial mind of man, of which it is certainly and confessedly, indeed, one of its most important and interesting manifestations. There is no animal, however comparatively elevated or varied are its psychical endowments, which possesses the power, inherent in the human mind, of voluntarily, at the instance of necessity or mere pleasure, throwing itself back, as it were, upon itself, of reviewing, deliberately and methodically, the accumulated and incessantly accumulating materials of, it may be, a vast and infinitely varied store of knowledge variously acquired, equally with the results of mental processes which they incite, and, generally at least, so largely minister to,—in search of some forgotten memory, whether of a sensation, fact, train of thought, or judgment, presuming it to be possessed of these common intellectual powers. Far less certainly is any animal endued, in any form or degree, with the supremely exquisite and soul-distinguishing faculty of moral memory or conscience, usually thus called; or even, excepting very partially perhaps, and limitedly, with the memory of the higher affections, such, for instance, as philanthropy, benevolence, gratitude, or others of the kindlier and better feelings or emotions, which, in their full and vigorous play, equally distinguish, ennoble, and adorn humanity. If, in fact, there be one point in psychology better ascertained than another, it is assuredly the one to which I am now adverting; and I repeat,—what from its notoriety must be accepted as a self-evident truism, though on that account not the less

necessary of being distinctly expressed here in terms,—that the inferior animals, not any of them, are endowed in any degree worthy comparison, perhaps, with the exquisite capacity possessed by many, of instituting at the bidding of the will, so to speak, those wondrously rapid and infinitely diversified retrospects over the far and widely-stretching domain of the actual observation or experience of the past; of renewing old and faded acquaintanceship with the ideal conceptions, thoughts, or judgments, that have previously influenced or occupied the mind, and been registered there; of reviving, in review, the motley and discordant group of motives to action, attended with or without emotion, that have formerly and long before, perhaps, influenced and impelled, with the equally diversified fruits that have, in consequence, accrued,—a faculty with which man alone, of all created beings, has been beneficently, and, withal, wisely privileged, and in virtue of which he is enabled, as often as he list, to live over again his past life, alike of thought and action, with all its commingled feelings of pleasure and pain, joys and sorrows.

“Hoc est
Vivere bis, vita posse priore frui.”

Such, then, in faint and imperfect outline, is active phenomenal memory, or recollection, as usually manifested by “the double animal,—the perfect man,”* and whether we consider its exceeding perfection or scope,—whether we regard its proximate and fundamental relations to the active powers of the thinking mind, and more immediately to the conscious volition, or the numberless and infinitely diversified offices that it discharges, in the many and multiform intellectual and moral actions and re-actions that so largely occupy and influence us in each successive phase of existence, equally with the ordinary and every-day concerns and relations of life, we cannot but feel very forcibly impressed with the conviction that the faculty, as thus manifested, is quite different and distinct from that with which any of the lower animals has been endowed. Further, if we look to its uses or final cause in the mental system, what more prominently arrests the attention? In objects or pursuits, intellectual and moral,—in the different duties and relations of life, both social, politic, and economic,—in every exercise, in short, which has for its object man’s present improvement and happiness, mental, moral, or physical, we have just now seen this higher and nobler form of memory to play a very striking and important part, and it requires no argument to show that its ultimate tendencies all incline, more or less directly, to the perfect consummation of that improvement and happiness. Furthermore, in conjunction with imagination, duly relying on the permanency of the order of Nature, and the sustained adjustment of harmony in the laws that govern and control its peculiar forces, it is enabled from the past to descry the future, and in the anticipated pleasures of which, rightly cherished by hope, we discover a well-spring that goes largely to contribute to the sum of human happiness. Surely the poet who designated the faculty, in this its nobler capacity, bearings, and relations, by the epithet divine, was somewhat of a philosopher as well.

But, after all, are there no animals which exhibit indications of their possession, in some degree, of the intellectual species of memory enjoyed by man? Now, certainly, there are several different genera of the higher orders that seemingly are possessed, equally with ourselves, with the capacity of recalling, by a voluntary mental effort of some force and distinctness, a bygone sensation, whether pleasurable or painful, or an impression or idea, objective or subjective, whether attended with or without some feeling of transitory emotion, if experienced with the degree of vividness requisite to any remembrance, though generally after the lapse of comparatively but a short interval of time. In other words, facts or incidents connected with their history are not wanting, that go to evince the working of a recollective faculty of some kind within them. In corroboration of the genuineness of the position here assumed, there is a description of proof which, since I first thought on the subject, I have ever regarded as pretty conclusive; I allude to the occurrence of dreaming, evinced, probably, by several very different tribes of animals, but more particularly and familiarly by the dog and the horse. Now the current philosophy of this mental phenomenon, whether as occurring in animals or man, may, in some respects, be open to debate; but the influence of memory, at least, in half-conscious and lively exercise, as constituting one of the chief and essential elements which it embraces, is unquestioned and unquestionable: indeed, in every expla-

nation having reference to it that has met my eye, due regard to the inciting agency, alike of memory and association, has unavoidably been paid. Nor is the well-known and undoubted circumstance of the susceptibility of many species of animals of almost all orders to profit by individual observation, or lessons in instruction or training, less pointedly corroborative of the assumption. But regarding this particular feature in their history, any remarks here in explanation would be quite superfluous, and I at once dismiss it by observing generally, that every acquired habit or art, of whatever description or character, or however made, necessarily involves, as well in the particular acquisition, as in the after-observance, some conscious activity of the power of remembrance. But over and above all this, many historical incidents have been noted by different trustworthy observers, that go very clearly and decidedly to bear out the position for which I am now contending. Of these, I can here only find room for the following, which will serve as a sample.

After remarking that horses have a very good memory,—that in the darkest nights they will find their way homewards, if they have but once travelled the same road,—that they remember, with much tenacity, good as well as bad treatment,—Colonel Smith mentions an instance of one which had been two years his own, but which had been left with the army, and brought back and sold in London. At the expiration of three years, he chanced to travel up to the metropolis; and, at a relay, getting out of the mail, the off-wheel horse attracted his attention; and upon going near it to examine it with more care, the animal was observed to recognise its former master, and to make many expressive gestures and movements indicative of its satisfaction at the circumstance, till the coachman at length asked if the horse was not an acquaintance.

A wolf was brought up as a young dog; he became familiar with every one he was in the habit of seeing, and, in particular, followed his master everywhere, evincing evident chagrin at his absence, obeying his voice, and deporting himself equal to a domesticated dog. The animal was presented to the Menagerie du Roi, where it continued disconsolate, scarcely taking food. After a time his health returned, and forgetting his former affection, and the object of it, became reconciled to his keepers. In eighteen months his former master returned, and without his uttering a word, the wolf perceived him in the crowd, and at the recognition evinced the most lively joy, the caresses of the animal, on being set at liberty, being as affectionate as could have been those of an attached dog after a few days’ absence. A second separation was followed by similar demonstrations of regret, but which again yielded to time. Three years had passed, and the wolf was living with a dog, which had been placed with him as a companion, when his master again returned. The long-lost but still-remembered voice was instantly replied to by the most impatient cries, which were redoubled as soon as the animal regained its liberty: such, indeed, was the keenness of his affectionate feelings, that the keepers, who offered to remove him, and to whom just before he had shown every symptom of fondness, were subjected to menace and very significant marks of displeasure. A third separation proved nearly too much for this affectionate animal; it became gloomy and despondent, refusing its food, rejecting the attentions of its keepers, and manifesting towards strangers the original savageness of the species. It was only after a long interval, that its health and spirits became in any degree restored. Commentary on this singular incident in the natural history of the wolf, which rests on the authority of Frederic Cuvier, and is quoted by Bell,* would be quite superfluous.

But of all animals, the canids, perhaps, exhibit the most striking and conclusive indications of conscious reminiscence, together with those particular mental states or affections, both emotional and intellectual, that, as in our own case, are alone mainly ascribable to an under-current and insensible influence of memory in connexion with association. A shepherd, employed to conduct some sheep from Westmoreland to London, took with him a young sheep-dog, which had never made the journey before, and, from his assistant being ignorant of the ground, he experienced great difficulty in having the flock stopped at the various by-roads and lanes he had to pass in the way. Next year, the same shepherd, accompanied by the same dog, brought up another flock for the gentleman who had had the former one. On being questioned how he had got on, he said much better than the year before, as his dog now knew the road, and had kept the sheep from erring in the route. The distance is calculated to be four hundred miles.†

In Daniel’s “Rural Sports” there occurs the subjoined anecd-

* Gibbon’s Decline and Fall of the Roman Empire.

* British Quadrupeds, p. 200.

† Jesse, Gleanings in Natural History, p. 94.

dote, which is quoted by Bell. "A few days before the overthrow of Robespierre, the revolutionary tribunal had condemned M. R— as guilty of a conspiracy. His faithful dog, a water-spaniel, was with him when he was seized, but was not suffered to enter his prison. He took refuge with a neighbour of his master's, and every day at the same time returned to the door of the prison, but was still refused admittance. He, however, uniformly passed some time there; his unremitting fidelity won upon the keeper, and the dog was allowed to enter. The meeting may be better imagined than described. The jailer, however, fearful for himself, carried the dog out of prison; but he returned the next morning, and was regularly admitted on each day afterwards. When the day of sentence arrived, the dog, notwithstanding the guards, penetrated into the hall, where he lay crouched beneath the legs of his master. Again, at the hour of execution, the faithful dog is there; nor can he be separated from the lifeless body. The next night after, the next day, the second night, it was remarked he was absent by his master's patron, who, suspecting whither he retired, sought him, and found him stretched upon his master's grave. From this time, every morning for three months, the mourner returned to his protector merely to receive food, and then again retreated to the grave. At length, he refused food; his patience seemed exhausted; and with temporary strength, supplied by his long-tried and unexhausted affection, for twenty-four hours he was observed to employ his weakened limbs in digging up the earth that separated him from the being he had served. His powers here gave way; he shrieked in his struggles, and at length ceased to breathe, with his last look turned upon the grave.*"

Still, it would appear, that the memory with which animals have been more particularly and generally endowed, is not altogether of that lively and energetic character which these facts or incidents would seem to indicate; in other words, that it is deficient in those high and distinguishing characteristics which we are wont to regard as pertaining alone to the more exquisite and perfect form of the faculty, subservient to processes of recollection, whether as manifested, *par excellence*, by man himself, or to a limited extent and degree by some of the more gifted of the lower animals. From what has been already stated in the present paper, the more prominent of these distinctive characteristics will now, it is hoped, be tolerably apparent; and if so,—assuming their correctness,—a ground all the more certain will be supplied us, in the way of contrast, for arriving at accurate, or at least approximately accurate conclusions, regarding the lower or sub sort of it, whether we term this passive, latent, or involuntary memory, or, with the Rev. Mr. Whewell, sense of successiveness,† its phenomena and laws, the objects to which it relates, and the uses which it subserves in their constitution. Now the length to which this article has already extended will preclude the possibility of doing more here than barely glancing at these several topics, interesting as they are.

Whatever be the peculiar and essential character of the subjective principle of which it is a common property or quality, or whatever the rank that may rightly be assigned it among the active intelligent powers or entities, it may here be affirmed, as a general fact or law of this sub-species of memory, that the recalling to consciousness of past sensations or impressions, the fruit of individual observation, felt and retained, proximately and necessarily depends, not, as in acts of recollection, on a conscious effort of volition, but upon the exciting and extra-voluntary agency of corresponding sensations or impressions presently experienced. Many different genera of animals have been apparently endued, in common with man himself, with the capacity of *willing* the remembrance, more or less distinctly or vividly, though after a comparatively much shorter interval of time, of a by-gone sensation or objective impression, or of several similar or kindred sensations or impressions formerly experienced in conjunction, or in immediate succession, together with the resulting allied feelings or emotions, in virtue of a distinct and independent voluntary effort attended with consciousness. In other words, they have vouchsafed to them the power of recollection to a

limited extent and degree; but, as just now intimated, the general rule or law that seems to influence and regulate the operations of the common and all-but-universal memory of animals, acknowledges not its authority and force at the instance of volition, but in total independence of it, in so far, at least, as its conscious agency is concerned. Here the presumption is, that some other psychical power, of more secret, though not less certain, operation than that of volition, interposes instead its active and authoritative governance and rule. But it may be argued that memory, under every habit and condition, is a self-regulating, as well as self-acting power; nor, within due limits, is this meant here to be contested. But were we to overlook or disregard its peculiar relations with the other co-existent psychical manifestations, in whatever these may consist in the individual animal, and the mutual influences that these relations necessarily involve, we should, if I am not very far mistaken, exclude from view much valuable information, both in reference to its particular operations, the nature or character of these operations, its objective bearings, offices, and final tendencies, of which, by a different line of procedure, it is possible to acquire the mastery. In viewing memory, then, alike in animals and in man,—not abstractedly, as an isolated and independent faculty; but as in reality intimately associated in operation with its correlative powers,—not as acting always, or even generally, in itself, of its own inherent energy, reproducing previously acquired impressions or ideas, and thus influencing, one-sidedly, volition and association, and volitional or associated actions or movements; but as being equally acted upon in turn by these closely allied mental energies. In thus contemplating the subject in its more natural aspect, I cannot certainly but think we attain perceptions of fundamental truths in this department of science that otherwise might ever have eluded the keenest discernment. We are thus, for instance, conducted to the feasible and not unimportant conclusion, that the common memory of animals differs from the recollective capacity of man, not only in a host of negative qualities and offices, but in its relation of reciprocity with the power of volition, whereby its inverse influence ceases to be felt. For, apart from their relative perfection and scope, which evidently bears no proportion that would warrant comparison for a moment, the one of these descriptions of mental manifestation differs from the other, as well in its chiefest bearings, concerns, and objective tendencies, as in the further and equally interesting circumstance of its more intimate and fundamental relationship, mutual as it is, with another common psychical power—that, namely, of association, or the law of simple suggestion of Dr. Thomas Brown; or, more correctly, perhaps, some modification of this principle or law, in obedience to which sensations or perceptions that influence presently are apt to suggest or connect themselves with their counterparts, laid by in the archives of the memory. In our own case, if we only regard, with a little attention, what passes in our minds, this sub-species of memory—whether my views regarding it prove correct or not—must often be felt to work, and to work most efficiently and agreeably. The abiding fruits of observation or experience that were old and dormant, and insusceptible of recollection by any mental effort, are being found ever and anon to obtrude themselves on the mind upon its being again influenced by similar acquisitions, and this quite unexpectedly on our parts, nay, often contrary to our strongest expectation. Even in the shortest life, and in the briefest period of it, what a host of different memories and associations may not in this way come afresh to influence the percipient man, that might otherwise have been irrevocably consigned to the tomb of all the Capulets. So it is presumably, with reference to the lower animals, among whom this kind of memory appears to be so largely diffused. Their consciousness, it may reasonably be supposed, is perpetually being jogged by the memories of prior and all but forgotten perceptions in virtue of the inciting agency of those of a correspondent character, that are newly acquired; successively, of course, and in relation to the recent acquisitions. But it is right to add, that we have no data whereon we may satisfactorily rely, for presuming that perceptions or ideas are even excited in them, as they are well known to be in us, on the opposite principle of contrast. That evidently would imply a rather high effort of imagination, of which, it is unnecessary here to say, they, without exception, evince but the faintest indications.*

But it is in the objects or subjects with which the memory of animals more immediately concerns itself, that its vast inferiority is found to consist. Now, without entering into

* Loc. cit. p. 224.

† His words are—"This constant and almost imperceptible kind of memory, by which the beginning and end of each instant [of time] is connected as it passes, may very feebly be distinguished in common cases from manifest acts of recollection, although it may be difficult or impossible to separate the two operations in general. This perpetual and latent kind of memory may be termed a sense of successiveness; and may be considered as an internal sense by which we perceive ourselves existing in time, much in the same way as by our external or muscular sense we perceive ourselves existing in space."—*Philosophy of the Inductive Sciences*, vol. i. p. 132, et. seq.

* Vide Fleming, Phil. of Zoology, vol. i. p. 221.

any detail here of the varied topics with which this part of the subject evidently teems, it will perhaps be sufficient generally to remark, that all those objective sensations or impressions that are in any way provocative of emotional feeling, agreeable or disagreeable, pleasurable or painful, or the like, appear to be of those of which the memory takes the surest and most lasting cognizance. The dog or horse, for instance, which has happened to be the subject of the lash, requires afterwards only to be shown the instrument of correction for a very sufficient remembrance; and the force, so to speak, with which the castigation, and the circumstances connected with it, has impressed itself on its memory, will be found to bear a certain ratio to the severity with which it has been administered, or rather, of the conflicting feelings of fear and anger of which it was the source. Again, the spaniel will often be found to exhibit all the indications of joy, when he observes his master resuming some particular habit which he was accustomed to wear during the hours of sport. The enjoyments connected with the pursuits of the field are thus excited, by the aid of associations, in the remembrance, as distinctly and vividly as they might have been by the sight of the gun.

Still it cannot be doubted for a moment that animals are somewhat susceptible as well of the retention of impressions of objects or things that are unattended by any sensible emotional manifestation. The fact of the horse, which has happened to make a new and unknown journey, being capable of himself accurately to retrace his steps by the identical route which he had been led to pursue in his outward course, even under circumstances the most unpropitious, clearly proves his having been influenced very distinctly by the ordinary impressions of the different objects witnessed by the way; and further, that his actions in so far were stimulated and guided by a right exercise of the memory. So also in other cases. But I have already transgressed my limits.

It is but right, however, to add here, that the ultimate tendencies or final cause of memory in animals, are all essentially subservient either to common animal gratification or enjoyment, or to purposes of a utilitarian character, whether in reference to themselves or others of the race. The ground of this statement were easy of proof; and I had intended at first to have gone into the consideration of the topic at some length, as well as the relation which memory bears to several of the active feelings or emotions, and intellectual operations of which animals are susceptible; but the trespassing further on the well-known and acknowledged liberality of this journal might, in an individual of my pretensions, be considered as presumptuous. A volume of notes, on the Principles of Action in Animals, which has now long laid by me, and out of which these papers have been culled, may be one day laid before the public in a separate form.

Lisburn, February, 1846.

CASE OF

ENCEPHALOID DISEASE OF THE PELVIC VISCERA.

By ROBERT HARDY, Esq., M.R.C.S. Eng. Hull.

History.—I was first called to attend Master A. R—, aged five years and six weeks, in June, 1844. I found him labouring under an acute attack of pain in the bladder, resembling one of the paroxysms from calculus in that viscus. Previous to this, his health had been always vigorous, his parents playfully terming him the "John Bull" of the family. A complete stoppage of urine having occurred, and the warm bath, anodynes, aperients, &c., having failed to give relief, the catheter was used twice, on one of which occasions a calculus was distinctly recognised at the extremity of the urethra. In a few days the symptoms were relieved, and though he occasionally suffered slight pain, and some difficulty in passing his urine, he had no further acute attack till the August following, when the same difficulties occurred as when he had been first seen, and the catheter &c. was used as before, for his relief. The calculus being a second time recognised by the catheter, Dr. Alderson was called in, and subsequently, Mr. Wallis, surgeon, was desired to make an examination of the case, which he did, and found that the calculus had now descended into the membranous portion of the urethra. The catheter on this occasion was used very gently, and it was hoped that the stone would be shortly voided, and our little patient effectually relieved. As far as could be ascertained, (and great care was taken in the matter on the part of his nurse, who was a highly intelligent woman,) no calculus was ever voided from the urethra, but from this period forward, all symptoms of stone vanished, and he continued to have the

full command of his bladder till within six or eight months of his death, subsequently to which period it dribbled away involuntarily, and particularly during the night. Soon after the use of the catheter last alluded to, pains and hardness were set up in the perinæum, and we concluded that the small calculus had escaped into the cellular tissue, between the urethra and rectum. Some feverishness having been set up, the perinæum was leached and fomented, salines and aperients were administered, and the pain was early relieved. The swelling, however, gradually increased, and continued equally hard, and we hoped for the ultimate discharge of the calculus through the perinæum, though, as yet, there were no indications of its approach to the surface.

The urgent symptoms having become relieved, (about the latter end of August,) he was removed into the country, where he remained for about a month. On his return, his general health appeared considerably improved, but the swelling and hardness of the perinæum were considerably increased, though no fluctuation could be detected. He had had no return of vesical irritation, or difficulty in voiding his urine, during his stay in the country. (N.B.—Dr. Alderson, on seeing him, now gave it as his opinion that the disease was encephaloid.)

From the very commencement of his illness, his bowels had assumed a constipated condition, which now became somewhat urgent, requiring powerful and frequently repeated purgatives, in order for its relief. This state of things got worse and worse during the succeeding autumnal and early winter months, it being frequently five or six days between the periods of defecation, in despite of the powerful means had recourse to for the patient's relief.

In the meantime, the tumour increased rapidly, pushing itself more outward, and extending first to, and then rapidly around, the intestinal rectum; no doubt, also, it was pressing at this period on its parietes internally, and forming a serious mechanical obstruction to the discharge of its contents. A side view of the pelvis now demonstrated that great deformity was proceeding therein, its posterior aspect being projected very considerably backward, especially at its inferior parts, which had become also elongated. In these two directions the swelling continued steadily to increase till the period of his death, the enlargement and deformity in the last stages of the disease having become truly hideous.

In Christmas week, 1844, matters became so urgent with regard to the bowels, that it was found necessary to have recourse to a small gum-elastic tube, carefully passed up the obstructed rectum, through which stimulating injections were passed. Partial relief was thus obtained, and, for three or four days afterwards, occasional evacuation of fæces, pressed small as a catheter, and flattened, were forced off with difficulty. This was again succeeded by obstinate constipation, from the causes before named, and the injections were now ordered to be used twice per week; they were continued up to November, 1845, but they had latterly failed to have the desired effect, and it was evident, from the immensely distended abdomen, and occasional violent pains within that cavity, that unless Nature got some relief, the child's life would be speedily terminated. At this period he was suddenly seized one evening with violent convulsions, which continued nearly all night. During these paroxysms, large evacuations per rectum took place, both of flatus and fæces. The internal resisting forces were broken down, and thenceforward, till death, the fæces were being continually forced through the bowel, the sphincter ani having previously lost its resisting energy.

In the latter stages of the disease, and more especially after the convulsive paroxysms, before referred to, our little patient had occasional febrile attacks, accompanied with pain, referred always to the bowels and stomach. These were usually relieved in three or four days by saline with gentle anodyne medicines, the latter becoming more and more necessary, until given regularly every evening, and occasionally in the morning, if he became very unhappy. With the exception of the febrile periods now named the appetite remained good, and the sleep sound, till within a few days of death, nor did he ever complain of violent pain in the affected parts, but more of a sense of uneasiness and heat; these symptoms were greatly alleviated by cooling lotions, which were continued to the end of life, and which no doubt greatly aided in keeping the skin covering the diseased parts intact. For many months before death a red excrescence had pushed itself out of the extremity of the rectum, and occasionally bled a few drops of blood. The greatest care possible was used by his nurses to keep him dry and clean, by which means he received great alleviation from suffering.

From the commencement of his illness he evidently lost

flesh; but within the last six months of death, emaciation rapidly proceeded, and at the period of his decease it was extreme. Though occasionally peevish, as might be supposed, yet, generally speaking, his spirits were buoyant; he amused himself with his books and toys, and in conversation with his attendants and friends. When inclined to play with his brothers, he knelt on his knees and hands; and when resting, he laid on his face or on either hip. He had no closing convulsions, or severe attacks of pain, but appeared to pass off the stage from sheer inanition, his faculties remaining vigorous till within a few hours of his death.

From the first decided appearance of external tumefaction, the cephaloid character of the disease became more and more evident, by numerous venous trunks being seen traversing the skin. These became especially evident about the apex of the sacrum, and this part, which also formed the apex of the tumour, was more especially the seat of heat and tenderness, becoming, towards the last, bright and shining, as if ready to lacerate.

Within the last eight months, the skin round the anus and on the perinæum became tuberculated, but never gave way. On the day succeeding death, (March 13th, 1846,) a post-mortem examination of the body was made by myself and assistants, in the presence of Dr. Sandwith, who kindly took down the following notes on the occasion:—

"Emaciation of the body extreme; abdomen tumid; an immense tuberculated tumour, commencing at the scrotum anteriorly, runs backward to the anus, which it surrounds, and is filling up the whole space situated between the tuberosities of the ischia, extending posteriorly, and also upwards to the base of the sacral bone. Its surface is very irregular, with a fungous excrescence shooting out of the right side of the anus.*

"The skin covering the tumour is traversed by numerous vessels, especially over the lower extremity of the sacrum, and surrounding the anus.

"The right groin is occupied by a hard tumour of uneven surface, of the size of a lemon; and a similar one, but much smaller, is found in the opposite groin. The whole hypogastric region is occupied by a solid tumour, the apex of which reaches to the umbilicus.

"On dividing the large perinæal tumour from the scrotum, backwards to the rectum, its outer layer is found of the density and appearance of ordinary carcinomatous tumour, and creaks beneath the scalpel. As the incision is deepened, the scirrhous matter becomes mixed with softer material of the same general character, interspersed with numerous bloody points; and deeper still, it has the appearance and consistence of brain intermixed with coagula,—the true fungoid tumour.

"The whole of the rectum is affected by the disease, and is so compressed and straitened that the little finger can with difficulty be passed through its lower two-thirds. The mucous lining is found to be intact. The excrescence before referred to, as pushing out of the bowel, is found to be nothing more than an internal hemorrhoidal tumour.†

"On opening the abdomen, the large tumour before spoken of was found to consist of the urinary bladder, the upper third of which appeared healthy, and the lower two-thirds invaded by the disease. On opening this viscus, the diseased portion of the anterior wall was found full two inches in thickness; its posterior wall from five to six inches thick: in both cases white, and of scirrhous hardness. The upper third of the bladder, though much thickened, was found healthy in structure; it contained a few ounces of clear straw-coloured urine, of the usual odour. The cavity of the diseased portion was completely obliterated, or diminished so as to form a small canal of the calibre of the urethra, with which it was continuous. The urethra itself was found pushed considerably towards the left side of the pubic symphysis, but its mucous lining remained entire, as was also the case with the bladder.

"The disease was found completely to envelop the ossa pubis and lateral parts of the pelvic inlet, and to extend upwards to the æla of the ilia."

As we had already spent much time in the above examination, we did not minutely examine the other abdominal viscera, but a view of their exterior led us to infer that they had not partaken of the fungoid disease.

Hull, April, 1846.

* The nodules on the surface of the tumour were chiefly on the perinæum, and resembled in appearance blisters raised by scalding water, making advance towards a state of phacelation.—R. H.

† A careful exploration of the diseased mass situated between the rectum and urethra was instituted, but no calculus was met with, though several points of gritty matter were found interspersed through the mass, especially near the pubic symphysis.—R. H.

CASE OF ANEURISM OF THE FEMORAL ARTERY CURED BY COMPRESSION.

By THOMAS MACKERN, Esq., M.R.C.S., Litherland, near Liverpool.

SURGICAL science is daily approaching, with steady, unswerving efforts, the summit of its sphere of usefulness. Its progress is powerfully accelerated by any improvement which secures to its practical operations the greatest amount of safety, coupled with the utmost economy of time and pain.

Among those improvements, compression of the artery, as a substitute for the ligature in certain cases of aneurism, is destined to assume an important position.

The almost certain immunity from the various risks that too often result from the most skilful operation by the ligature, demand for the treatment by compression the serious attention of the surgeon, when with this we remember, that in the event of failure, the pressure employed serves to facilitate the cure by the ligature, and, above all, that it saves the patient's mind and body the humiliation of the knife. To pass by this mode of treatment, without examination and experiment, is a most culpable breach of duty towards the profession and the public, of which, however, I am satisfied few medical men in this liberal and enlightened age will be guilty. In the infancy of any discovery, every fact relative to it is of importance in the settlement of its claims; I therefore lay the following addition to the statistics of this operation before the profession.

Philip M—, aged thirty years, of sanguineous temperament, well-developed frame, and hitherto in the enjoyment of excellent health, which, however, he has severely tested by free and frequent libations; by occupation, master of a canal-boat, a life of comparative ease; is occasionally obliged to raise heavy weights, and has frequently ridden the horses employed on the canal. He presented himself to me on the 15th of December, 1845, on account of a swelling which existed on the inner side of the right thigh, and which, he stated, first made its appearance about sixteen months since, while in bed. He then distinctly felt a small tumour, with a slight pulsation, accompanied by pain. He gave it no particular attention for six months, during which period it increased in size and pulsation, but never interfered with the due performance of his duties. Within the last three months the pain and pulsation and size of the tumour had increased sufficiently to cause him considerable alarm, and he applied to several surgeons in Liverpool, who proposed tying the vessel, but he obstinately refused to be "cut." After examination, during which I found a large irregular aneurism, situated on the femoral artery, where it enters Hunter's canal, I explained to him the nature of the disease, and proposed trying the milder measure of compression, to which he gladly assented.

I employed the Italian tourniquet, (Signorini's,) and commenced the compression immediately below Poupart's ligament, without entirely suspending the circulation in the vessel. For the first week I did not allow the instrument to remain on longer than half an hour at three different periods of the day. In the course of three weeks, he could bear it on for six or eight hours, shifting it occasionally along the course of the vessel. The tumour now became solid, and could not be diminished by pressure; and several new vessels were formed round it. As there was no disturbance of the system, and the heart maintained a healthy action, I gave him directions to keep on the instrument as long as possible, and he generally had it on for half the twenty-four hours. I could not induce him to use it at night; moreover, as he lived at some distance from my house, I was compelled to trust to his discretion in its use, and confinement to bed, which confidence I found he occasionally abused, of course, delaying the cure. The pressure was commenced on the 20th of December, and the instrument was laid aside on the 26th of January, the pulsation having quite disappeared, and a most sensible difference in the size of the tumour being apparent. In the first fortnight, small doses of digitalis and tartar emetic were used; after which, as the circulation was moderate, he was allowed the free use of animal food, to increase the fibrin in the blood. The after-treatment consisted in an elastic bandage over the seat of the aneurism; and a week after the cessation of the pulsation, with the cautious use of the limb, he returned to his employment on the 14th of February, and has remained to the present time free from any inconvenience, the tumour having nearly disappeared.

I am quite satisfied, if this case had been more under my control and inspection, as in an hospital, the pulsation would have ceased in half the period. As it was, the time occupied

was not greater than is usually required for the ligature; the result was infinitely more satisfactory, and is a fresh confirmation—for the benefit of the sceptics—of the power of this modified plan of treatment, and its applicability to aneurisms of the extremities.

Litherland, April 14th, 1846.

OPERATION FOR THE CURE OF IMPERFORATE ANUS.

By W. G. SMYTH, M.D., London.

A MALE infant, born at No. 45, Catharine-street, Lambeth, had been in the world for two days before the parties attending it discovered the malformation described below. The child had refused the breast—had been vomiting and hiccuping: the abdomen was swollen and hard. It was obvious that the rectum lay deep, there being no indication, either by colour or touch, of its situation, or of any external preparation for an anus. My friend Mr. Smyth, of Lambeth-walk, agreeing with me that this was not a case to admit of a moment's delay, with his assistance I proceeded to search for the rectum, the child being placed on the midwife's knee, on its belly, being less likely to kick or be troublesome in that position. Making an incision in the middle of the perinæum, the sphincter was observed to be straight, its inner sides being in close contact. This was cut through, and part of the levator ani and the fatty matter beneath were divided to the depth of an inch; but I could find no indication of where the rectum lay. I enlarged the external wound in both directions, and then continued to cut cautiously upwards and backwards; and having arrived at the depth of about three inches,—being able to touch the pubes in front and the sacrum behind, the wound being large enough to bury the index finger,—on examining with great care, we could not discover any appearance of a rectum. However, when the child cried, a slight impetus was felt,—a descending from behind,—towards which, through the intervening substance, I pushed a trocar, as slender as an exploring needle; and on the second application, the escape of gas through the canula satisfied us that the bowel had been reached. I made an attempt to enlarge the opening with a director and a bistoury, but found there was no room to act with certainty. A full-sized trocar I easily introduced; and by pressing on the bowels, a considerable quantity of meconium was expelled; a bougie was then left in the wound. On the next day, a probe was passed, along which the canula was easily guided into the bowel, which it reached when pressed into the external wound; but it was only by squeezing the bowels that the contents could be made to flow outwardly.

It was quite evident how difficult, if not impossible, it would be to make an efficient opening for the fæces to pass through this long and rather curved channel; and how difficult it would be to prevent such an opening from closing; and also how unlikely the power of either voluntarily expelling or retaining the fæces would be obtained. I therefore considered it expedient to bring the bowel down into the wound: for this purpose, I passed a small pair of case-forceps along the canula, and laying hold as near the opening into the bowel as I could reach, I gently and gradually pulled it down upon the canula. This being repeated two or three times, the opening into the bowel was brought down to near the mouth of the external wound. No means were used to retain it, and the injection of warm water now thrown up was returned with power. The canula remained in the bowel for ten days, the fæces being freely expelled through it by the muscles of the rectum. The greater portion of the wound healed by the first intention around the canula by granulations. The sphincter now acts well, and a good anus is formed—if anything, a little too far back; the bowels act naturally, a bougie being occasionally passed. A month has elapsed, and no bad symptom has occurred.

Remarks.—In these cases, having no means of knowing how or where the bowel terminates, there must always be caused serious difficulty to the surgeon; but as the alternative of not giving relief is death, we must not hesitate to run dangerous risks in obtaining our object. Infants are found to bear a great deal without evil consequences accruing, provided no vessel or structure of importance be injured. The primary object being to empty the bowels, I would advise a proper opening to be made at once. The great danger is, the bowels becoming loaded, bagging, and pursing in the cellular tissue, being stretched until the muscular and peristaltic motion is lost, and the child made dangerously ill. I saw a case of imperforation seven or eight years ago, in which I think Mr. Double-

day confined the mother. The rectum was easily enough found, at the depth of an inch, but the bowels had become so crammed and distended, that I could not get them to act, and the child died in a few days.

In making a canal through such a spongy substance as the cellular tissue, occupying the space where the bowel should be, such tissue will be found a most inadequate substitute for the muscular rectum; and in many cases the bowel may be found floating loose, or easily separated from its attachments, or these stretched, so that it may be brought down into its proper position; the passage then can easily be kept open, the tendency to healing, and so rendering another operation necessary, having in all cases been an immense obstacle to a perfect cure.

Vauxhall-walk, April, 1846.

CASE OF

SEVERE OBSTRUCTION OF THE BOWELS.

By THOMAS WILSON, Esq., Senior Surgeon to the Hull and Sulcoats Dispensary.

I WAS recently called in to a gentleman, of middle age, and rather spare habit of body, who was suffering from a painful affection of the bowels. He had been attended by me on two previous occasions, for a similar complaint: the attack this time commenced with griping about the umbilicus, increased by pressure, but yet, not to any great degree; the region of the colon was free from pain, empty, and much distended with flatus; the tongue furred; the pulse 100, and full. The previous attacks having been characterized by inflammatory symptoms, together with great obstruction of the bowels, and the antiphlogistic plan of treatment, combined with strong aperients and turpentine injections, having proved successful, a similar method was on this occasion had recourse to: fifteen leeches were applied over the umbilical region, followed by hot fomentations, and a drop of croton-oil with calomel and colocynth pill were given, alternated with a castor-oil mixture every four hours: this was on the 23rd of February. The next day, the bowels not having been relieved, and the pain, though less severe, still continuing on pressure, an aperient injection, containing sulphate of magnesia, aloes, and linseed-oil in warm gruel, was given; the castor-oil having been rejected by the stomach, a sulphate-of-magnesia mixture with colchicum was substituted, the croton-oil pills being continued. In the evening, no relief to the bowels having been obtained, an injection of three ounces of turpentine, two ounces of linseed-oil, three drops of croton-oil, and two scruples of jalap-powder, in a pint of gruel, was administered, but without effect. On the 25th, my patient was much worse: vomiting had occurred repeatedly during the night, after taking the sulphate-of-magnesia medicine, the matter ejected being dark-coloured, like coffee-grounds; the bowels were unrelieved; the pain still continued, though not much affected by pressure; the countenance was very anxious, the voice weak, the pulse 110 and full. The medicines were now discontinued, and the following prescribed—of powdered jalap and scammony each two scruples, calomel one scruple; to be divided into two powders, one to be taken immediately, and the other at the expiration of two hours; they produced no effect on the bowels, but were retained by the stomach. All these means having failed in overcoming the obstruction, and the patient being now in a very precarious state, Dr. Horner, senior physician to the General Infirmary, was called in for consultation. Sixteen ounces of blood were then taken from the arm, and the following medicines prescribed, ox gall one drachm, croton-oil twelve drops, to be divided into eighteen pills, of which three were taken every two hours; an injection also, containing six drops of croton-oil, was given, in a pint of solution of common soap. The pills produced sickness, owing, as the patient said, to their taste; they were altered to the following: croton-oil twelve drops, oil of carraway-seeds four drops, carbonate of magnesia, sufficient to make into twelve pills, of which two were to be taken every two hours.

26th.—The blood taken from the arm did not exhibit inflammatory appearances, being neither cupped nor buffed. All the pills had been taken during the previous night, without being accompanied by vomiting, or having the slightest effect on the bowels. Our remedies having hitherto proved ineffectual in affording relief, a large mustard plaster was applied over the whole extent of the abdomen, and the hot-water hip-bath directed to be used; a powder, consisting of ten grains of gamboge, and one scruple of powdered scammony, was also given every hour, alternately with a dose of strong infusion of senna, containing also salts and jalap. The

powders were retained by the stomach, but the infusion was rejected, as had been previously the case with all fluid medicines; it was therefore discontinued. Fifty grains of powdered gamboge, and five scruples of powdered scammony, having been taken by the patient without any effect upon the bowels, an enema, composed of four ounces of spirits of turpentine, and four ounces of concentrated essence of senna in hot gruel, was administered. In about a quarter of an hour, slight relief was for the first time obtained. In the course of two hours, the bowels were again freely and copiously acted upon; the gamboge and scammony were therefore discontinued, and thirty-five drops of Battley's sedative solution of opium given, with the object of procuring repose to the patient, who was now in an exhausted and restless state, and also of aiding the action of the purgatives by its antispasmodic powers. An hour or two after taking the opiate, he was again freely purged, and subsequently passed a comfortable night. Very little uneasiness or pain was afterwards felt; and the bowels, having been kept regularly open by mild aperients, he progressed favourably, without the appearance of any bad symptom, or having to complain in the slightest degree of the powerful remedies used. His usual good health was soon established. Wishing to condense this account as much as possible, a daily statement of the condition of the tongue, pulse, skin, urine, &c., has been omitted. It may be sufficient to state, that throughout the tongue was moist, pale, and covered with a whitish fur; the pulse full, and beating from 100 to 110; the skin was not much affected; the urine scanty, high-coloured, and offensive. During the attack, the patient refused all nutriment, with the exception of tea, barley-water, and lemonade with cream of tartar.

This case shows the great extent to which powerful purgative treatment may be carried, in obstruction of the bowels, when not dependent upon inflammation, milder measures having failed. It gave me much satisfaction to find that Dr. Horner's view of the case was similar to my own, in considering it, in this instance, not inflammatory, but probably owing to accumulations in the bowels, which had for some time previously been in a very torpid state; time, therefore, was not lost by having recourse to remedies that had previously been found inefficient; but more active aperient treatment was at once resorted to, premised by bleeding, as a preventive of inflammation, and to relax constriction.

Hull, April, 1846.

CASE OF TETANUS, IN WHICH ACONITE WAS ADMINISTERED; AND REMARKS.

By WILLIAM NEWTON, Esq., M.R.C.S. Eng., Newcastle.

On the 1st of April, 1846, I visited Matthew S—, a poor person, residing in my medical district in the Newcastle-upon-Tyne Poor-Law Union. He was labouring under a confused wound of the right great toe, which had happened to him on the 28th of the previous month. The toe was greatly swollen, and was the seat of diffusive suppuration. Pain was severely felt, and the patient complained of its extension along the limb. Two or three free incisions were made, and the pus evacuated was so foetid, that the women who were present could scarcely stay in the room. Poultices were now applied, and the bowels acted on with aperient medicine. A portion of bone was discharged along with the pus, and the wound appeared to be going on well. When I called, on the morning of the 7th, he complained of stiffness about the lower jaw, and could not protrude his tongue. These symptoms, he said, had seized him suddenly about breakfast time. The man being sixty years of age, an old sailor, who had, in the course of his life, suffered two or three fractures of the limbs, and who was much reduced in health, beef-tea and wine were given. The bowels, which had become costive, were opened with croton-oil, and under this treatment there was an apparent amendment. But during the night of the 11th and the morning of the 12th, general tetanus had set in; and when I called at nine o'clock A.M., (for I had not been sent for,) I found him in dreadful convulsions, presenting, in fact, the usual symptoms of acute tetanus. The head was drawn backward and fixed, and his body described an arch. Mr. Preston, surgeon, kindly accompanied me in one of my visits, and the following prescription was ordered:—Solution of muriate of morphia, three drachms; tincture of aconite, forty drops; tincture of tobacco, forty drops; camphor-water, sufficient to make a mixture, of which a drachm is to be given every hour.

I made three subsequent visits, and saw that the medicine was duly administered. I could not discover that any one of

the ingredients had produced its usual physiological effect on the system; certainly none was exerted on the disease, for the patient died at half-past three o'clock next morning, convulsed to the last moment. No post-mortem examination could be obtained.

Remarks.—This was an ordinary case of tetanus, and that disease is better described in books than I can hope to define it. But it may be useful in the investigation as to the utility or otherwise of the properties of aconite. I will not be so rash as to state that aconite has never cured tetanus, or that it was in this instance given to a favourable subject, or at a favourable time. Still, it appears partly to negative—at least to limit—its alleged virtues. A negative result is not beset with more difficulties than a supposed positive effect,—nay, it is surrounded with fewer, in reasoning on the effects of medicine over disease.

My chief reliance would have been, in compliance with evidence, on tobacco as a therapeutic agent; but the present case seemed to forbid its use. The patient was advanced in years, and his constitution broken down; and it seemed to me, that by giving tobacco so as to produce a decided effect, it would be more likely to arrest the heart's action than to stay the progress of the disease.

REMARKS ON MR. TYTE'S CASE OF RUPTURE OF THE UTERUS.

By DAVID G. JONES, Esq., Surgeon, London.

In No. 6 of the present volume of *THE LANCET* is a case quoted by Mr. Tyte, of Harrow, which proved, on a post-mortem examination, to be rupture of the uterus; and in No. 8 of the same volume, are a few inquiries by myself, with a summary of his case, wishing to ascertain the correctness of his report, the case in question exhibiting quite a new mode of treatment, the result of which is not very satisfactory. In No. 11 Mr. Tyte states, that the summary of his case is not correctly quoted by me, inasmuch as his statement runs as follows—viz., that the child's head descended low in the pelvis, slightly dilating the perinaeum, whereas, my statement was, that the child's head was pressing on, and dilating, the perinaeum. May I be permitted to ask a question here—i.e., when the perinaeum is being dilated, after rupture of the membranes, what is it that dilates the perinaeum? Again: this was observed at ten o'clock, seven hours after she was first taken in labour, when the pains were very severe, recurring with very little intermission. This state of things continued for two hours. There was no distortion of the pelvis or impaction whatever, the child was of an average size, and the soft parts were dilatable. What, therefore, must be inferred from these circumstances? Why, that the child must be almost expelled, of course. Mr. Tyte likewise states, that I neglected mentioning his attendance on the patient, three years before, with a tedious labour. Was this her first or second labour? From the time that had elapsed, of course I concluded it was the first, which is generally rather tedious than otherwise, and therefore I did not think it worth mentioning, from the healthy state of the patient and capacity of the pelvis. Mr. Tyte observes, that I characterize the treatment as unusual. I am still of the same opinion. What was the necessity for performing craniotomy and evisceration in the present case? None whatever; but it was disadvantageous and most unjustifiable, as it delayed the expulsion of the child. Mr. Tyte, moreover, remarks, that if he has erred in his mode of conducting the case, he has the satisfaction of having done so in excellent company, rehearsing the following quotation from Dr. R. Lee's "Lectures on Midwifery":—"When the head of the child presents, and rupture of the uterus takes place, the best plan is, without delay, to deliver with the perforator and crochet, and to prevent the child, during the operation, from passing through the rent into the peritoneal sac, pressure should be made over the fundus uteri, and the opening made in the head in a most gentle manner." That he, Dr. Lee, had not seen a case of ruptured uterus in which it was possible to deliver with the forceps, and that he was not aware of any case of ruptured uterus in which the child was born alive over the forceps. I would advise Mr. Tyte to look over Dr. Lee's lectures more carefully, as he will find this treatment applicable when the head has not descended into the pelvis. In three cases of rupture of the uterus recorded in Dr. Lee's "Clinical Midwifery," delivery was effected by version; thence Dr. Lee's expression, that he had seen no case of ruptured uterus where the patient could

be delivered with the forceps, from the situation of the fœtus in utero, of course. Again, in favour of his treatment he quotes the following:—"Efforts have frequently been made to deliver with the forceps in such cases, (says Dr. Collins,) but this instrument is seldom applicable, as the introduction of the blades generally forces the head out of our reach; besides, but little would be gained, for the child dies shortly after the rupture takes place. The dimensions, too, of the pelvis, are, in such cases, for the most part defective, (therefore impeding the descent of the child,) all which circumstances would seem strongly opposed to this mode of delivery." In all these remarks I perfectly coincide. Mr. Tyte does not take into consideration the capacity of the pelvis, by which condition we mostly find such cases governed. In his case there was nothing of the kind. There is a material difference here, so that Mr. Tyte will find that the above quite accords with my views; not, as he expected, that with my modern views they would not accord. I think this word *modern* is more applicable to himself, for if he refers to Drs. Denman, Blundell, Ryan, Davis, Lee, Rigby, Collins, &c., he will not find the dreadful operation of evisceration performed under the same circumstances. Mr. Tyte, in attempting to answer my inquiries, remarks that the difficulty of delivering with the vectis and forceps arose from the frequent recession of the head. Would the recession not be greater in attempting to perforate the head, than applying the forceps in a capacious pelvis? Dr. Ramsbotham says in these cases there is but one mode of practice that affords the least chance of life—viz., speedy delivery. If the head has entered the pelvis, and has not receded, the child may be extracted by the agency of the long or short forceps; but he generally found the head had receded beyond their reach. He would then introduce his hand, and turn. In Mr. Tyte's case it had receded somewhat, but was in the cavity of the pelvis, and had descended after that. It is seldom under rupture of the uterus that the perforator can be necessary or available. Mr. Tyte, to make his case appear more clear, (as he imagines,) asks, who would question that delivery ought to be effected at once!—as he contended, from the general circumstances of the case, he was imperatively called upon to deliver, and that he did not believe any competent judge would question it. This is certainly the best remark that he has yet made, and I perfectly agree with him, from facts stated above. But had this practice been put into operation, the case probably would not have terminated as it did. Mr. Tyte, towards the conclusion of his letter, mentions that I wish to impress upon your readers that I could have performed the operation in little less than half an hour. Far from it: Mr. Tyte is labouring under a very great mistake here. I said, that the operation with the forceps could have been performed, with any management, in one-sixth of the time occupied by him—viz., four hours, under the circumstances that presented themselves in the case in question. I should be very sorry to undertake the operation under such a presentation and combination of circumstances. I may observe, that after the post-mortem examination, it was ascertained that rupture existed. This is what he calls having the honour of pursuing Dr. Lee's practice. But here he does not forget to leave the last part of the business unmentioned.

High Holborn, March, 1846.

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 20, 1846.—MR. DENDY, PRESIDENT.

ALBUMINURIA.

MR. PHILP exhibited an enema syringe, which, by means of an exhausting pump, had the recommendation of affording a constant stream, instead of acting by jets, as was the case with the old-fashioned syringe.

MR. FISHER related a case of affection of the kidney, in which the most prominent symptom was the presence of a large quantity of albumen in the urine for a period of several months, as was evidenced by testing the fluid with nitric acid and heat. Under the treatment pursued, which was, in the commencement, antiphlogistic, including the use of mercury to ptyalism, followed by the tartrate of iron, the patient got quite well, the urine becoming, and continuing normal. The patient shortly afterwards contracted typhus fever, of which he died, and after death, the kidneys were found congested only, no marks of disorganization, even under the microscope, being detectable. The case was brought forward to show the uncertainty of the signs of disease as exhibited in some cases; in this instance, in particular, it would seem that

a case of Bright's disease had been cured, but the post-mortem examination showed that no such disease had existed.

DR. COPLAND had listened to the case with interest, as it confirmed some views which he had advanced in his article, "Dropsy," to show that the presence of albumen in the urine did not afford sufficient evidence that the kidney was in a granular condition. This condition of urine might be present when the kidney was inflamed, or simply congested, as was often the case after scarlet fever.

DR. ROBERTS mentioned a case in which albumen was found in the urine, probably as the result of the application of a blister. He mentioned another case, also, in which there was a peculiar foetid condition of the urine in an old gentleman with enlarged prostate; there appeared to be no cause for the phenomenon, and he asked an explanation of it. The urine was usually acid; once, after a shivering fit, it became suddenly alkaline, but after a sleep, again assumed its acid character.

MR. HILTON observed that the urine was often offensive when it had been long alkaline.

THE PRESIDENT had observed a peculiarly offensive condition of urine in cases of scurvy.

CHEMISTRY, PHARMACY, AND MATERIA MEDICA.

A LETTER, ADDRESSED TO BARON LIEBIG, PROFESSOR AT THE UNIVERSITY OF GIESSEN, (G. D. OF HESSE.) By MM. LAURENT AND GERHARDT.

MONSIEUR LE BARON,—You have just published a brochure,* in which you have attacked our labours in the most injurious manner.

You are at liberty, doubtless, to find our labours to be bad, and you may also attack us in a style at which any well-bred man would blush; you alone are responsible for your own expressions.

But you have no right to calumniate us; you have no right to designate us forgers, highway robbers, to say, in the face of the world, that in order to refute your theories, to expose your errors, we have deceived the Academy of Sciences, in presenting to that body, on the 22nd of September last, experiments which do not exist, which we never made.

Were you a Frenchman, Monsieur le Baron, we might call you to account for these calumnies, before the legal tribunals, for those experiments were made in Paris, in the laboratory of M. Pelouze, for the most part in the presence of M. Pelouze, or his pupils, and upon substances furnished by that chemist, and also in Montpellier, in the laboratory of the Faculty of Sciences, partly with materials furnished by M. Pelouze, and partly on products prepared in the latter laboratory, and which were shown to many persons, amongst others to the Dean of the Faculty.

This will serve to show the value of your assertions.

Since your being a Foreigner insures your impunity, we have no other resource against you than an appeal to public opinion; we beg you, therefore, Monsieur le Baron, to have the goodness to give our reclamation its right, by retracting your words, and to accept our *salutations empressées*.

AUG. LAURENT,

Corresponding Member of the Academy of Sciences.

CH. GERHARDT,

Professor to the Faculty of Sciences, Montpellier.

In publishing this letter in his journal *The Annalen*, Baron Liebig tells us, the authors have sent no less than six copies, to be placed in a public reading-room at Giessen, besides very liberally distributing copies of it elsewhere; he says, "I think proper to accompany this letter with a few remarks."

It will be immediately perceived that the authors of this letter have only tried to refute one point of my article on M. Gerhardt and his relation to organic chemistry. Their object is to prove, *by witnesses*, that the statements they communicated to the Academy, in their letter of the 22nd of September, last year, are the results of experiments really instituted. By the addition of his name, M. Laurent has incurred part of the responsibility of these statements; and I think I am not deceived if I say that the only object of the reclamation is his justification.

The statements contained in the communication of the 22nd of September, 1845, correspond, however, word for word, with the note laid before the Academy in January, 1844,

* In the present volume of THE LANCET, p. 84.

(*Comptes Rendus*, p. 158,) therefore two years ago; they are exactly those which he endeavoured to maintain in January, 1845, (*Comptes Rendus*, p. 27,) when he declared that he, as well as two other very well-known chemists, had not succeeded in obtaining mellonide of potassium.

There can, I should think, be no doubt that the formulæ which M. Gerhardt gave in July, 1844, and in January, 1845, as the composition of the mellon compounds, only express his own opinions, and are not by any means the results of experiments made by himself; and the complete manner in which his statements of the 22nd of September, 1845, correspond with his former ones, seemed to leave no doubt as to their being of the same origin.

The contents of the note of the 22nd of September, in which M. Laurent bore a part, by adding his name, turn upon the refutation of two principal points. It is said that I asserted—1st, that mellonide of potassium is produced by dissolving mellon in potassium; 2ndly, that hydromellonic acid is decomposed by heat into mellon and hydrogen. Both of these things are impossible according to the views which MM. Gerhardt and Laurent have taken of the composition of the mellon compounds. These two assertions are contradicted in their note, and the Academy is made acquainted with the error which I have committed. "It is impossible," say MM. Gerhardt and Laurent, "to conceive, according to this, the formation of mellonide of potassium out of mellon with potassa: we have, besides this, no example of such an extraordinary reaction as hydromellonic acid affords by heat.

If I now maintained that the Academy has been deceived by Messrs. Gerhardt and Laurent, I believe I have an undisputable right to do so, as the assertions which they attributed to me are false, and were never made by me. I have never maintained that mellonide of potassium may be prepared by the solution of mellon in potash; on the contrary, I have shown and described circumstantially, (*Ann. de Chimie et de Physic*, p. 55,) that there is formed, under these circumstances, a salt of a strong alkaline re-action, the acid of which in the silver salt contains 1.11 per cent. of hydrogen, and 22.18 per cent. of oxygen.

I have never asserted or maintained that the so-called hydromellonic acid is decomposed by heat into mellon and hydrogen.

The statements of Messrs. Gerhardt and Laurent could therefore have no other object than to lead the Academy astray in their judgment. I say, they could have no other motive, because I have, with a perseverance which scarcely any other chemist would have exercised, endeavoured, although altogether without success, to correct their error a year before.

After I had read M. Gerhardt's note, addressed to the Academy in January, 1844, wherein these assertions first appeared, I determined to repeat my labours on mellon and its compounds. This investigation presented great difficulties, and it cost me three months labour to discover a good method for making mellonide of potassium, and to determine the composition of the mellon compounds. Theory and theoretical speculations were not at all questions in my labours, (*Ann. de Chem. et Pharm.*, vol. l. s. 338,) as they consist of a series of results expressed in figures. What sentiments I then entertained may be judged of by the paper itself, where, at page 344, I said, "If before describing my own experiments, I have said nothing more of the labours and results of others (Volkel's and Gerhardt's) which are opposed to the existence of mellon itself, or to its nature as a compound radical, than that I have read them, it is only because I think that they will be refuted in the following details:—

This hint, which might, to any impartial person, serve to prove that I sought to correct mistakes in the most forbearing manner, and wished to avoid a dispute, failed to accomplish its object. Even when, after some months, there appeared an absurd, contradictory, and totally false interpretation of my experiments from the pen of M. Gerhardt, in his *Comptes Rendus mensuels*, (January, 1845,) I forebore saying anything; but when, in September of the same year, the same inventions and false assertions re-appeared in the circle of the Academy, and were discussed in their original construction, there could not possibly be any more doubt as to the intention and object of these attacks; and no one will blame me if I expressed myself with the full indignation which such proceedings must excite.

The proofs that they have worked upon the mellon compounds, to which MM. Gerhardt and Laurent allude in their letter to me, in themselves say nothing, and are worthless, because they do not demonstrate that they really analyzed mellon combinations. I do not doubt that they have insti-

tuted analyses in M. Pelouze's laboratory of substances, which they took for mellonide of potassium; but who would give to such proceedings the name of an investigation, and ascribe to them the character of demonstration, as they have done! Five months have now elapsed since the 22nd of September, 1845, and neither of these two chemists has ever published any result in figures of this analysis, which might make it possible for other chemists to judge of the correctness of their statements. Are these not sufficient grounds to make one believe that the statements of the 22nd of September, 1845 rest upon the same basis as the two preceding ones, which correspond literally with these, and are not founded upon experiments and analyses, and for which no reclamation is made!

Nothing is certainly more convenient than this kind of refutation by the analysis of substances, which they might, in case of need, have obtained as good, and perhaps even much better, at that excellent manufactory of chemical products which bears the honourable name of M. Roubiquet. It often happens that my assistants make combustions of organic substances for me, because the time that I spend in my laboratory in teaching, is much too valuable for me to perform operations with which my assistants are perfectly acquainted; but I should never dream of valuing in the least, or of publishing an analysis of a substance which I had not prepared with my own hands. For these preparations there are necessary a number of experiments, and an expenditure of time, exceeding often a hundred-fold that spent upon an analysis. Thus I may give an instance: that merely in order to find a secure method of preparing glycocoll, (gelatine sugar,) and to be able to confirm one of the most important facts for animal chemistry—namely, the division of hippuric acid into benzoic acid and glycocoll, described by Dessaignes, (a statement which was perfectly correct,) I had to perform, necessarily, a series of experiments, which occupied me unceasingly for six weeks. How can the difficulties of such an undertaking be compared to the performance of an organic analysis! If, however, the method is once found, then a number of young chemists are sufficiently clever and experienced to finish the work, which for them becomes a source of instruction.

I repeat, that I should never have thought it worth while to bring to public discussion the manner in which M. Gerhardt mutilates the labours of foreign chemists, and turns them to his own use, had not he known how to attain the confidence of the editors of one of the best French journals, and to induce them to spread through a large circulation his false and unscientific statements. If the editors of this journal would, for example, take the trouble to compare the extract of the investigations of MM. Merklein and Wöhler on bezoaric acid, which M. Gerhardt gave in the last number of the journal, with the original paper, they would once for all be deterred from making M. Gerhardt's views their own, as they have done in combining from this time the *Comptes Rendus* of M. Gerhardt's with their own journal. All that Wöhler states of the imperfect knowledge of glauco-melanic acid is given by M. Gerhardt as his idea, as his critical judgment, so that the reader of this extract might be led to consider the authors as unskilful beginners.

Another artifice of M. Gerhardt's is, that he mentions nothing in the above article of what Wöhler has said upon the evident connexion of bezoaric, gallic, and tannic acids, instead of which he, however, describes the re-actions that M. Wöhler gives, as proofs of his conclusions, and adds, "I prophesy, that a conversion of bezoaric into gallic acid has here taken place." This is certainly the cheapest manner of obtaining the reputation of a prophet, and of securing to himself priorities of discoveries. In no country in the world would such proceedings be tolerated.

J. L.

BRITISH AND AMERICAN MEDICAL JOURNALS.

In the second volume of *THE LANCET* for 1844, at page 258, we gave a short analysis of a communication on the subject of

PERFORATION OF THE MEMBRANA TYMPANI FOR THE CURE OF DEAFNESS.

The cases in which this operation is admissible were there stated, and the conclusion arrived at was, that it is rarely successful in the restoration of hearing. Attention is again directed to the subject by an interesting communication, by Mr. BUTCHER, to the Dublin Surgical Society, and reported in

the *Medical Press*. He shows that the operation is never permanently successful, and whether this want of success depends on the restoration of the perforated membrane to its entire condition, or to the more direct action of the external air on the acoustic nerve, the results are the same. Further adopting Dr. Houston's investigations, which show the highly vascular and nervous character of this membrane, he argues on the possibility of inflammation extending from its injured texture to those in its vicinity, and thence to the brain and its membranes. This view is not hypothetical: the author illustrates his arguments by the narration of the histories of two cases which had been thus treated, and both of which terminated fatally. The following is a condensed report of one:—

"A young woman was completely deaf in both ears for four years, caused by a severe cold. Catheterism of the Eustachian tube was performed, and said to fail. The membrane of the tympanum was pierced, a small piece being drilled out of the membrane of the right side. After the operation, the hearing was greatly improved. Next day, intense pain was experienced in the ear. Remedies were applied, and in forty-eight hours a profuse discharge took place from the ear. This varied in quantity, day after day, for two months, the hearing being slightly benefited. In eleven weeks after the operation, the patient became more deaf than ever, and was constantly complaining of flying pains through the head; at one time fixing in the forehead for a few hours, at another in the occiput, and frequently in the temple, particularly in the right ear. In this state she continued for four months, when she was attacked with rigors, rapid pulse, intolerance of light, and all the symptoms of disease in the brain, and she died on the third day.

"On examination, an abscess was found in the lower part of the middle lobe of the brain. No opening could be detected through the petrous portion of the temporal bone, but the dura mater covering it was roughened on the surface, and softened in its texture, particularly near the internal auditory foramen. The membrana tympani was entirely destroyed, and the lining membrane of the tympanum was considerably thickened and villous on its surface."

The general experience expressed in the discussion which followed, showed that the operation was not one which afforded results equivalent to the danger to which its performance gave rise.

FATAL CASES OF MENINGITIS.

In the same journal, Dr. DARBY reports the occurrence of several cases of meningitis occurring amongst the boys in the Rathdown Union Workhouse. Many cases have proved fatal with great rapidity, and the disease has assumed an almost epidemic form. It may be borne in mind, that a similar affection assumed this character at Gibraltar some months ago, a report of which appeared soon after in this department of *THE LANCET*, vol. i. 1844, p. 557.

PARALYSIS FROM ARSENIC; TREATMENT BY A NEW FORM OF COUNTER-IRRITATION, "FIRING."

In the *Dublin Hospital Gazette*, Dr. CORRIGAN gives the history of a case of the above disease, of which the following is an outline; and he subsequently explains and remarks on the form of treatment which he denominates "firing," or scorching, rather, as distinguished from actual cauterization.

"A labourer was admitted, under Dr. Corigan's care, Dec. 7th, 1845, labouring under paralysis of upper and lower extremities. The paralysis was greater in the lower extremities, which were unable to support the weight of his body. The muscles of his thighs and legs were flaccid and wasted, but sensibility not impaired. His intellect is unimpaired; the pulse is quick and rather compressible, the bowels regular, and the appetite good.

"He attributes the present attack of paralysis to a dose of arsenic which he took by mistake for flour. On having taken it, he was brought to an hospital in Liverpool, and the stomach-pump used. Immediately afterwards, he began to feel disagreeable prickling sensations in his hands and in the soles of the feet. He soon began to totter in his walk; his limbs then became unable to support the weight of his body, and in this state he was admitted into the hospital.

"Five grains of blue pill were given three times a day, until the mouth became sore, for a week.

"17th.—No improvement; the firing-iron was applied along the spine and over the thighs and legs.

"20th.—He has regained considerable power over the arms, but not over the lower limbs.

"The firing is applied every day along the spine, thighs, and legs.

"24th.—He is now able to walk; firing to be continued daily; one-sixteenth of a grain of strychnine three times a day.

"January 5th, 1846.—Limbs rapidly regaining their strength. On the 8th instant, all treatment was discontinued. He was retained in the hospital until the 23rd instant, lest any relapse should occur. He occasionally called at the hospital, and was, at the date of the last report, February 25th, in the possession of perfect strength."

Dr. Corrigan then remarks—

"I wish to point out the mode of using this application, and the reason for preferring it to other counter-irritants. The iron used is portable, consisting of a thick iron-wire shank, about two inches long, inserted in a small wooden handle, having on its extremity, which is slightly curved, a disc or button of iron, a quarter of an inch thick, and half an inch in diameter, the whole instrument being six inches in length. The face of the disc for application is flat. This, trifling as it may seem, must be attended to. In the French cauterizing irons, the buttons for cauterizing are spherical, and the consequence is, that they must either be pressed long and deeply into the skin, to bring them in contact with an extent of surface equal to their diameter, or they can be made only to touch at a single point. The only other portion of apparatus required is a small brass spirit-lamp. To use the instrument, it is only necessary to hold the button of the instrument over the flame, keeping the forefinger of the hand holding the instrument at the distance of about half an inch from the button. As soon as the finger feels uncomfortably hot, the instrument is ready for use, and the time required for heating it to this degree is only about a quarter of a minute. It is applied as quickly as possible, the skin being tipped successively, at intervals of half an inch, over the whole affected part, as lightly and as rapidly as possible, always taking care to bring the flat surface of the disc fairly in contact with the skin. In this way the process of firing a whole limb, or the loins, making about one hundred applications, does not occupy a minute, and the one heating by the lamp suffices. You can ascertain at once whether the heat be sufficient. If you look sideways at the spots as you touch them, you will observe that each spot the iron has touched immediately becomes of a glistening white, much whiter than the surrounding skin. In the course of a quarter of an hour, sometimes of a very few minutes, the whole skin becomes of a bright red, and the patient feels a glow of heat over the part. The iron is never rendered red hot. It is, indeed, very little hotter than boiling water, and he never makes an eschar with it, and very rarely indeed raises a blister. There are merely seen upon the skin next day, a number of circular red marks, the cuticle not being raised, and the surface being ready, if required, to receive a fresh application, and what is of no trifling consequence, where such an extent of counter-irritation has been used, there being no discharging surface to interfere with the motion of the limb, or the comforts of the patient. In most cases, the patient is quite unconscious of what has been done. In the case of a medical friend of the author, he could not even guess what the application was; he merely knew that a not disagreeable smarting or heating sensation was suddenly produced, but could not say how, until he saw the instrument. The thickness of the disc or button of the instrument is not a matter of indifference. If it be thinner than the measure given, it will cool too rapidly; if it be thicker, it will take too long a time in heating."

Dr. Corrigan goes on to say—

"I can certainly recommend its application in the way here directed, as one of the most useful of our counter-irritants; it can be applied so rapidly, so extensively, and, as I have already said, without even the patient knowing, very often, what has been done. Its superiority over blisters may also be owing to the suddenness of the impression produced. The effect is often as instantaneous as the application. My friend Dr. Mitchell, Master of the Victoria Lying-in Hospital, consulted me some months since for a severe attack of lumbago. I applied the firing, and he was in one minute quite free from pain. He has since used it himself extensively in practice, and, I believe, he will shortly publish the results of his observations."

To this succeeds the mention of several equally successful cases, quite sufficient to justify a trial of the remedy.

THE LANCET.

LONDON, SATURDAY, MAY 2, 1846.

UNWILLING as we are, from causes which require no explanation, to enlarge at this time upon the long-agitated question of medical reform, we could not, with propriety, refrain from directing the attention of the profession to the resolutions printed at pp. 501-2, which were passed unanimously at the meeting of the COMMITTEE OF ASSOCIATED SURGEONS, on Monday night last. The truthful and simple principles which they enunciate will find a cordial and cheerful response in the mind of every man of thought. In the absence of any law on the subject, the Committee have deliberately resolved, that if a NEW combination of medical practitioners is to exist, it should be founded on the two great principles, that the profession should be fully represented in the governing body, and that ALL the members should be governed by the same laws, united by the same interests, and, to all intents and purposes, should form integral parts of a SINGLE BODY POLITIC. On such conditions, the Committee have determined to advocate the establishment of a voluntary Association, open to ALL the legally-qualified members of the profession, and on such conditions, and on none other, are they prepared to appeal to the deliberate judgment of a public meeting of the profession.

The steady, faithful, and unobtrusive course which has been pursued by the ASSOCIATED SURGEONS has obtained for that body the general respect and confidence of the profession. In determining to attend the meeting which was lately held in the Hanover-square Rooms, as passive spectators and auditors of the proceedings, they proved how strong is their desire to see a spirit of union prevail over all the deliberations of their professional brethren. Obviously, the position of the question of medical reform would have been far different at this time from the one which it now exhibits, had the course marked out in THE LANCET been adopted. Upwards of two thousand pounds have been expended in an attempt to procure a worthless piece of parchment for a single class of the profession, without any attempt having been made, by the most numerous medical association that ever existed, to prepare a general measure of medical law for the consideration of the Government. Extraordinary, however, is the fact, that there stands before the profession, with outstretched hands, a chief minister, who exclaims, "Give me *your own* Bill,—supply me with one of your own framing, and I will endeavour to convert it into a statute of the realm!" Yet upwards of two thousand pounds have been expended, and the degrading and humiliating fact must be acknowledged, that there is no such measure in existence! And, for advising that there should be one, the motives of the originator of the question of medical reform were insultingly impugned. But an honest course of policy brings with it its own personal reward. Individually, we see nothing but grounds for exultation.

OUR former remarks on the advertised connexion between DR. BRIGHT and HOLLOWAY the quack, were made in no spirit of hostility to DR. BRIGHT, whose professional eminence and desert we did not fail to acknowledge, even while we were

called on to criticise him in other respects. We felt that this long-permitted connexion was a scandal to English medicine, and an annoyance to every right-thinking man in the profession; but we entertained no doubt that DR. BRIGHT would rejoice in an opportunity of disavowing and denouncing the impudent quack who had dared to couple his name with professional dishonour. We felt, indeed, that, independently of any remonstrance of ours, DR. BRIGHT had long owed it to the profession, that he should take steps to disconnect his name from the notorious pills and ointment. But we have been disappointed. We strenuously combatted the idea that DR. BRIGHT had really descended to be the patron of HOLLOWAY. In the absence, however, of all public disclaimer, many have begun to suspect that the advertisements, the handbills, the oath before the Lord Mayor, and the story of the half-sovereign given to the patient for pills and ointment to heal the fifteen running ulcers, may have some foundation in truth. The spread of such an opinion must inevitably have the effect of tarnishing the reputation, and injuring the practice, of any physician, however high his standing, and it will, we apprehend, be found that it is a far easier matter to give birth to such a suspicion than to eradicate it when once formed. If such a suspicion should, by possibility, be well grounded, we can hardly estimate the culpability of DR. BRIGHT; and even if the sufferance and toleration of the thing be all that he is really guilty of, his conduct in not explaining the whole matter when it came under public discussion, is highly reprehensible. Looking at the professional feeling, as indicated in our own columns, and to the part taken by other journals respecting quackery, and the discreditable and infamous modes in which *some* medical men are connected therewith, no reasonable person can doubt that the entire profession is taking a deep interest in the subject, and that the silence of DR. BRIGHT, or any other man under similar circumstances, will be felt to be in the last degree disrespectful to the profession at large.

In precisely the same spirit we called on DR. LOCOCK to explain the connexion of his name with the pulmonic wafers. The reply was prompt. He at once expressed his deep regret, and the annoyance this disreputable connexion had caused him, and described the steps he had been desirous of taking to free himself from the imputation, expressing, at the same time, a deference for the opinion of the professional public, at once most honourable to himself and to the profession. True, DR. LOCOCK thought himself prevented by the opinion of his friends and legal advisers from doing anything efficient in the way of punishment or prevention, and refrained from noticing the fraud, because of the difficulty of advertising the exposure to an equal extent with the forgery. Still it was evident he would have done anything he had considered practicable, to rid himself of such a pest. We, on the other hand, believed that he might, at the expense of a few pounds, have applied to the Court of Chancery for an injunction—and that then, whether he had obtained the injunction or not, the report of the application for such an injunction, on such grounds, would have found its way into almost every newspaper in the kingdom, and thus would have advertised, in the most effectual manner, the frauds practised upon the public in DR. LOCOCK's name. Our opinion was at issue with that of DR. LOCOCK on this point; and we thought, too, that he had taken a wrong view of the case, in

making it a personal, instead of a professional matter. These opinions we frankly expressed; still there was much to be commended in the courteous and ready manner in which Dr. Locock endeavoured to set himself right with the profession, and also in his emphatic repudiation of the unholy alliance between quackery and medical names.

In these respects, how unsatisfactory is the conduct of Dr. BRIGHT, and how Dr. Locock rises in the estimation of the profession by the contrast! Dr. BRIGHT is content still to suffer his name to remain a veritable part of the stock in trade—still to continue the hero of the handbills—of one of the most notorious quacks that ever figured upon the public stage; and he not only does not interfere with the impure practices of the empiric, but, by an obstinate silence, he refuses the profession the slender satisfaction of an assurance that his own hand is untainted in the matter, that he is the victim, rather than the abettor, of the nuisance in question.

We will point to one consequence of Dr. BRIGHT's sullen and contemptuous behaviour. We have written with a single eye to the service and renovation of the profession. Our exertions are in a measure turned into injuries by the silence of Dr. BRIGHT. The quacks see, and the profession and the public see, that the eminent physician, when reproved by a recognised organ of professional opinion, for allowing the prostitution of his name to the infamies of quackery, expresses no public regret, no word of indignation, at the forgery of his name, nor makes any visible effort to extricate himself by legal means from the disgraceful web in which he has been involved. Hence, the profession is in a measure dispirited, the public are encouraged to patronize the pestilent humbugs, and the quacks themselves swarm with greater force and audacity than ever. A week or two after our denunciation of HOLLOWAY, this quack actually advertised that another illegal oath, rendering another lord-mayor liable to indictment, had been taken at the Mansion-house, respecting the pretended cures wrought by the pills and ointment. This would not have happened, had Dr. BRIGHT been engaged, as he ought to have been, in proceeding against him for his former delinquencies. If Dr. BRIGHT had been robbed of his purse, he would, doubtless, have pursued the thief,—the quack who filches his good name is allowed to proceed with impunity.

The whole tenor of our articles on these subjects has been to show, that when a medical man takes no steps to disconnect his name from such enormities, he in effect becomes incriminated. This we believe will be the conclusion arrived at by the profession generally, in the case of Dr. BRIGHT. With himself will rest the responsibility of this, and the punishment that will be sure to follow in the diminished esteem and favour of the profession. There will be two Dr. BRIGHTS—one, the distinguished physician, the other and obverse, the timid, left-handed upholder of quackery by sufferance—a thing only exceeded in mischief by actual participation in the nefarious game. It is from no transient feeling—from no sentiments of hostility towards individuals—that we have engaged in treating the subject of quackery, but from a deep-rooted feeling that it is intimately connected with some of the gravest evils which afflict the profession; and we will not cease till we have infused a new spirit into the profession as regards this matter, and have somewhat disabled this hydra-headed monster. Our praise shall be bestowed liberally on those who maintain the honour and purity of the profession

in this respect; and our severest censures shall visit those who bring upon it odium and dishonour through such disreputable channels.

A MORE minute examination of the transactions of the Royal Society enables us to show that the conduct of the various Councils and Physiological Committees has been even more reprehensible than we at first supposed it to be. Our scrutiny has been more particularly directed to the awards of the NEWPORT and BECK medals; but there are good reasons for supposing that the irregularities have by no means been confined to these particular medals. The organization of the Councils and the Physiological Committees is an important subject, about which we must take another occasion to express our opinions.

We mentioned, in a former article, that Mr. NEWPORT has had a Royal medal in physiology given him for his scientific labours during the triennial cycle of the Royal Society, ending in June, 1836.

It is singular enough that the Royal medal should have been awarded to Mr. NEWPORT for two papers, as though numbers were required to give him strength. In presenting the medal, the Duke of SUSSEX, at that time the President, addressed the Society as follows:—"The Royal medal for the present year, which the Council had proposed to give to the most important paper on Animal Physiology communicated to the Royal Society within the last three years, is awarded to G. NEWPORT, Esq., for his series of investigations on the anatomy and physiology of insects, contained in his two papers published in the *Philosophical Transactions*, within that period." His Royal Highness further repeated, "Within the period of the last three years, he (Mr. NEWPORT) has enriched the *Transactions* with two papers." The first paper was on the *Sphinx ligustri*, published in the volume for 1834. The second, "A Memoir on the Respiration of Insects, more recently communicated to the Society, and of which, at its last meeting in June, the title only could be announced."

The fact is, that being presented on the last day of the Session, nothing but its title was known to the Society, and it had been seen only by the referees. The medal was given away at the anniversary meeting, November 30th, 1836; but we have ascertained that the part of the *Philosophical Transactions* in which Mr. NEWPORT's second paper appeared, was not published until March, 1837. Thus, the second part of the *Philosophical Transactions*, in which this paper was subsequently printed, had not been published when the Duke of SUSSEX spoke, so that a positive falsehood was put in the mouth of the Duke, who of course was only the mouthpiece of the Secretary in the matter. It is well the Duke is not alive to face the tortuous Secretary. It should also be mentioned, that, with reference to Mr. NEWPORT's first paper, that on the *Sphinx ligustri*, Dr. GRANT had openly accused him of pirating and plagiarizing the most important points which it contained from his lectures at University College. The award of the NEWPORT medal, then, like that of Mr. BECK's, was irregular, and of questionable legality. It was given for one paper of doubtful originality, and for another paper, which, at the time of the award, had not appeared in print, this being in direct violation of the regulations upon which the foundation of the Royal medals was restored by her Majesty.

We are also enabled to add something more respecting the BECK medal. It now appears that Mr. BECK's two dissections were made at the instigation of Dr. SHARPEY, and that the expenses attending them were defrayed, through Dr. SHARPEY's influence, by University College! The dissections were partly executed in Dr. SHARPEY's own dissecting-room, and three years ago he had confidently predicted, that at about this time Dr. LEE's dissections would be overthrown. The profession already knows the manner in which Dr. SHARPEY endeavoured to fulfil his own vaticination; that he and Dr. TODD were the referees of Mr. BECK's paper; and that it was on their report that the Council and Physiological Committee grounded the award. As far as Dr. SHARPEY was concerned, seeing the part he had taken in promoting Mr. BECK's labours, it was little better than passing a medal from his right hand to his left. It is indeed most unaccountable that a man of Dr. SHARPEY's high character and reputation should ever have mixed himself up with such proceedings.

The Physiological Committee now attempt to explain how it was that Mr. LAWRENCE, the President, was allowed to leave Somerset House before the recommendation of the Royal medal. It is said that the secretary mentioned this medal before Mr. LAWRENCE left, but that another member replied, the medal to be given was not in physiology, but in physics. After Mr. LAWRENCE left, it was, they maintain, ascertained that it was a physiological medal, and that then the Committee was re-formed. Even if this were any reply to the charge of premeditated trickery, it leaves the Committee transfixed upon another horn of a dilemma. According to this version, the Royal medal in physiology is so inconsequential a matter, that the Committee come to the meeting which is to recommend its award, without knowing what they have to do, and that at the fag-end of this sitting, they, without any previous consideration or examination, recommend its award to a paper which only two of them had seen, and which was well known to be the subject of doubt and controversy. But as Dr. MANTELL said, at the recent meeting of the Society, everything is enveloped in confusion by the fact, that the contents of the paper which has gained the medal are as yet unknown to the Society.

There are two sources from which some idea of its contents may be procured—the report of the Physiological Committee, which was alluded to in the Address of the President, on the 1st of December last; and the published Abstract of the proceedings of the Royal Society. On a former occasion we expressed our opinion that, looking to the conduct of the parties concerned, and to the fact that, in contravention of the statutes, Mr. BECK's paper had been returned to him after its first presentation, there was no warranty that the paper ultimately printed would be the same paper, and contain the same views, as that of which the title was read on the 16th of June. A comparison of the "Abstract" and the "Address" will not tend to allay these suspicions. We quote first from the "Abstract" of Mr. BECK's paper.

"The object of the author, in this communication, is to record the results of his dissections of the nerves of the uterus, both in the unimpregnated and gravid states, with a view to determine if any changes are observable in them in these two conditions. He enters minutely into the anatomical details of the formation of the great splanchnic nerve, the composition of the semilunar ganglion, and the distribution of the branches proceeding from it to the different abdominal viscera. His conclusions are, that while the ovaria derive

their nerves from the renal, the Fallopian tubes from the hypogastric, and the bladder, rectum, and vagina, from the pelvic plexus, the nerves supplying the uterus are continuations of the hypogastric plexus, and that they undergo, during pregnancy, no further change, either in size or position, except that which is the simple consequence of the enlargement of the organ over which they are distributed, and that they undergo no other change during a second pregnancy. He thinks it probable, moreover, that the vessels of the uterus do not decrease in size after parturition, but are only contracted in their cavity. He notices several points relating to these subjects, which are still open to further investigation. The paper is accompanied by highly-finished drawings of the appearance of the dissected parts."

It is generally understood that it is the duty of the Secretaries to write these abstracts. To whom did Dr. ROGET, on this occasion, depute this duty; for we perceived that, in his letter, Dr. ROGET states Mr. BECK's paper was never in his possession at all! There is internal evidence of this; for a greater bungle could hardly be conceived, and there can be no doubt of the elegance and purity of style with which Dr. ROGET can express himself, if that were the chief qualification of a senior Secretary of the Royal Society.

We now quote from the report of the Committee of Physiology, alluded to in the Address of the Marquis of NORTHAMPTON. It must, however, be mentioned, that there is a further suspicion about the honesty of this report; for the original reports of Drs. SHARPEY and TODD are, as may be seen from the correspondence supplied by Dr. LEE, suppressed:—

"The paper of Mr. Beck contains the result of an elaborate anatomical investigation of the nerves of the uterus, together with observations on the structure and connexions of the sympathetic nerve.

"By his researches, the author has cleared up various points concerning the nerves of the uterus which have hitherto been doubtful or misunderstood. He has determined more precisely than heretofore the source and mode of distribution of these nerves, and the real extent to which the organ is supplied with them. The true nature of the nervous ganglia at the neck of the uterus, and of the plexuses formed by the sympathetic and sacral nerves in the same situation, is also satisfactorily made out, as well as the fact that the branches derived from the sacral nerves are not destined for the uterus, but are distributed to adjacent organs.

"With regard to the sympathetic nerve, it is shown that there are both grey and white separate branches of communication between that nerve and the spinal nerves. This important fact has, it is true, been already pointed out in the recently-published work of Todd and Bowman; but the author of the paper has nevertheless the merit of arriving at it independently, by his own observations. He has further shown that the white and grey constituents of the nerve keep distinct from each other, not only in the so-called trunk of the sympathetic, but also in its primary branches, as far as the visceral ganglia, beyond which the white and grey parts become intermixed in the nerves distributed to the viscera. The precise mode of connexion of the white and grey communicating branches with the spinal nerves is also carefully investigated. These observations appear important, as tending to throw light on the constitution of the sympathetic nerve and its relation to the rest of the nervous system.

"The Committee consider the paper of Mr. Beck as a most valuable contribution to the anatomy of the nervous system, and as affording additional and more precise data for physiological reasoning respecting the nerves to which it refers. On these grounds, as well as on account of the consummate skill and devoted perseverance displayed by the author in his arduous investigations, they have recommended that his paper be rewarded with the Royal medal."

Let the profession observe that, in the Abstract, the object of Mr. BECK's paper is "to determine if any changes are observable in them (the nerves of the uterus) in their two conditions," (the unimpregnated and gravid states.) And it is determined "that they undergo, during pregnancy, no further change, either in size or position, except that which

* This correspondence will appear in next week's LANCET.

"is the simple consequence of the enlargement of the organ over which they are distributed." This was the really important point, the anatomical point at issue. The Report, the second thoughts of the Physiological Committee, *does not refer to this at all*. It might be imagined that the two extracts must apply to two different papers. The profession will see the mean attempt to elude the first statement, and will judge of the probity of such proceedings. We may fairly ask, such being the proceedings of the medical section of the Royal Society, of what value are the medals, the decisions of referees, of the Physiological Committee, or the Council of the Royal Society? They are at this moment a by-word throughout England, they will soon be so throughout Europe. The men concerned go about attempting intimidation, by the threat that those who expose their proceedings will suffer; they may rest assured that the punishment will, in the end, remain with themselves; and they may comfort themselves with the conviction that *THE LANCET* is historical.

We trust the Fellows of the Royal Society will learn many lessons from our *exposé*. Had the Earl of BURLINGTON—had Sir J. HERSCHEL—had Mr. CHRISTIE—had the Council, when Dr. MARSHALL HALL addressed them severally, attended to his just requests, redressed his wrongs, or healed his feelings, unjustly wounded—had any one of them done this simple act of duty, we will not say of fellow-members of the same Society, but of fellow-men, leaving the senior and junior Secretary out of the question, all this public denouncement would have been prevented. We advise persons so situated to listen in future with attention and sympathy when there is the suspicion of wrong. Let kindness take the place of brutality; let every Fellow of the Royal Society feel for the future that he may apply to the President or Vice-presidents, and especially to those who, like Sir J. HERSCHEL, are supremely rewarded for Science' sake, with a certainty that no justice will be denied. If in our section of that Society a new experiment or a new dissection should be made, let the Council, if requested, at least condescend to look at it! Let the *good* of the time of Galileo continue, but let the *bad* cease! How now do we loathe the characters of those men who condemned him, but who would not look through his telescope?

It seems to us, that the lowest sense of the "probité scientifique"—all feeling, all sympathy apart—should have induced the individuals we have named, and the Council, to have listened and to have examined before they decided. That they did not, and would not, must painfully impress the profession and the public with a very mean idea of the character of head and heart of our scientific men. We have indeed had a lamentable picture placed before us. Suppose our judges in the law so accused! Does not Judge Jefferies with all his infamies rise up before the mind's eye of the reader. Now *life* may be dearer than scientific *fame* and *justice*, but sordid money or estate is not. Our legal judges are not placed in a more responsible situation than the judges (!) of the Royal Society.

Thanks to our present exertions, we believe such things will not again be perpetrated at the Royal or any of our societies. The press is all-powerful, and we at least *will* listen to the complaints of any sincere labourer in our own profession; we will cause his complaint, his experiment, or his dissection, to be attended to in time to come. The medals of the

Royal Society shall not be given, in future, to pay private debts, or to serve particular favouritism or cliquism. Nor shall one man receive the value of fifty medals in his own person, or remain in office so as to exclude others a thousand times more worthy, for a long series of years, for, indeed, the greater part of an active life. We will hold up such things to the scorn of the profession—to a scorn which no man shall be able to endure.

COMMITTEE OF ASSOCIATED SURGEONS.

Freemasons' Tavern, Monday, April 27th.

At a meeting of the Committee this evening,

Present—G. BOTTOMLEY, Esq., Surgeon, of Croydon, in the Chair,—Messrs. Fox, Arthur Hassall, Yearsley, Patterson, Bloxam, Baylis, J. R. Harrison, Lewis, Wakley, Phillips, Abraham, J. R. Lynch, John Hunter, Ottley, and others,—

The deputation appointed to meet the Sub-committee of the National Association, for the purpose of ascertaining the exact meaning of that portion of the proposed plan for a National Institute of Medicine and Surgery, which defines the parties who are to be admissible as members, reported that they had had an interview with the Sub-committee on Friday, and the following was a brief summary of the information received:—

Several of the Sub-committee stated that the intention of the Committee of the National Association, in proposing the formation of the intended Institute, was "to provide a home for the general practitioner," and not to aim at establishing a single faculty of medicine; one or two gentlemen, however, added, that they thought the formation of a powerful union between the members of this great branch of the profession very likely, ultimately, to lead to such a result.

To the question, "whether it was intended that members of the Royal College of Surgeons should be admitted to the Institute, though having no other licence to practise?" it was replied—Certainly; that in the first instance all members of the several colleges of surgeons would be admissible, but that after six months, the Council would have to determine whether they possessed satisfactory evidence of their qualification to practise all branches of the profession—namely, whether they had proved themselves qualified to practise medicine and midwifery as well as surgery.

As regards Physicians, the same rule would be observed, except in the case of a fellow or member of any college, the by-laws of which restrained him from practising all branches of his profession, and which would accordingly incapacitate him from joining an institute of practitioners of all departments of medicine; at the end of six months it would be in the power of the Council to reject a candidate for admission should they not be satisfied with the testimonials of his fitness to practise in all departments of medicine.

The deputation then urged on the Sub-committee the propriety of opening the doors of the proposed Institute to ALL qualified members of the profession; they believed that the right way to combat exclusiveness, was not by the establishment of new exclusive bodies, but by the formation of an institution which should be open to all; if any parties chose, by absurd restrictions, to exclude themselves, with them should rest the blame. The deputation also stated that they believed a strong and very general desire existed for the formation of a Faculty of Medicine, and that the more nearly the new Institute should attain that character, the more willingness there would be to support it.

The conduct of the deputation was loudly applauded, and after an exceedingly animated and interesting discussion, the following resolutions were passed unanimously:—

Moved by Mr. HASSALL, and seconded by Mr. Fox,—

"That the report of the Sub-committee be received and adopted."

Moved by Mr. PHILLIPS, seconded by Mr. J. HUNTER, and resolved,—

"That this Committee finds, with much regret, that the Provisional Committee of the National Association is still desirous to establish a society for a single section of the profession rather than to unite all branches into one institution."

Moved by Mr. ABRAHAM, seconded by Mr. PATTERSON, and resolved,—

"That this Committee is firmly of opinion that, in the

present crisis of medical affairs, in order to found a National Institute of Medicine and Surgery on a just and permanent basis, it should be open to the admission (both now and in future) of all the legally-qualified members of the profession, whether belonging to the English, Irish, or Scotch colleges."

Moved by Mr. BLOXAM, seconded by Mr. HARRISON, and resolved,—

"That it is highly desirable that the members of the profession generally should, without any delay, declare to the Committees of the Associations with which they are connected, that they are favourable to the establishment of an institution in medicine and surgery, into which *all* legally-qualified practitioners should be admitted on terms of perfect and undeviating equality; and that it is especially necessary that such members should attend the general meeting of the profession, (soon to be convened in London by the Provisional Committee of the National Association,) and thus, by their presence and their votes, give the most powerful effect to the principles they advocate."

The Treasurer reported the following subscriptions as having been received since the last meeting:—

£	s.	d.	£	s.	d.
Mr. G. Norman, Bath	1	1	0	Mr. Bagshawe . . .	0 10 0
Mr. George	1	1	0	Dr. Hodges	0 10 0
Dr. Fergusson . . .	1	1	0	Anonymous	0 10 0
Mr. Ormond	1	1	0	Mr. Barton	0 5 0
Mr. Bally	1	1	0	Mr. T. Barrett . .	0 5 0
Messrs. Spender and				Mr. Bartrum . . .	0 5 0
Cowan	1	1	0	Mr. Ton (second sub-	
Mr. Church	1	0	0	scription)	1 1 0
Mr. Stockwell . . .	0	10	0	Mr. Harrison . . .	1 1 0

The sitting of the Committee did not terminate until a late hour.

HOSPITAL REPORTS.

ROYAL FREE HOSPITAL.

(GRAY'S-INN ROAD, LONDON.)

LARGE FEMORAL ANEURISM—LIGATURE OF THE EXTERNAL ILIAC.

J. B.—, aged forty-eight, was admitted into the Royal Free Hospital on the 29th of November, 1845, under Mr. Gay's care, for a large pulsating tumour on the front of the thigh, immediately beneath and pushing up Poupart's ligament.

The patient, a healthy-looking muscular man, stated that about three years ago, whilst making considerable exertion to lift a heavy weight from the ground, he felt "something give way" in the right groin; that his attention was afterwards drawn to a small tumour in that situation, which gave him some uneasiness; and that it has continued gradually to increase, occasioning severe pains down his thigh and leg, and interfering with the movements of the hip-joint in such a manner, that at the time of his coming to the hospital he could work no longer.

The tumour was tolerably distinct, of a roundish form, and measuring at least four inches in circumference. By gradually compressing it on all sides, it could be diminished in size very considerably, making it evident that it was a sac or cyst; but the comparative size of the tumour, after it was thus emptied, it still being very large, showed that the walls of the sac were thick. It was also materially lessened in size, by making continuous pressure on the external iliac, and enlarged to its usual dimensions again, as soon as the pressure was removed; hence little doubt could be entertained that the sac was filled by the arterial current. The pulsation was vigorous, and attended with a throb which rendered the usual aneurismal bruit inaudible; but on limiting the flow of blood into the sac by gentle pressure on the artery above, the peculiar thrilling bruit was distinctly heard, and the communication between the artery and the sac thus readily discovered to be about an inch below Poupart's ligament. These symptoms put the nature of the case beyond a doubt; the patient was directed to keep in bed on low diet, and to lose a pint of blood.

The size of the aneurismal sac, the fact stated by the patient, and confirmed by watching the tumour after his admission, that it was increasing in size with considerable rapidity—the sufferings of the patient from pains down the thigh and leg, together with his apparently sound state of constitution, and readiness to submit to the proposed means of cure, concurred to render the operation of tying the iliac expedient, and the case favourable for such procedure.

On the 3rd of December, the bowels were well evacuated by aperient medicine as well as enemata, and on the following day, Mr. Gay performed the operation of tying the external iliac in the following manner:—A semilunar incision through the integuments and superficial fascia, about five inches in length, and so made that the most depending part of the curve should be situated just over the external iliac artery, and below the edges of the internal oblique and transversalis muscles, laid bare the aponeurosis of the external oblique. A director was passed beneath it, and its fibres were divided in the same direction, and to the same extent, as the tegumentary wound. The fascia transversalis now presented itself, and by passing the fingers into the internal ring, was readily torn, so as to admit their passing on to separate the peritoneum from the pelvic fascia. This was accomplished in a very short time, without the aid of the knife, and the finger immediately alighted upon the vessel, about two and a half inches above Poupart's ligament. The fascia was scratched through with the nail, and the artery having been separated from the vein, and isolated from its sheath, a strong piece of twine was passed under it by means of an aneurismal needle. At this point of the operation, a little time was allowed to satisfy the operator that the vessel, now in the curve of the needle, was completely free from contiguous textures, and that its compression would have the effect of stopping the flow of blood into the aneurismal sac. The next step, that of tying the vessel, was to complete the operation; but it was found necessary, in order to get a thorough command of the ligature sufficiently high up, to divide a few of the fibres of the internal oblique and transversalis muscles at their junction with Poupart's ligament. This Mr. Gay hoped to have avoided; but the obstacle that the edge of these muscles presented to the free use of the fingers, rendered their division absolutely requisite, in order satisfactorily to tie the vessel. The knot of the ligature was tightened to its utmost, with the view of ensuring the complete division of the two inner arterial tunics—an old maxim, but in Mr. Gay's opinion not to be supplanted with safety by the contrary notions, although they are now obtaining the advocacy of some distinguished physiologists and surgeons. Scarcely any blood was lost during the operation; the edges of the wound were brought together and kept so by sutures, and after covering the whole with cold water dressing, the patient was placed in bed.

The aneurismal tumour ceased to pulsate, and lessened in size immediately the artery was tied; and the temperature of the limb fell considerably. The limb was consequently wrapped in cotton wool, which was secured by a bandage. By ten o'clock, (six hours after the operation,) the upper part of the limb, as far as just below the calf of the leg, had recovered its warmth, and although the lower portion was cold and mottled in appearance, it was found, on comparing it with the other leg, to be exactly in the same state, both as regarded temperature and appearance. Neither the anterior nor posterior tibial arteries could be discovered to pulsate on the affected side, and but very feebly in the sound limb. Ordered, one grain of morphia.

6th.—Slept for about two hours during the night, and would have slept longer, but for his customary pains down the thigh and leg; skin warm; tongue covered with a thick white fur, becoming brownish towards the root; thirst; pulse 92, soft; vomited some bilious matter this morning; considerable tension of the parietes of the abdomen, and tenderness on pressure over the region of the small intestines; inability to pass his urine, which was accordingly drawn off by the catheter. The affected leg warm; the foot still cold; the left leg and foot equally warm; right posterior tibial artery felt pulsating, although but feebly. Mr. Cooke, the house surgeon, ordered some castor-oil and calomel to be given last night, but it has had no effect on the bowels; hot fomentations to the bowels.—Nine o'clock: in sound sleep; skin warm and perspiring; pulse 100, soft; on waking, the morphia to be given; no desire or power felt to pass his urine: it was therefore again drawn off.

7th.—Slept soundly during the night, and has been free from pain, excepting on the right side of the knee-joint. Much less tenderness over the abdomen, but still pressure gives great pain about two inches above the wound, in the direction of the umbilicus. This, however, is much relieved by the hot fomentations, which are frequently repeated. Wound healthy, and beginning to discharge; tongue cleaner at the edges; skin warm and perspiring; pulse 96, good; no œdema has taken place, and the leg is warmer, but still not so warm as the other; bowels not opened; water still drawn off by means of the catheter. Omit medicines.

8th.—During the last night the pain in the knee annoyed him, and he did not therefore rest so well as in the previous

night: but, notwithstanding, his condition has in every respect beside materially improved. Moved to-day on to a water-bed. Ordered a liniment of belladonna and opium, to be rubbed in over the knee, and in case the pain should prevent his going to sleep, a quarter of a grain of morphia to be given every two hours until sleep is procured.

9th.—In every respect better; wound discharging; skin cool; pulse 90 and quiet. He has had a little cough occasionally during the day. Did not take the morphia.

10th.—Appetite returning. Ordered beef tea. Felt, for the first time since the operation, a desire to pass his urine, and effected it.

11th.—To this time, the bowels have not been opened, nor have there been any symptoms which appeared to render their action desirable; but as the patient is desirous of taking nourishment, Mr. Gay directed that he should have an injection with castor-oil. This did not take the desired effect, and another was given, with the addition of an ounce of the sulphate of magnesia. This procured copious evacuations of faecal matter, and with the aid of an aperient draught, the bowels were now thoroughly cleansed. He was then ordered animal food in small quantities, and as his pulse had become feeble, and the discharge from the wound was abundant, a grain of sulphate of quinine, in an ounce of the infusion of roses, three a times a day also. Everything went on most favourably until the

18th, when the tongue was observed to be a little furred, and rather brownish towards the back and centre parts. His appetite declined, and he became thirsty and feverish. A brisk saline purgative, and low diet, corrected this feverish tendency, and in the course of two days he appeared to be in a condition which justified his returning to his quinine, and more liberal fare. Immediately on resuming animal food, however, he began to complain of some ardor urinæ, which increased, and on the

22nd, became most severe, and was attended by some general febrile disturbance; the urine contained a considerable quantity of lithic acid. He was ordered, opium, one grain; calomel, five grains, to be followed in an hour by a saline aperient draught. The meat diet to be suspended, and to take, after the bowels are well evacuated, simple saline mixture, with an excess of alkali, and twenty drops of tincture of hyoscyamus, every four hours. Barley-water, tea, and dry bread or toast.

23rd.—The ligature came away with the poultice. Less ardor urinæ, and the character of the sediment is altered, this being now principally lithate of ammonia. Continue medicine, with mucilaginous drinks and barley-water.

24th.—A curious change has taken place in the nature of the urinary symptoms since the 22nd. The ardor urinæ has increased; the urine contains no earthy sediment, but some tough mucus, and it has now an alkaline reaction. So severe is the pain of micturition that he requests his urine may be drawn off, and it is difficult to determine whether there is not some inability voluntarily to empty the bladder. Mr. Gay thought such to be the fact; but no evidence of spinal irritation can be detected. Still there is much general irritability, and the patient's strength has again been reduced to a very low ebb. The region of the bladder to be well fomented. Animal broths. Ordered, morphia, six grains; extract of diosma, half a drachm. Mix, and divide into nine pills; one to be taken every four hours until the pain is relieved. Under this treatment, the symptoms slowly subsided, the quantity of mucus gradually lessened, and the urine, by the

29th, had regained a very slightly acid reaction. The tongue, which had been covered with a thin whitish coating, became much cleaner, and his appetite again began to improve. Ordered, two grains of disulphate of quinine, in an ounce and a half of the infusion of roses, three times a day. A pill, consisting of blue pill, one grain, rhubarb pill, three grains, morphia, half a grain, each night. During this disturbance, symptoms of an abscess began to develop themselves in connexion with the aneurismal sac. On the 23rd, some pain and fulness were felt just below Poupart's ligament, and over the site of the aneurism. Poultices were kept constantly applied. On the 25th, an abscess burst, and discharged a large quantity of fetid pus. The discharge continued—sometimes tinged with blood—to be very abundant, until the patient's health manifested improvement, which was brought about by the aid of generous diet and wine. The thigh was bandaged from the knee to the opening of the abscess, and gentle pressure on the sac was maintained constantly by pads of lint placed between the bandage and the skin covering the sac. He began to take exercise in the open air in the second week in January, and under this treatment, the discharge thickened, the sac of

the abscess lessened, and by the end of January, it had completely healed.

Feb. 13th.—The patient has been improving in every respect, but to-day he complains of a little pain again in the seat of the aneurism, and on examining, another abscess was found to be in the course of formation lower down than the former. It was opened on the 15th, after which it discharged freely for a day or two, and then closed.

March 1st.—The patient is in every respect well, walks about the hospital-square with the aid of a stick. The wounds are healed, and nothing remains but the solidified sac of the aneurism, which presents a hard indolent mass just below Poupart's ligament, without the slightest evidence of pulsation, and of very little hindrance to the movements of the hip-joint. A sense of tightness just below the sac is the only complaint which he makes.

Remarks.—Mr. Gay attributes much of the success of the operation to the "do-nothing" system of treatment, which he strongly advocates after every severe operation, especially after those which have an immediate local or functional connexion with the chylipoietic viscera. The bowels, well evacuated before the operation, were allowed to remain in a constipated state for a week afterwards, and the patient directed to take nothing more than would just satisfy the wants of Nature.

This state of the bowels did not appear to produce those marked effects upon the system which, in an otherwise healthy condition of the system, would be most likely to follow; indeed, there appeared to be no symptom which made it urgent that the bowels should be purged, until the desire for evacuation naturally returned, and this it was that Mr. Gay considered as an indication for aperient medicines, which were accordingly given. Nor did Mr. Gay refer the production of lithates and the disorder of the bladder in the after stage of the case to this permitted constipation, for the generous animal diet which preceded these symptoms was sufficient of itself to account for them.

The immediate constitutional effect of operations of this class is to moderate the energies of the vegetative functions; and nothing could be more interesting than to observe, in this case, how completely, in obedience to the operations of the reflex function, acted upon by the pathologic state both of the artery and the peritonæum, directly after the operation, the energies of the abdominal muscles and of the muscular coat of the bladder were suspended, that by their action no injury should result to the parts beneath; and how gradually, after the first sources of danger were passed over, the functions of these muscles returned. Upon these views Mr. Gay advocates the system of management to which he alludes.

The subsequent state of the bladder was an interesting part of the history of the case. The formation of an abundance of lithic acid was attributed to the too free use of animal food, at the same time that the patient was taking no exercise; and thus, upon its suspension, and a free purging, the lithic symptoms disappeared; but the opposite condition, which immediately followed, does not appear so easy of explanation. It may be, that the presence of lithic acid in the urine, and at the same time (as proved by the contemporaneous formation of an abscess) an inflammatory disposition of system gave rise to inflammation of the mucous coats of the bladder, and the production of mucus, which, acting upon the urea of the urine, produced carbonate of ammonia. And it is more than probable that, at the same time, there was, from some cause, (the general irritability?) a state of the bladder which had much the same effects upon its function as though it were palsied.

The abscesses no doubt contributed to the local reparation and consolidation of the aneurismal sac, but in connexion with what part of the sac they took place, it was difficult to ascertain.

ST. BARTHOLOMEW'S HOSPITAL.

MEDICAL CASES TREATED AT THIS HOSPITAL.

(Reported by E. L. ORMEROD, M.B., Cambridge, Member of the Royal College of Physicians; Demonstrator of Morbid Anatomy at St. Bartholomew's Hospital.)

ENCEPHALOID DISEASE OF THE PERITONÆUM.—PROGRESS OF THE CASE.—DEATH.—POST-MORTEM EXAMINATION.—DIFFICULTY OF DIAGNOSIS DURING LIFE.—GENERAL REMARKS.

CASE 1.—Martha H—, aged forty-four; Faith back ward; under Dr. Burrows; Dec. 4, 1845. A pale, emaciated woman; dark complexion, but no indication of any malignant disease in her expression; married, and the mother of four children; has had pain in the stomach for six months, and swelling of the

abdomen for seven weeks. The abdomen swelled up rather suddenly to a large size, but is now somewhat less than it has been, still, however, much distended, soft, tolerant of pressure, fluctuating, resonant on percussion in the epigastric and right iliac regions, dull everywhere else.

As the fluid still collected, she was tapped on Dec. 27th, and ten quarts of clear serous fluid were drawn off, which subsequently coagulated, on standing, into a gelatinous mass; no enlarged organ could be felt, when the walls of the abdomen had collapsed after the operation.

The tapping gave some relief, but she complained for several days of a "soreness" of the abdomen. As the fluid again collected, she had, on Jan. 17th, slight prolapsus of the uterus. The left hypochondriac, right iliac, and epigastric regions alone were now resonant; all the rest of the abdomen again dull on percussion.

On Jan. 26th, ten quarts of clear serum were evacuated, which did not coagulate. Her abdomen soon filled again, and distressing vomiting commenced, which continued till her death, in spite of all varieties of treatment directed to its relief.

On Feb. 16th, twelve quarts of fluid were drawn off; about this time she had swelling of the right leg, which became less after she had been tapped.

She was tapped for the last time on Feb. 28th, when ten quarts were withdrawn, to her great relief; but she now sank rapidly; her right leg swelled again, and she had great pain in the right groin; she vomited a mucous fluid, almost black from numerous streaks of altered blood, and died on March 9th, the abdomen having become almost as large as ever.

Autopsy nine hours and a half after death.—Body still warm; limbs all lax; blood generally coagulated. Head not examined. Some old adhesions of the left pleura about the base; no notable quantity of fluid in the left pleural cavity; right pleura free, the cavity containing about a pint of clear serum. The right half of the upper surface of the diaphragm was studded with little, round, polished, white elevations; no such deposit existed on the left side. Base of the right lung slightly contracted, and the pleura wrinkled; both lungs were gorged with blood behind, but no deposit existed anywhere in them. The cellular surface of the reflected layer of the pericardium, behind the sternum, had a few white nodules attached to it, of the same character as those which grew upon the diaphragm. The serous surface was smooth, the cavity containing a few drachms of clear fluid. Heart small, healthy. The rectus abdominis was seen to be full of white opaque granules, especially at its attachment to the thorax; peritonæum contained a large quantity of clear fluid, in which floated a single flock of whitish fibrin, like an ostrich feather; the layer lining the walls of the abdomen was thick and tuberculated with a hard white deposit. On the removal of the fluid, the small intestines were seen running down the centre of the abdomen in a spiral coil, tightly bound to the spine by a thickened and short mesentery, and to one another by an adhesion here and there between the folds. They were of a faint purple tinge, with a mottled-white tuberculated deposit upon the serous surface. The liver was coated with a thin white layer of fibrin, and adherent to the stomach, between which and the colon lay the great omentum rolled up into a white, hard cord, appearing on section to be composed of little grains of fat, from between which a creamy fluid exuded on pressure. From about here, two or three round cords, containing pervious vessels, passed to the front of the abdomen. The tuberculated deposit was confined exclusively to the serous membrane; it was in some places as thick as a crown-piece, but in no part was the muscular coat implicated, and the mucous membrane was healthy throughout, although the form of the intestinal canal, and particularly of the stomach, was very much altered by the rigid case in which they were partially enclosed. The duodenum, where it has no serous covering, was quite free from any lesion of this kind; while all the rest of the intestines, the stomach, and the mesentery, were dotted over with nodules of this sort, from the size of a split-pea to that of a broad-bean, or even larger—all hard, and with polished surfaces, none giving issue to any fluid on pressure. Liver adherent, except at the thin edge: internally, it was healthy, but the gall-bladder was studded with numerous deposits. Spleen and kidneys healthy; mesenteric and lumbar glands enlarged, white, hard, but giving issue to a creamy matter on pressure. The right inguinal glands, and one absorbent gland between the axilla and the mamma, also had undergone the same degeneration. Veins of right thigh healthy. A small cyst existed in each ovary, larger in the right, and holding about four ounces of a thick, brown fluid; the peritoneal surface, but not the cystic, was tuberculated as above. These cysts rose above a hard

floor of thickened peritonæum, extending from the ossa pubis to the rectum, having no traces of the fossæ usually found there. Below this the uterus lay imbedded in a hard, tough, cellular tissue, in which were a few spots of deposit, such as existed elsewhere; but the uterus itself was quite free from them: it was bent into a curve, the concavity forwards, the mouth slightly vascular.

In the abridged history of the progress of the case here presented, almost all notice of the treatment has been omitted, for, indeed, there was little to remark in it beyond the total failure of all the means usually employed, with more or less success, to remove dropsical effusions. Perhaps the kidneys, more than any other organs, refused to act under the treatment that was directed to them.

The diagnosis throughout was a matter of great interest, for although the seat of the fluid was correctly predicated before death, yet there existed some difference of opinion on the subject; and the diagnosis of ovarian from peritonæal dropsy has acquired a practical importance that will excuse here a few remarks on this matter. Among the many minor points of difference that have been pointed out, the distinctions of the position of the intestines in relation to the fluid, together with the history, are of the most weight. In this case, the history only tended to mislead, which, with the changes that the mesentery had undergone before the patient came under notice, rather favoured the belief, that the intestines were pushed back by a tumour instead of being held back by their own fastenings. Any examination through the vagina would have been rendered quite useless by the thick flooring of peritonæum that separated the contents of the pelvis from the rest of the abdominal viscera. From the only fact that might possibly have thrown light on the true nature of the case—namely, the swelling of the inguinal glands and anasarca of the right lower extremity—attention was withdrawn, by her always lying on that side, on which it was therefore probable that oedema would make its appearance first.

The fluid withdrawn in this case spontaneously coagulated on the first, and not on any subsequent occasion. The same spontaneous coagulation was observed in a case of cancer of the peritonæum lately treated in Addenbrooke's Hospital, Cambridge. But so far from this being diagnostic of the disease, Cruveilhier* has found the fluid bloody and turbid in cases of cancer of the omentum, where the fluid was probably secreted under conditions analogous to those in the case detailed; and in the dissection of a case of cancer of the peritoneal surface of the colon, accompanied by ascites, occurring in the practice of Mr. Paget, the fluid was most singularly limpid and colourless.

In the above case, the tendency of the disease to attack serous membrane was displayed in the pericardium and right pleura, as well as the peritonæum. The affection of the pleura, and accompanying effusion, is interesting in connexion with Sir B. Brodie's remarks on pleural effusion, as being the common mode of termination of protracted cases of mammary cancer. (Lectures on Pathology, p. 203.) Here, however, were no scirrhous tubercles in the lungs; they were found only on the diaphragmatic pleura.

The following case, occurring in St. Bartholomew's Hospital, a few years ago, well illustrates another form in which encéphaloid cancer may display itself in the peritonæum, to which, however, it did not so exclusively confine itself; nor, indeed, did it apparently begin there, but in the ovaries.

ENCEPHALOID DISEASE OF THE OMENTUM.—HISTORY OF THE CASE.—

REMARKS.—THE OMENTUM, THAT PORTION OF THE PERITONÆUM MOST COMMONLY THE SEAT OF CANCEROUS DISEASE.

CASE 2.—Eliza L—, aged fifty-one; pale, delicate-looking; face anxious; alæ nasi dilated; skin warm and moist; pulse 100, feeble; bowels confined; complains of constant dull pain in the abdomen, of seven months' duration, with an irregular swelling in the same part, which has been increasing.

History.—Healthy; a widow; the mother of seven children; her courses stopped four or five years ago, till last year, when they recurred several times, at intervals of a month, natural in quantity, but accompanied by much pain. Soon after their second cessation, she had some little pain in the left inguinal region; then a swelling appeared there, and continued to grow slowly, without at all affecting her general health, till two months since, when a horse knocked her down, and trod upon her abdomen. She was laid up for three weeks by this accident, and from that time the abdomen has grown more rapidly, and with more pain. The abdomen is now irregu-

* Cruveilhier, Anat. Path. livr. 37.

larly conical, the umbilicus being the apex of the cone. A large round swelling may be felt in the left iliac fossa, and a smaller, less defined, in the right. Some parts of the abdomen are soft and yielding; in other parts there are small, round, hard, and freely-movable tumours, tender on pressure, and extending as high as the epigastrium. Under the use of leeches and poultices, from time to time, the pain in her abdomen was much relieved. Her bowels required the constant use of castor-oil. On April 28th, crepitation was perceptible to the ear and hand over the abdomen.

May 31st.—A well-defined edge can be traced from the tumour as high as the umbilicus, then lost in an irregular, ill-defined mass, which occupies the right hypochondrium.

There was little to attract attention in her daily increasing weakness and languor. On July 7th, she had a rigor, not followed by any re-action; her tongue was covered with aphthæ; pulse 100, small, and weak. She died quietly on July 12th.

The body was much emaciated; heart small, and retaining a little fat about the apex only; lungs healthy, but traces of recent pleurisy on the left side.

A singular appearance was given to the contents of the abdomen by the omentum, which, thickened and as white as if painted in parts, extended a tough edge from the right hypochondrium to the left iliac fossa, where it became connected with a white mass of similar composition, filling the pelvis, and re-appearing in the right iliac fossa. This mass was soft and pulpy, making a white turbid mixture with water; and when the fluid parts had been thus washed away, there remained a hard, white, elastic, fibrous tissue, constituting the body of the tumour, into which the white creamy fluid had been infiltrated. The lining membrane, and part of the thickness of the walls of the uterus, was healthy, but the outer surface of its walls had imperceptibly become implicated in the degeneration of the surrounding parts. A patch of the same kind of matter existed on the coat of the gall-bladder, but no traces of similar degeneration elsewhere, the serous surface of the stomach and intestines being quite healthy.

Carcinoma of the substance of the uterus not affecting the mouth of that organ, is the most striking single fact illustrated by the above case. As compared with the previous case, the chief point of interest is the result of the different dispositions of the omentum. Had fluid been effused from the beginning, and the omentum rolled up in a cord, as happens in chronic peritonitis, the resemblance of the two cases in detail would have been very close, so much does the after progress of disease depend on the order in which any of the earlier processes have succeeded each other.

In one point, these two cases differ widely from each other; the affection seemed in the former to attach itself particularly to the serous membranes; in the latter, the omentum was almost the only part of the peritonæum affected, although so broad a surface was presented on which this morbid product had been developed. As the omentum seems to be the part of the peritonæum most susceptible of cancerous degeneration, judging from recorded cases of cancer affecting this part only, so it is most probable that the morbid process going on in the ovarian tumour was communicated directly to this more susceptible part, rather than to the serous membranes of other parts around. Thus, in a man who died in this hospital in 1842, of extensive cancer of the stomach, the omentum was the sole portion of the peritonæum much implicated, only a few carcinomatous tubercles existing at the bottom of an old hernial sac, excited, as it appeared, by the irritation of the pressure of a truss. A more abundant growth, however, as in Case 1, was developed in the pleura.

Perhaps in Case 2, above detailed, the injury inflicted on the abdomen by the accident alluded to, may have befallen the omentum chiefly, and thus directed the further growth of the disease.

UNIVERSITY COLLEGE HOSPITAL.

SURGICAL CASES AT THIS HOSPITAL.

(Reported by J. BURFORD CARLILL, M.B., Lond., formerly House Surgeon to the Hospital.)

Wound in the axilla, involving the axillary artery.—Recovery.

Jon S—, aged twenty-four, a healthy muscular labourer, of sober habits, in climbing over an iron railing, slipped, and fell upon the blunt arrow-shaped end of one of the rails, which was forced through his clothes into the axilla; and in this position he remained, with his toes touching the ground, until rescued. When admitted into the hospital, under Mr. Quain, (March 4th,) he was faint from loss of blood, apparently

arterial, estimated by himself at two quarts. Hæmorrhage had, however, ceased spontaneously. There was a wound, about an inch in length, with ragged edges, in the centre of the left axilla. He was ordered to remain in bed, the arm to be supported close to the side in a sling, and a pad of lint was kept applied by a figure-of-8 bandage. At this time, pulsation was distinctly felt in the left radial artery. He slept comfortably the first night, with but little pain.

March 6th.—No pulsation could be felt to-day in any of the arteries below the wound; the temperature of the limb was, however, the same as that of the other, (96 Fahr.)

11th.—A very feeble pulsation is to-day felt, for the first time since the 6th, over the radial artery.

From this time, the case progressed favourably, the wound granulated kindly, and was perfectly healed on the 27th March, when he was discharged. He returned to the hospital a few days afterwards, complaining of pain over the back part of the shoulder, for which the belladonna plaster was ordered. He stated that the temperature of the left hand appeared to him to be less than that of the right; the thermometer indicated for the left, 91°, for the right, 93°.

In a clinical lecture, Mr. Quain observed that the important point in the foregoing case was the fact that, notwithstanding the occurrence of profuse hæmorrhage, and the injury of the main artery of the limb, (as shown by the cessation of the pulsation in the arteries beyond the seat of injury,) the patient did well, without any interference by operation or otherwise.

There was a want of evidence for forming a positive opinion as to the source whence the hæmorrhage proceeded; for, as the patient was not seen by any medical practitioner till after the bleeding had ceased, there was no evidence on which reliance could be placed, either as to the manner in which the blood had issued from the wound, or as to the character of the blood itself, and there was not therefore sufficient means of judging whether it escaped from an artery or from a vein.

The amount of hæmorrhage was doubtless exaggerated, as is usual with patients and their friends in cases of wounds. He was now of opinion, after the recovery of the patient, that the axillary artery was not the vessel from which the blood had escaped, because the hæmorrhage soon ceased, and did not recur. No tumour had formed at the seat of injury, and the pulse was for some time perceptible below the wound. It should be stated, that the condition of the pulse in the two arms was not compared after the patient's admission into the hospital; but the house-surgeon and the dresser concur in stating that the pulse in the injured arm was an ordinary one. When Mr. Quain saw the case next day, the pulse at the wrist was not perceptible.

On a review of all the facts, at the fortunate conclusion of the case, it appeared probable that the vein had been wounded, and that the artery was obliterated in consequence of having been contused by the end of the rail; but it was admitted that the reasoning is not to be considered by any means conclusive. Fortunately for the patient, no opportunity arose of clearing up the doubt.

During the progress of the case, in consequence of the uncertainty as to the source of the hæmorrhage, and the certainty that the axillary artery was involved in some way, the attendants were cautioned to pay close attention to the man, and he was carefully watched by the house-surgeon and the dresser, Mr. Brangwin and Mr. Williams.

If arterial hæmorrhage had occurred, Mr. Quain intended to divide the pectoral muscles over the track of the wound, and secure the bleeding vessel at each side of the opening into it; the hæmorrhage would in the meantime have been commanded by pressure above the clavicle, and by an assistant's fingers within the wound.

THE ETIQUETTE OF THE PROFESSION.

(MR. VAUDREY'S REPLY TO MR. BEECROFT.)

To the Editor of THE LANCET.—Sir: A medical friend having, only a few days since, forwarded me THE LANCET, dated March 28th, I saw, for the first time, Mr. Beecroft's letter, headed, "Etiquette of the Profession." Your insertion of the following will be much esteemed by yours, obediently,
Hyde, April, 1846. W. C. VAUDREY.

I assent to my objection to meet Mr. Beecroft, but deny any want of gentlemanly courtesy to him, either at the time I casually met him, or at the patient's house. The father of the patient tells me, that he was the party who sent for me, and that, too, as soon as Mr. Beecroft intimated any danger. When I met Mr. Beecroft, and before I had seen the patient, and after he said that he himself had sent for me, I at once

told him that under those circumstances I would not go forward; nor did I proceed until urged by Mr. Beecroft to do so. His lumbago in the head is, I think, a direct insult on the lady who happened to misunderstand my opinion, which was, that I feared tubercle of the brain—an opinion that three weeks' further experience has not shaken. As for me, he is quite welcome to take all advantage of stating what he must feel at the time was not fact. A drowning man will catch at a straw.

My differing, of course, in diagnosis and treatment, will be best explained by Mr. Beecroft's own words and proceedings. He tells us, then, it is a case of hydrocephalus. The same morning he had leeches a very delicate girl very freely; for, in point of fact, she has been in a very critical state for seven or eight months. He was giving calomel and scammony repeatedly. She had sponges dipped in spirit lotion over her head; still he was in the house half-an-hour, and allowed her to be sitting near a large fire, and surrounded at times by a family, numbering eleven or twelve; and this was the position in which I really found her; nor had he ever ordered her into a secluded apartment. My differing, of course, in treatment, did at least relieve both the paroxysms of the head and vomiting completely for five whole days,—no trifling change, Mr. Beecroft will allow, in a well-marked case of hydrocephalus. What I have stated will be corroborated by the patient's own family, and, in future, I shall leave Mr. Beecroft to be sobered down by stern Time.

MEETING OF THE NATIONAL ASSOCIATION.

(NOTE FROM MR. PENNINGTON.)

To the Editor of THE LANCET.

SIR,—The report of the speech delivered by me at the meeting of the National Association, on the 17th ult., is most incorrectly reported. Amongst the most prominent errors, is the sentence that should render them independent of corrupt colleges.

I never uttered that sentence. My meaning has also been misrepresented in a preceding sentence—viz., that it was only within the last year that a prospect had opened of placing themselves on a still higher rank than they had hitherto held, by steadily following the direction that had been adopted by the Society of Apothecaries. Thoroughly sensible as I am of the great obligations to the Society of Apothecaries, no expression of mine could convey the idea that the National Association followed the direction of any other body than those of its own members.—Your humble servant,

R. R. PENNINGTON.

Mr. Pennington cannot doubt the Editor taking this into his consideration in his next publication.

Portman-square, April, 1846.

DISEASES OF THE SKIN.

(MR. HUNT'S REPLY TO MR. CORTIS.)

To the Editor of THE LANCET.

SIR,—An intelligent correspondent of THE LANCET, Mr. Cortis, is right in assuming, that any comments with which my brethren may honour my papers, will give me pleasure; and it is especially gratifying to me to find my views generally corroborated by the experience of a gentleman, who has evidently paid more than common attention to this much neglected subject. If I mistake not, even on the points on which he expresses his dissent, there is, practically, little variation of opinion between us, as I shall endeavour to show.

1. Mr. Cortis demurs to my exclusive reliance on mercurial treatment in squamous venereal affections, and in order to show that his own experience is at variance with my opinion, he relates a case in which a scaly disease was aggravated by mercury, and afterwards cured by arsenic. Now I verily believe that on my own principles I should have been led to treat this case mainly in a similar way; that is, had I suspected, in the first instance, a syphilitic origin, I should have administered mercury, and finding it obviously aggravating the disease, I should then have abandoned mercury in favour of arsenic, suspecting that I might have been wrong in my first diagnosis; and I need not add that the diagnosis with reference to this important point is sometimes difficult. The opinion I have long entertained, that the venereal scaly disease (the tertiary form of the indurated sore of Hunter) will yield to no remedy but mercury, is founded upon uniform experience; but I am ready to yield my views to any palpable

evidence to the contrary which any correspondent may be able to adduce. There is, however, no subject in the practice of surgery more intricate or unsettled than this, and I have often regretted that the minutely detailed cases of Hunter and Abernethy have been so much disregarded by modern writers. Carnichael's views on this one point have, I think, never been satisfactorily confuted.

2. I turn with pleasure from a subject already worn threadbare by discussion, to the second point of difference between your correspondent and myself. And here, again, the difference between us is more apparent than real. Mr. Cortis says he has used arsenic in various forms of skin disease with very great benefit, but certainly not with universal success; and he then expresses his doubts whether a favourite remedy has not been too highly extolled. To this latter question, however, he himself replies in language which leaves me little to say: "Perhaps it is only fair to suspend our judgment on this head till we have an opportunity of examining all his cases." With reference to Mr. Cortis's own experience, I must beg to remind him that before he can draw from that source any shadow of argument against my own success with arsenic, he must try it fairly in the way I have pointed out, not only under favourable circumstances, as regards the health of the patient, but *alone, and in decreasing doses*. It is the *method*, not the *remedy*, to which I wish to call attention. I have not proposed arsenic as a new remedy in diseases of the skin, but I have minutely described what I believe to be a new mode of administering it, and one which I trust our correspondent will one day adopt with success, which will leave him little to complain of. Arsenic will do much, I am well aware, on the plan hitherto adopted by universal recommendation—viz., beginning with a small dose, and gradually increasing it. But this method will not be attended with universal success, as Mr. Cortis, and every other writer on the skin, acknowledges. Nor am I so presumptuous as to affirm that my own method will never fail. I only say that it has never yet disappointed me in a single instance, and I shall feel myself bound to publish the first failure which I may meet with. It may be that I am too sanguine, and I am aware that hobbies are prone to run away with their riders. But my confidence in arsenic was not a preconceived notion; on the contrary, it was gradually inspired by an accumulating mass of evidence, the result of induction from actual experiments, which were so conducted, that they could scarcely deceive me. In most of my cases, I tried the remedy alone, using no other medicine, and avoiding baths and external applications. Not content with this, I frequently intermitted the medicine again and again in the same case, with a uniform result, so that I found I could hold the disease under absolute control. Indeed, I do not know any instance in the whole compass of practical medicine, in which disease is so entirely passive under any given remedy; and I venture to say, that if our correspondent will take a retrospective view of his experience, he will find that in every case in which arsenic has failed in his hands, in the diseases under review, the failure may be traced to one or more of the causes enumerated in my second paper, (p. 77.) and to these I beg leave to commend his attentive consideration.

For the practical and valuable remarks contained in Mr. Cortis's paper, as well as for his account of the chemical analysis and medicinal properties of the mineral spring at Filey, I beg to tender him my thanks, in which I am sure your readers will unite with me.

Herne Bay, April, 1846.

PAULUS ÆGINETA.

To the Editor of THE LANCET.

SIR,—Your correspondent, "Jus," thinks that it is not proved that the Council of the Sydenham Society has been guilty of a "prostitution of the Society's funds" in publishing the silly book of Ægineta. A certain proposition in Euclid is not the less demonstrated because a certain class of readers cannot comprehend the demonstration. Talk of history, it is mere babbling. The Sydenham Society is not a medical archaeological association. Its two thousand readers do not want grains of gold that can only be extracted out of a mountain of rubbish.

But I go to facts. The translation of Paulus Ægineta was commenced as a private speculation, and, after having failed as such, though it addressed itself to a far larger audience than the Sydenham Society, it was taken up by the Council, as though they were purveying food for the medical antiquary, instead of a great body of practical physicians, surgeons, and general practitioners.

I will mention one absurdity. Throughout the work, the ancient medicaments are perpetually referred to, and it is acknowledged in the first volume, that the modern reader will find "considerable difficulty" in comprehending them. We are told, however, that they are to be explained in the third and last volume. Thus, after wading through some fifteen hundred pages, the publication of which is to spread over several years, the reader is to be enlightened as to what he has been reading about.

If the members had had Paulus Ægineta alone, it would have been bad enough; but a twaddling author and a twaddling commentator are beyond all endurance. The *anilities* of the one would have been more than sufficient, without the *puerilities* of the other.

CENSOR.

THE SYDENHAM SOCIETY AND ITS DARK-AGE LITERATURE.

To the Editor of THE LANCET.

SIR,—A great deal has been said in your journal about Paulus Ægineta. With your permission, I, too, would utter something of this strange medico-literary curiosity. When I first saw the old gentleman, I confess I was pleased with him: he was well introduced; his green and golden livery were very attractive; and his age inclined me to respect him. But, Sir, on his beginning to talk, I wished heartily that he had never been resuscitated. Never did I before so well understand what Bacon would imply by the "obscuritas antiquitatis." Wonderful as he might have been in his own day,—"auribus istius temporis accommodatus,"—he is intolerable in ours. Whilst, with marvellous gravity, I was listening to the detail of his curious dreams, the shade of Sydenham himself appeared, and frowning with disgust, flitted in a moment. At that instant, Sir, I would have given more than "tenpence" to have never set eyes on this Paulus Ægineta.

April, 1846.

Yours,

SPECTATOR.

THE PROPOSED NATIONAL INSTITUTE OF MEDICINE AND SURGERY.

To the Editor of THE LANCET.

SIR,—Sincerely do I rejoice, in common with the medical practitioners in this town and its vicinity, that the National Association and the Committee of Associated Surgeons are going to combine their energies to establish a National Institute of Medicine, Surgery, and Midwifery. I became a member of the National Association, but I never cordially supported it, because I entertained the idea, perhaps erroneously, that it succumbed, unnecessarily and improperly, to the higher powers; and, also, I did hope that the Royal College of Surgeons might, in some way or other, be constituted a college for the general practitioner. That hope is now for ever blasted. Let all minor differences now be laid aside,—let not the doubly-qualified practitioner disrespect his brother who is merely a M.R.C.S. or a L.A.S., because he has not passed the same ordeal as himself,—let not the M.R.C.S. turn to the L.A.S. and say, "You do not understand anatomy and surgery, which are the basis of all sound practice of medicine, not having received the diploma at Lincoln's-inn-fields;" and let not the L.A.S. say to the M.R.C.S., "You do not understand chemistry and medicine, not having, like me, the licentiate of Gallipot Hall." Let all criminations and recriminations be buried in perpetual oblivion,—let the Brodies, and Listons, and Fergussons, and Wakleys, join with the Penningtons, and Bedingfields, and Websters, and Nusseys, hand and heart, in the good cause of medical reform, and success will crown all our efforts. Let there be one home for the general practitioner,—one portal, by which he may enter an honourable and important profession. Let that one home,—that one portal, be the National Institute of Surgery, Medicine, and Midwifery. By union and perseverance we shall attain this desirable and important object, and lay the foundation for happiness and prosperity in the medical community.

Your obedient servant,

Wisbeach, April, 1846.

JOHN LILLEY, M.R.C.S.E., L.A.S.

SHELL-LESS EGGS NOT YELKLESS.

To the Editor of THE LANCET.

SIR,—Theory and practice are too liable to conflict, unless the one be fully demonstrated by the other, more especially on subjects of minute physiology, such as the progress of the embryo in the egg in its early development towards

maturity—a process that is visible only by the aid of the most powerful microscope, and, in its earliest stages, to be observed but very imperfectly. Being myself somewhat of a practical man, with a very slight knowledge of physiological science, I have derived much instruction from the perusal of a learned paper "On the Egg," in THE LANCET of April 4th, from the pen of Mr. Tod. But if I comprehend rightly the meaning of the two under-quoted passages, my experience does not bear out their correctness—namely, that a blasted ovum is invariably discharged, minus the yolk, as well as the shell:—

"It is impossible to discover the length of time for the passage of the yolk through the oviduct into the uterus; but when it reaches the uterus, the egg is complete in all its structures, except the shell, which is an uterine secretion. This uterine secretion seems to owe its production to the presence of the yolk; for when a blasted ovum is laid, it has no shell."

"I have already stated, that when a yolk comes to maturity, it bursts its formative capsule, and passes through the oviduct to the uterus. Sometimes, however, the yolk, instead of entering the oviduct, escapes into the cavity of the abdomen, becomes adherent to the peritoneal covering of the intestines, and forms an extraneous body; and when this event occurs, the hen lays a blasted ovum—i.e., an egg, minus the yolk and the shell."

I have, for a length of time, kept two sets of fowls, tended by one cock each, and from the peculiar situation of my locality, my poultry-yard (the garden behind the house) has been almost constantly under my own eyes. I have thus been enabled to observe facts and circumstances which would have escaped my observation had I been living on a farm in the country. From some cause that I am not well able to determine, my fowls are very liable to drop eggs without shells, which are mostly, in every other respect, (apparently,) perfect, and I can most confidently state, that not above one in twenty of such eggs is deficient of the yolk. One small hen, five years old, owing to some accident or physical derangement, has, during the last two years, regularly dropped her eggs from her roost (into a basket placed to receive them) deficient of the shells, but always containing the yolks, which are used in puddings with other eggs. Although not positively able to account for the phenomenon, I am of opinion, that confined locality, dampness, absence of pure air, and want of such salutary ingredients as fowls can find at discretion in the fields, may assist in causing the frequent occurrence of this derangement in other fowls. Very seldom indeed do I ever find these eggs deficient of the yolk, as well as minus the shells. But I have met with several descriptions of these abortive eggs. One, in every respect a perfect egg, excepting wanting the shell. Another, shaped like a funnel, the membrane, containing the yolk and glaire, extending at the small end to the length of about an inch, with a second piece shrivelled up like a thin cord. A third form is that of twin eggs, joined by a contracted portion of the membrane, the one containing the yolk, the other the glaire, in shape like a dumb bell. And I mention a fourth, of the size of a pigeon's egg, which never contains a yolk. This is the last egg of the season, and the fowl does not lay again for some time afterwards. I have by me specimens of three of these curious forms of eggs.

I have observed certain effects with my fowls invariably, which seem to be also opposed to the statement—viz., that these eggs produce no constitutional derangement. This is certainly correct if these eggs pass off easily, but whenever they break inwardly, the yolk and the glaire are discharged, often leaving the membrane within. So often as this accident has occurred, and the shrivelled membrane is not early got rid of, I have known serious constitutional derangement to ensue, followed even by death. The shrivelled membrane becomes putrid, if it remains within too long a time; and another fact is, that these eggs almost invariably cause indigestion.

If any one be at all sceptical with regard to the correctness of my statements, I should be most happy to supply him, at any time, with specimens of these eggs, (shell-less, but containing the yolks,) which are dropped by my fowls very frequently.

My name and address are at the service of any seeker after knowledge, like myself, or any one who may wish for specimens, and I add them in a private note, for answer to any inquirer.

—I am, Sir, yours,

London, April, 1846.

D. S. E.

* * Mr. Tod certainly was in error in stating that the "shell-less egg" has no yolk.—ED. L.

HYGIENE.

ON THE MAKING OF BREAD WITHOUT FERMENTATION.

To the Editor of THE LANCET.

SIR,—Having seen in the last week's *LANCET* an advertisement relating to a newly-invented process for the manufacture of bread without the aid of yeast or any other fermenting substance, perhaps I might be permitted to call the attention of the medical profession (and especially of that portion practising in our colonies) to this subject, by making a few remarks upon the process, and the numerous advantages it offers over that generally adopted.

From the influence which temperature has upon fermentation, great difficulty is constantly found in obtaining good yeast in tropical climates; and in long maritime voyages, other circumstances conspire to render this obstacle so insurmountable, that, after having fruitlessly tried numerous expedients, the attempt to obtain fresh bread has been almost given up in despair. The natives of our Indian colonies have either been driven to eat bread sour from the moment when it has been drawn from the oven, or to choose an equally disagreeable alternative, to digest dry, heavy, and unwholesome biscuits. Fresh bread is a luxury equally unknown to the mariner and the colonist; consequently, the method now before us will prove an invaluable boon to both parties, as it will enable them to procure "the staff of life" almost at a moment's warning.

Before entering upon the discussion of the improved process, perhaps it will be advisable to make a few remarks upon the theory of the ordinary method of "rising the dough." Your readers are of course aware that the essential ingredients for the manufacture of bread have hitherto been flour, water, and some substance capable of inducing fermentation. Yeast is commonly used, which consists of an immense quantity of peculiarly organized vegetable cells, having extraordinary powers of reproduction when placed in circumstances favourable to their development. Saccharine solutions, kept at a proper temperature, permit these cells to germinate rapidly, and during their growth, the sugar is converted into alcohol and carbonic acid gas, the latter of which is evolved in large quantities. Flour contains a certain proportion of sugar, which, therefore, in the manufacture of dough, becomes converted into spirit of wine, and the carbonic acid gas, during its escape in bubbles, inflates and lightens the dough, by separating its particles farther from each other; and then, during baking, the dough is dried sufficiently for it to retain this porous form, after all gas has escaped.

Any other substances capable of eliminating gas would be equally efficacious in "rising the dough," as the porosity of bread simply depends upon the mechanical effect of the bubbles of gas upon the dough previously to baking.

The method adopted by the patentee of the "prepared flour" therefore, has this object in view—viz., to evolve by chemical decomposition, during the wetting of the flour, a sufficient quantity of carbonic acid gas to render the dough spongy, light, and elastic, so that the bread might be made porous, palatable, and digestible. He has perfectly succeeded in his object, and at the same time done so without communicating to the bread any flavour likely to excite the criticism of the most gastronomic individual; the articles introduced are so small in quantity, and so perfectly harmless in their physiological properties, that no one can ever object to make use of an article thus prepared. Some time ago he kindly permitted me to inspect his apparatus and the whole process of preparing the flour, making the dough, and baking the bread upon this principle, and I can safely say, that I have never witnessed any operation in domestic economy so beautifully simple and efficacious. A few minutes suffice to mix the necessary ingredients with the flour, and then, simply by stirring up a little water with this mixture, and kneading the mass for a short time, it becomes dough, as spongy and elastic as if twelve hours had been consumed in its manufacture by the old method; in another hour it is drawn from the oven as a loaf, equal to anything ever produced by the finest and sweetest yeast. It is not necessary that the ingredients should be mixed with the flour immediately before the bread is to be made; flour thus prepared might be kept in store for months, or years even, without undergoing more change than any other meal would under similar circumstances. I have eaten a loaf made from flour thus prepared eight months ago, and can testify to its sweetness and perfect flavour. Bread thus made has been kept for months without showing any sign of mouldi-

ness or decay; it hardens and becomes dry, but continues sweet to the last.

It will be at once seen, from the simplicity of the process, that we are now perfectly independent of fermentation, and consequently, of all the disadvantages attendant upon changes in temperature; for whether we desire to obtain bread in the depth of winter, or during the greatest heats of summer, in the polar regions, or in the torrid zone, our food will be as readily made, and as light and spongy, as if produced under the most advantageous circumstances, according to the ordinary process.

The mariner, provided with a stock of "prepared flour," when thousands of miles of ocean cut him off from all intercourse with the abodes of man, can in an hour produce a loaf of fresh, wholesome bread, equal in appearance, texture, and flavour, to any manufactured by a West-end baker. This must be to him a delicacy of inestimable value: no longer will he be compelled to breakfast upon maggots, weevils, and mouldy biscuits; but a hot loaf or a smoking twist will in future make him forget the privations attendant upon a mariner's life. The importance of this change in diet is greater than, at first sight, it might appear, for it will doubtless considerably diminish the disposition to scurvy, and even become a hygienic resource of great value.

In a mercantile point of view, this article of diet will effect a great economy of room, since a ton of flour will occupy much less space than a ton of biscuits.

In our steam navy, this prepared flour might easily be made the common food for the men, since the waste heat from the boilers might, by a little exercise of engineering skill, be made subservient to the baker's art; and from its economy of bulk, it appears to be the very article they require: so in garrisons, or beleaguered fortresses, or for depots in the colonies, it must be invaluable; in country situations, remote from breweries, or in very hot or cold seasons, when yeast is not to be procured, it must confer a great benefit upon the community.

I am induced to send you this communication, believing that there has been no recent invention likely to have a more important effect upon the health of the community; and by inserting it in the pages of your widely-disseminated and useful journal, you will greatly oblige, dear Sir,

Yours, most obediently,

WILLIAM B. HERAPATH.

Bristol, April, 1846.

REPLY TO CRITICISMS IN THE MEDICO-CHIRURGICAL REVIEW.

To the Editor of THE LANCET.

SIR,—May I request the insertion in *THE LANCET* of a few remarks on certain suggestions contained in a little work on "Therapeutical Inquiry," which I lately published, and which have been grossly misrepresented in the last number of the *Medico-Chirurgical Review*. I would have asked for such permission at an earlier period had I seen this review sooner; and although my having failed to procure a copy in so large a town as Brighton would show that the poison to which I wish to apply an antidote has not spread very extensively, I should still be glad of the opportunity of doing so.

In illustrating the several positions in my Essay, it was necessary to advert to various practices in the treatment of disease; and as they equally answered the purpose, and were more likely to prove interesting to the reader, I preferred some which I had myself introduced, and suggestions of other new remedies, to those with which he was already acquainted. Out of some thirty of such novel practices and suggestions, the reviewer selects three, and endeavours, by suppressing the context, or the chain of reasoning leading to the suggestion, and by representing that which is suggested as a remedy only under peculiar circumstances, as one generally recommended, to give an air of justice to his criticisms.

But it is not only with the suggestions that the reviewer finds fault. He objects also to some of the statements in the book. "The modus operandi of bloodletting," he says, "is stated to be unknown." The book contains no such statement. On the contrary, allusion is made in it to Dewees' narrative of his accidental discovery of the efficacy of copious bleeding for the purpose mentioned, as an example of remedies which, though "we might have been led, by analogical reasoning, to consider plausible, (and bleeding, to produce muscular relaxation, is used in other diseases), we should scarcely have dared to venture upon, had we not otherwise discovered their utility and safety." Not a word is said in the Essay respecting the modus operandi of copious bleeding in rigidity

* Mr. Henry Jones, Broadmead, Bristol.

of the uterus; but substitutes (*viz.*, dilatation by fluid pressure, and faintness produced by powerful revulsion of the blood) are recommended for this effectual, though hazardous measure.

"Severe and continued vomiting is recommended as an almost infallible remedy in malignant sore throat." This is the version of a relation which is given of severe and continued vomiting having proved successful in several cases of diphtherite, and of a recommendation to employ it in that disease as it has been employed in croup, to which diphtherite is allied, as well as to scarlatina.

In the Essay on "Therapeutics," when speaking of the extension of a principle of treatment to analogous diseases, the practice of making incisions through parts restraining swelling from disease underneath, is especially dwelt upon, and various illustrations of it are given, as the incisions in whitlow, chemo-sis, phlegmonous erysipelas, &c. From these I proceed to the somewhat analogous proceeding of tapping in diseases of the head and thorax; and with respect to the first of these, I express the doubt whether the principle might not be carried further than for the cure of chronic hydrocephalus and sanguineous effusion immediately under the calvaria; whether, in fact, it might not be adopted in the more deeply-seated effusion of apoplexy, when all other measures have failed, and "death rapidly approaches." The suggestion is supported by a statement of the well-known fact, that after respiration has ceased, life might be sustained by artificial inflation of the lungs while the attempt was made; and the numerous instances of recovery after severe wounds, hernia cerebri, &c., are alluded to.

Had I then been aware of it, I would have noticed at the same time a somewhat similar suggestion of M. Foville, (*Dict. de Medecine et Chirurgie*, vol. vii., article *Encephale*), to remove a portion of the calvaria in inflammation of the brain; but his explanation of the advantage that has appeared to proceed from openings in the calvaria after wounds, is not that pressure has thereby been removed, but, on the contrary, that such openings have afforded the opportunity for the advantageous pressure of the atmosphere on the distended vessels of the brain. In noticing my suggestion, the reviewer leaves out every part of the reasoning and every analogy which supports it, as well as the observation, that "where the slightest hope remained from other measures, or the curative operations of Nature, the proceeding suggested would, in the present state of our knowledge, be inadmissible;" and introduces it, as if in all cases the trephine had been recommended as a substitute for the lancet. With as much justice might the surgeon who proposed amputation or the excision of the joint in incurable white-swelling, be represented as suggesting the saw as an universal substitute for the milder measures which generally check the disease in its earlier stages; or the proposer of paracentesis in certain advanced cases of pleurisy, be represented as one that would prefer tapping to bleeding as its general cure. On first hearing the suggestion in question, "*on crierait peut-être à l'extravagance*," (to use M. Foville's words in reference to his own suggestion, above alluded to;) but if we were to be deterred, by apprehensions of this kind, from proposing novelties in treatment at all removed from the established routine, there would be an end to therapeutical progress. In the original form of my Essay, I deemed it expedient to defend this suggestion against such a prejudice, by reminding the reader that a proposition, which I published a quarter of a century ago, to substitute other measures than cutting for the removal of stone from the bladder, may to some have appeared equally extravagant. Singularly enough, it did not appear so to the editor, at that time, of the *Medico-Chirurgical Review*; and the circumstance of his favourable notice of it (in October, 1819) falling into the hands of his subscriber, M. Ducamp, and M. Ducamp's associate, M. Le Roy, may (as I have elsewhere shown) have been the origin of lithotomy in France.

The third and last suggestion mentioned by the reviewer being quoted without comment, I shall make no other observation upon it, than that here, as in the preceding instance, there is the unfairness of mentioning a suggestion without the argument or analogies that support it. The suggestion is only to extend the application of a local remedy (which, wherever it can be used, has been found of the highest value) to a part of the body to which it has been supposed (and in my opinion erroneously) physically impossible to apply it.

But, from the purpose of my Essay,—which was to show how our acknowledged remedies have originated, and how therapeutical knowledge may be advanced, especially by the study of the analogies between diseases and between remedies,—it was not incumbent on me to bring forward every argument I

might have adduced, in support of every illustrative suggestion, as if it had been the main purpose of the tract to publish these suggestions. Why the reviewer should have fixed upon a few of the illustrative suggestions, and altogether passed over the principal subject of the tract, as well as the new practices described in it, which experience has proved of value, it is unnecessary to inquire. But if it be the desire of the present editor of the *Medico-Chirurgical Review* to stay the rapid decline of his journal, he must fall upon some better scheme than that of presenting his readers with misrepresentations of, and garbled extracts from, the books he professes to review.—I am, Sir, your obedient servant,

Brighton, April 20, 1846.

JAMES ARNOTT.

THE MEDALS OF THE ROYAL SOCIETY.

(LETTER FROM MR. NEWPORT.)

To the Editor of THE LANCET.

SIR,—I am much surprised that in giving what you profess to be "a short history of the official conduct of the Royal Society" towards Dr. Hall, you should again have thought it necessary to include in your statements any remarks on myself; and I am still more surprised, that you should have charged a statement which I have made, with reference to my former communications with that gentleman, with falsehood, notwithstanding that that very charge, and other similar ones, made by Dr. Hall himself, were disproved more than eight years ago in the pages of your own journal.

But as the accusation is now repeated in a new form by you, with editorial authority, I am again compelled to enter on my vindication.

The statement which you impeach as a "false" "allegation or insinuation," is contained, as you have shown, in a note attached to my paper on the "Temperature of Insects;" and the "recent occasion" alluded to in that note "refers, of course, to the inquiry into Mr. Newport's claim to originality." This, doubtless, was a question raised in the Council of the Royal Society in November, 1836, previous to the confirmation of the award of the Royal medal to my two papers, the one on the "Nervous System" and the other on the "Respiration of Insects." On that occasion, as Dr. Hall himself has shown, (*THE LANCET*, Feb. 17, 1838, p. 749,) the letter which I had written to him on the 23rd of July, 1832, (*THE LANCET*, April 25, 1846, p. 470,) was sent by him to the Council through one of its members.

Now you need not be told that "misrepresentation" consists as much in act or deed as in word or statement.

It was the very act of sending my letter, by which the Council might have been so far influenced as to have decided against me in my absence from the investigation, and have been led to infer that the contents of my paper on Respiration, to which they were about to award their honours, were not my own, but were due to Dr. Hall, which I regarded, and which I think every candid mind must still regard, as "misrepresentation;" because that letter does not "clearly and indubitably set forth the relation which existed between Dr. M. Hall and Mr. Newport," as you have asserted.

During more than three years prior to my first acquaintance with Dr. Hall, in May, 1832, I had been engaged in investigations on the respiration of insects, and, confiding in his honour, I frankly communicated the results of these investigations to Dr. Hall, shortly after the commencement of our acquaintance, and long before I commenced, at his suggestion, those which are alluded to in my letter of July 23, 1832. The fact of my having made that communication to him I stated in your journal eight years ago, (*THE LANCET*, March 24, 1838, p. 952,) and I am not aware that it has ever been denied by Dr. Hall. Had he not been fully informed of the nature of my investigations, surely he would not have thought me competent to make any inquiries on the difficult subject of respiration, with reference to his own views of muscular irritability, and for which purpose he sent me the instrument alluded to in my letter to him? The fact of my having made certain experiments on respiration, with reference to Dr. Hall's particular views, is explicitly stated in my paper in the *Philosophical Transactions*, 1836, p. 551; but none of the experiments which I have there or elsewhere published on respiration were made with his instruments, nor did my views originate with him. What I have published originated in experiments commenced in 1829 and 1830, and these are detailed, and the date of their commencement in 1829 mentioned, in my paper.

To this exposition of facts I may add, that I possess written authentications of these very experiments, by friends who

saw, and who assisted me in making them, during my residence at Sandwich, prior to the year 1832. One of these documents, from the gentleman whose pupil I then was, is published in *THE LANCET* of March 24, 1838, pp. 951-2, and I am in possession of and ready to produce others if required.

With these statements I now leave your candid readers to judge whether or not the remarks which you have thought fit to make respecting me were correct, and whether you were justified in designating the statement in my note in the *Transactions* as false. Your very obedient servant,

GEORGE NEWPORT.

Upper Southwick-street, Cambridge-terrace,
April, 1846.

. There is something truly extraordinary in the mental vision of Mr. Newport; his notions of proof and disproof are singular. How could the act of Dr. Hall, in putting Mr. Newport's own letter into the hands of Mr. Kiernan, (he did not send it to the Council,) be construed into a *misrepresentation*? How can a man's own words misrepresent himself? Mr. Newport acknowledges, that in his experiments on the relation of muscular irritability to respiration, he was merely working for Dr. Hall. Mr. Newport states that he first saw Dr. Hall in May, 1832. Dr. Hall's paper on muscular irritability and hybernation was read to the Royal Society in February, 1832, some months before. If there be any similarity between Dr. Hall and Mr. Newport, the priority of Dr. Hall is obvious. It is extraordinary, that because Dr. Hall simply showed Mr. Newport's own letter to the gentleman named, he should be accused of misrepresentation; and still more extraordinary, he should be accused of *misrepresentation* in the pages of the *Philosophical Transactions*, with such total absence of all proof or probability. Holding a mirror to a man's face might as well be termed misrepresentation. It really is an insult to the perceptive powers of the readers of *THE LANCET* that such cavilling should be thrust upon them.—ED. L.

DR. LAYCOCK AND HIS REFLEX FUNCTION OF THE BRAIN.

DR. LAYCOCK is angry that Vindex should offer battle to him and his hobby anonymously. I would not do so did I not think that a writer might honourably, and in conformity with "sound ethics," preserve an incognito. Surely one may be allowed to pull up weeds with a gloved hand; or, if this simile be too humble, I may say, that I at the first gave my name to the Editor of *THE LANCET*, and this ought to be sufficient warranty to Dr. Laycock that his adversary is at least his equal. Even in the jousts of chivalry, a knight who could satisfy the umpires was allowed to fight with a blank escutcheon and with his visor down.

Dr. Laycock says that he has maintained a simple proposition, to the effect, that "the cerebral nerves of special sense are *incident excitator nerves*, and that the portion of the encephalon situate above the tubercula quadragemina is subject to the laws of reflex action." Dr. Laycock did, indeed, attempt to maintain it, and in doing so he mistook the spasm of the larynx, excited in the hydrophobic patient by the sight of water or the sight of a polished mirror, for reflex actions. I, on the contrary, maintain that this is a gross absurdity. The spasmodic action in such cases, from such causes, is emotional, it is not in anywise *reflex*, but the course of the motor action is *direct*, from the seat of emotion to the larynx. It depends not upon reflex action, but upon the *emotion*, the *terror* excited by the liquid or the polished surface, both of which suggest the *idea of drinking*, so horrible to the hydrophobic patient. Reflex, indeed! why the same takes place from hearing the trickling of water, with the eyes closed, or from hearing the word "water" pronounced. Dr. Laycock maintains that the sight and hearing of certain things excite reflex actions of the brain. Will he maintain the absurdity, that in hydrophobia, the impinging of the sound upon the auditory nerves produced in the utterance of the word "water," makes an incident impression different from the sound of any other word, and which is carried by an incident and reflex action to the vocal organ?

Dr. Laycock further declares, that "the headless wasp *angrily attempts to sting*; the scolopendron *threateningly erects its tail*; the tail of the earthworm, when severed from its brain, will *attempt to flee* from irritation.

The words italicised prove that Dr. Laycock considers emotion and volition, and their appropriate motions, may remain after decapitation, and he refers to Volkmann and Van Deen for the proofs. Dr. Laycock ought to have known that the

objections of these physiologists have been answered and refuted long ago; that they did not, in fact, understand their own experiments. But, as I stated before, Dr. Laycock argues loosely, and supposes, that because the movements after decapitation are *like* those which occur in perfect animals, they are therefore the *same*.

Let me put before Dr. Laycock a passage or two from Dr. Carpenter's recent *Manual of Physiology*, in which this subject is clearly discussed, and to which he may bow, perhaps, more readily than to me.

"The general conformation of articulated animals, and the arrangement of the parts of the nervous system, render them peculiarly favourable subjects for the study of the reflex actions, some of the principal phenomena of which will now be described. If the head of a centipede be cut off whilst it is in motion, the body will continue to move onwards by the action of the legs, and the same will take place in the separate parts, if the body be divided into several distinct portions. After these actions have come to an end, they may be excited again, by irritating any part of the nervous centres, or the cut extremities of the nervous cord. The body is moved forwards by the regular and successive action of the legs, as in the natural state; but its movements are always forwards, never backwards, and are only directed to one side, when the forward movement is checked by an interposed obstacle. Hence, although they might *seem* to indicate consciousness and a guiding will, they do not so in reality, for they are carried on, as it were, mechanically, and show no direction of object, no avoidance of danger. If the body be opposed in its progress by an obstacle of not more than half of its own height, it mounts over it, and moves directly onwards, as in its natural state; but if the obstacle be equal to its own height, its progress is arrested, and the cut extremity of the body remains forced up against the opposing substance, *the legs still continuing to move*. If, again, the nervous cord of a centipede be divided in the middle of the trunk, so that the hinder legs are cut off from connexion with the cephalic ganglia, they will continue to move, but not in harmony with those of the fore part of the body, being completely paralyzed, as far as the animal's controlling power is concerned, though still capable of performing reflex movements by the influence of their own ganglia, which may thus continue to propel the body, in opposition to the determinations of the animal itself. The case is still more remarkable, when the nervous cord is not merely divided, but a portion of it is entirely removed from the middle of the trunk, for the anterior legs still remain obedient to the animal's control; the legs of the segment from which the nervous cord has been removed are altogether motionless, whilst those of the posterior segments continue to act, through the reflex powers of their own ganglia, in a manner which shows that the animal has no power of checking or directing them.

"The stimulus to the reflex movements of the legs in the foregoing cases, appears to be given by the contact of the extremities with the solid surfaces on which they rest. In other cases, the appropriate impression can only be made by the contact of liquid; thus, a dysticus (a kind of water-beetle) having had its cephalic ganglia removed, remained motionless as long as it rested on a dry surface; but when cast into water, it executed the usual swimming motions with great energy and rapidity, striking all its comrades to one side by its violence, and persisting in these for more than half an hour. Other movements, again, may be excited through the respiratory surface. Thus, if the head of a centipede be cut off, and, while it remains at rest, some irritating vapour (such as that of ammonia or muriatic acid) be caused to enter the air tubes on each side of the trunk, the body will be immediately bent in the opposite direction, so as to withdraw itself as much as possible from the influence of the vapour. If the same irritation be then applied to the other side, the reverse movement will take place, and the body may be caused to bend in two or three different curves, by bringing the irritating vapour into the neighbourhood of different parts of either side. This movement is evidently a reflex one, and serves to withdraw the entrances of the air-tubes from the source of irritation, in the same manner as the acts of coughing and sneezing in the higher animals cause the expulsion from the air passages of solid, liquid, or gaseous irritating matter, which may have found their way into them.

"Now the performance of these, as well as of other movements, many of them most remarkably adapted to an evident purpose, might be supposed to indicate that *sensations* are called up by the impressions, and that the animal can not only *feel*, but can *voluntarily* direct its movements, so as to get rid of the irritation which annoys it. But such an in-

ference would be inconsistent with other facts. In the first place, the motions performed by an animal under such circumstances are never spontaneous, but are always excited by a stimulus of some kind. Thus, a decapitated frog, after the first violent convulsive movements occasioned by the operation have passed away, remains at rest until it is touched; and then the leg, or its whole body, may be thrown into sudden action, which immediately subsides again. In the same manner the act of swallowing is not performed, except when it is excited by the contact of food or liquid; and even the respiratory movements, spontaneous as they seem to be, would not continue unless they were continually re-excited by the presence of venous blood in the vessels. These movements are all necessarily linked with the stimulus that excites them—that is, the same stimulus will always produce the same movement, when the condition of the body is the same. Hence it is evident, that the judgment and will are not concerned in producing them, and that the *adaptiveness* of the movements is no proof of the existence of consciousness and discrimination in the being that executes them, the adaptation being made for the being, by the peculiar structure of its nervous apparatus, which causes a certain movement to be executed in response to a given impression, not by it. An animal thus circumstanced may be not unaptly compared to an automaton, in which particular movements, adapted to produce a given effect, are produced by touching certain springs. Here the adaptation was in the mind of the maker or designer of the automaton; and so it evidently is in regard to the reflex or consensual movements of animals, as well as with respect to the various operations of their nutritive system, over which they have no control, yet which concur most admirably to a common end.

"Again, we find that such movements may be performed, not only when the brain has been removed,—the spinal cord remaining entire,—but also when the spinal cord had been itself cut across, so as to be divided into two or more portions, each of them completely isolated from each other, and from other parts of the nervous centres. Thus, if the head of a frog be cut off, and its spinal cord be divided in the middle of the back, so that its fore legs remain connected with the upper part, and its hind legs with the lower, each pair of members may be excited to movements by a stimulus applied to itself; but the two pairs will not exhibit any simultaneous motions, as they will do when the spinal cord is undivided. Or if the spinal cord be cut across, without the removal of the brain, the lower limbs may be excited to movement by an appropriate stimulus, though they are completely paralyzed to the will, whilst the upper remains under the control of the animal as completely as before. Now it is not conceivable, that, in this last case, sensation and volition should exist in that portion of the spinal cord which remains connected with the nerves of the posterior extremities, but which is cut off from the brain. For if it were so, there must be two distinct centres in the same animal, the attributes of the brain not being affected; and by dividing the spinal cord into two or more segments, we might thus create in the body of one animal two or more distinct centres of sensation; to say that two centres of sensation are present in such a case, would really be in effect the same as saying that there are two or more distinct minds in one body, which is manifestly absurd."

Or if this be not sufficient, I would direct Dr. Laycock to one of the most beautiful passages to be found in physiological writing.

"Every physiological act of the excito-motor power is obviously designed; the act of deglutition, the act of inspiration, the closure of the eyelids, of the larynx, the action of the sphincters,—all is replete with obvious design.

"How, therefore, the appearance of design in some of the reflex actions, observed in experiments, should have been imagined, as they have by my venerable friend Professor Nasse, by Professor Volkmann, and others, to indicate the presence of a mental operation, I cannot comprehend.

"Thus, if, in the decapitated or divided tortoise, we irritate the various parts *a, b, c*, in fig. 9, we observe the several actions portrayed in the plate; if we irritate the tail, the posterior extremities are protruded towards the part so as apparently to remove the cause of irritation; if we pinch the integuments at *b*, the extremities are retracted; if we irritate the anus, *c*, the limbs are moved so as to be brought into contact with the part."

"The design in all this is obvious; but is it design in the decapitated or divided animal? Certainly not; but of its omniscient Creator! It coincides with what would be design in the animal; otherwise, in such acts of the living and perfect animal, the act of volition and the act of the reflex excito-

motor powers would counteract and frustrate each other. We may, I believe, be so far allowed to reason from final causes. And may we not be allowed to say, it is all beautiful, and demonstrative of the wisdom of Him who fashioneth all things after His own will?

"It is in this manner that the march, the flight,—yes, and the inspiration, of birds and insects, coincide in effecting the combined objects of locomotion, and of a most vital function. It is in this manner that we are enabled to contemplate the migration of animals, as effected and continued, however long, like the acts of inspiration, on a principle not susceptible of fatigue. I suspect, indeed, that the migratory traveller is frequently actually visited by Nature's sweet restorer, during its aerial transit!

"In this manner the ostrich pursued its course after decapitation by the crescent-headed arrow of the Roman emperor; and the decapitated cock of Kaaw Boerhave ran on in the direction towards its food, previously impressed by its volition; each successive contact of the foot with the ground exciting the subsequent movement."—p. 31.*

Dr. Laycock calls me a *fanatic*, and he says, "I readily declare that I am not a vivisector." This is downright cant, and I "readily declare" that I prefer fanaticism to cant. What is the opinion of Dr. Laycock, confessedly a mere pen-and-ink physiologist, worth, that he should endeavour to propagate a new dogma in physiology? What should we think of a man who should dogmatize about fever who had never seen a case excepting on paper?

Dr. Laycock says that he "has not the slightest taste for experiments on living animals;" canting writers have always said the same. Let me administer a taste of the rod from the illustrious Harvey, when the same spirit opposed him. He says—

"There are those who cry out that I have affected a vain commendation in dissection of living creatures, and do, with childish slighting, dispraise and deride at frogs and serpents, gnats, and other more inconsiderable creatures. If you will enter with Heraclitus and Aristotle into a workhouse, (for so I call it,) for inspection of viler creatures, come hither, for the immortal gods are here likewise: and the Great and Almighty Father is sometimes most conspicuous in the least and most inconsiderable creatures."

Dr. Laycock may still dream on, that he has "adduced ample and irrefragable proof of the truth of his proposition," but I rather suppose his dream will be a solitary one.

April, 1846.

VINDEX.

HOUSE OF COMMONS.

Wednesday, April 29th.

THE FACTORY QUESTION.

MR. WAKLEY presented to the House a great variety of petitions in favour of a Ten-hours' bill, among which was the following important Memorial:—

To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled,

The Petition of the undersigned members of the Medical Profession of Manchester, humbly sheweth—

That your petitioners are professionally engaged in this important manufacturing borough, and are frequently called in to visit the poor in cases of sickness, a large proportion of whom are factory-workers.

That your petitioners are deeply impressed with the opinion, that the length of time which children and young persons are confined in factories, necessarily compelled to breathe an impure and heated atmosphere, is highly injurious to their health, and much impedes their progress in arriving at that state of healthy maturity which labourers in less confined and more healthy situations attain.

Your petitioners are decidedly of opinion that a reduction of the hours of factory-labour would materially lessen the number of cases of disease in this borough, and also reduce the rate of mortality amongst its inhabitants.

Your petitioners therefore pray your Honourable House to pass a Bill prohibiting all persons under twenty-one years of age from being worked in factories more than ten hours a day.

And your petitioners will ever pray.

(Signed by fifty-eight physicians and surgeons of the town of Manchester.)

Other petitions, of a like nature and prayer, were at the same time presented from the medical practitioners of Todmorden, (Rochdale,) and of the town of Heywood.

* The *italic* letters refer to the admirable plates.

* Dr. Marshall Hall's new memoir on the nervous system. 1845.

NEWS, REMARKS, AND CRITICISMS.

KING'S COLLEGE.—The annual distribution of the medical prizes took place on Saturday, April 25, when it was stated that the medical classes comprised 214 students, of whom 160 attended the hospital.

THE MEDALS OF THE ROYAL SOCIETY.—*To the Editor.*—SIR: The recent, as well as many former exposures of the unfitness of the Council of the Royal Society to be intrusted with the award of the royal medals, suggests the propriety (may I not say, for the sake of our national honour, the imperative necessity?) of a petition to her Majesty for the discontinuance of the grant of these perverted rewards of scientific research. I wish you would seriously turn your attention to this subject. I can assure you that not a small number of scientific men, engaged in pursuits which do not fall under your immediate cognizance, would most fervently join in that prayer to the throne: for the same class of wrongs that you have exposed with reference to the medals for physiology and its kindred pursuits, are equally rife in every other department of science, and are felt with equal intensity. Better by far is it that no scientific distinctions should exist, and that discovery should meet a mere historical reward, than that a mere *clique* should enjoy the temporary distinction that is easily purchased by demi-charlatanism, and a parasitism to Dr. Roget, Professor Christie, and the selfish creatures who cut with them in the Somerset-House and Piccadilly Saturnalia. It is clear that you hold Dr. Roget "cheap" enough in the world of physiological science: but he is (he cannot but be) *transcendent* in comparison with his mathematical colleague, whether viewed in respect to his science or to his partialities and hatreds.—Your obedient servant, A MATHEMATICIAN.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted members on Friday, April 24, 1846:—R. Cockburn, B. Miller, W. Davenport, W. J. Collins, J. C. Cleland, G. A. Knott, E. J. Barker, D. E. Hamilton, H. Smith, J. Mulhanny, S. Chavasse.

APOTHECARIES' HALL, LONDON.

Names of Gentlemen who obtained Certificates of Qualification to practise as Apothecaries on Thursday, April 16, 1846:—George Peskett, Petersfield; Henry Peskett, Petersfield; Philip Beal, Portsea; William Smith, Derby; Allan Cleland, London; George Henry King, Southampton; Charles Mathias; William James Kite, Ramsbury, Wilts; William Bowden, Totness.—April 23:—Henry Daubeny, London; Charles Lewis Norton, Bristol; Henry Beckwith, York; Charles Natrass, Sunderland; Robert Samuel Thornley, Derbyshire; Richard Barnes Roscow, Haslingden; Edward Hall, Newtown; Andrew Truelove Edge, Nedging, Suffolk; William Evans, Devonport; Edward Reckitt, Hull; Edward Whately, Great Berkhamstead; William Brinton.

CORRESPONDENTS.

Several of our correspondents complain, because the advertisements which convened the late meeting of the members of the National Association were excluded from our columns; and one gentleman, for whom we have long entertained strong feelings of personal regard, states, that such a proceeding, on the part of the Editor of this journal, has manifested, in his estimation, "a feeling of vindictiveness which he never considered could be justly chargeable against him." Now, we can assure both him and our other correspondents on this subject, that no such advertisements were sent to our office for publication, consequently any disappointment which any of our readers may have felt, has been caused by others, and not by ourselves. We certainly uniformly exclude from our pages the advertisements of quacks, at the sacrifice of receipts probably to the extent of some thousands of pounds annually, and the Editor has also rejected the advertisements of an individual by whom he had on several occasions been grossly slandered and libelled. But advertisements of meetings in which the interests of the profession may be supposed to be more or less concerned, he would on no account think himself justified in excluding from his pages. It is a species of information which they ought to possess, and if he were to be guilty of withholding it from them, he would consider himself to be the author of a fraud. It is therefore for others to explain why such announcement did not appear in the columns of a journal whose readers probably outnumber, by ten to one, the readers of any other medical periodical that is published in this country.

A Surgeon, (Manchester).—The debate on the Factory Bill will not be resumed until Wednesday, the 13th inst. when the vote for the motion on the second reading will be determined. Any information which the profession could communicate to us, in the meantime, on the effects of factory labour on young persons, with permission to make use of such information in the House of Commons during the debate, would be respectfully acknowledged.

Chiron.—Not until after the next public meeting. It is to be conveyed by the provisional committee of the National Association.

The communications forwarded by Mr. J. L. Pon and Mr. Cooper (of Liverpool) will be inserted.

W. S. B.—The fee should have been paid by the person who applied to the office to assure his life. In the case mentioned, if the party certifying was not usual the medical attendant of the assurer, nor acquainted personally with the facts required to be declared, the document in question may be fraudulent, and the policy, if granted, liable to be rejected on that ground, whenever payment of the sum involved is claimed.

We have received the *Carlisle Patriot* of April 24th, containing the correspondence between Mr. Hugh James and Dr. Henry Lonsdale, but cannot notice it further with advantage to any person or object concerned. It is evident enough that the publication of a letter from Mr. Nicholson should have accompanied the other documents, when the matter found its way into the newspaper.

Correspondents who forward newspapers to the Editor of the *THE LANCET* are requested to indicate in some way the articles to which they desire to direct his notice, either by cutting the paper, or circumscribing the remarkable passage by an ink or a pencil line, or pointing it out in some other manner. Such a proceeding is absolutely necessary, in order that the articles in question may obtain prompt observation, for it often happens that upwards of fifty newspapers and letters reach the Editor of this journal in the course of a day.

In the last *LANCET* a communication was acknowledged as from Mr. Gale, instead of from Mr. Thomas Yate, of the Infirmary, Tunbridge Wells.

Mr. R. D.—The circumstances mentioned are not peculiar. It would be useless to publish the statement.

A Country Surgeon.—The attendance was exceedingly small. What else could be expected?

Mr. Lionel Buller shall receive a private note. We do not remember having received a previous letter from him a week since.

A Surgeon (Bury) must on reflection admit that it would not be proper to notice the subject *anonymously* in *THE LANCET*, or in any other publication. Under the effective arrangements of a new law it is to be hoped that such deceptions will not be practised with impunity. We know nothing of the individual case to which our correspondent has referred.

Inquirer.—The "Associated Surgeons" before going to the meeting, had resolved to take no part in the proceedings. It was not a meeting of the "profession."

The letter of Mr. James Orwin, on the subject of interments in towns, shall be published in the next *LANCET*.

We must refer Mr. W. Johnson, *Senex*, (Leeds,) and others on the same subject, to the Resolutions, (p. 501,) which were adopted on Monday night last, by the Committee of Associated Surgeons. The feeling in favour of creating a *FACULTY OF MEDICINE* appears to be universal. But it is admitted by all who have addressed communications to us on the subject, that it would be infinitely preferable that the existing colleges should be rendered subservient to the wants of the profession, rather than that an *additional* corporation should be established.

J. G. S.—Without doubt the "physician" would be a competent witness in prosecutions against his companions for illegal practice; but if the drug-giver were to deserve to be fined £20, the doctor would assuredly deserve a good whipping. In this case, as in others of a similar kind, the press, perhaps, will prove to be the most efficient lash.

The number referred to by W. J. C. must have been forwarded by some friend, for a "particular" purpose, with the nature of which we are not acquainted. It was not sent by the Editor. What was the subject of the letter signed "Galenicus"? For the present, its receipt has escaped our recollection.

We have received from *Professor Silliman* the first number of the second series of the "American Journal of Science and Arts," and would with pleasure, at all times, notice the contents of the work as its numbers are received at *THE LANCET* Office, but it has always proved so difficult to carry out arrangements for "exchanging" journals with our contemporaries, that, as a general rule, we have long refrained from attempting to adopt it. The omission to return copies of *THE LANCET* for numbers of scientific periodicals which the Editors oblige us by forwarding, must, therefore, never be regarded as indicating a want of courtesy on the part of *THE LANCET*.

Mr. Horne's paper on *Scarlatina* is, at his request, left for him at *THE LANCET* Office.

Communications have been received from Mr. Edward Price; Mr. Nicholls; Mr. Rawson Pearce; Dr. Robinson; Mr. David Tod; One who has Served, (on the effect of sailor flogging;) Adolphos; Mr. J. G. Sproston; Mr. Merri- vale; Dr. Moreton; Mr. Pennington; Mr. Thomson, Aberfeldy; Dr. G. O. Rees; A Surgeon, Bury; Justitia; Mr. H. L. Tovey, Bermondsey-street; Dr. Hall Davis; Mr. Dorington; Mr. Yates; A Surgeon; Mr. David Maxwell Aitken; Mr. Henry Appleton; Mr. Herbert Davies; Mr. Markwell; Machaon; and Mr. George Johnson.

ERRATA.—A ludicrous error occurred in our report of the speech of Mr. Bedingfield, in the last *LANCET*, p. 475. The following funny passage: "He resolved &c. to go to Portugal to distil real royal water, under Sir Arthur Wellesley," ought to have been printed—"to distil water from the laurels of the gallant Sir Arthur Wellesley."

In Mr. Thomson's paper on Treatment of Bronchitis in Infants, in the number for April 18, p. 434, line 33 from the bottom, for "*paring* its edge, &c.," read "*raising* the edge of the blister occasionally."

In Mr. Brett's paper on Strabismus, in the number for April 25, p. 461, figure 3, the operation has been made by the engraver to appear on the external rectus muscle, where it is comparatively seldom required, instead of on the internal rectus. And in page 470, col. ii. line 7, read Mr. Christie, instead of Mr. Children.

CLINICAL LECTURES

ON THE

PRINCIPAL FORMS OF INSANITY,

DELIVERED IN THE MIDDLESEX LUNATIC-ASYLUM
AT HANWELL.

BY JOHN CONOLLY, M.D.,

PHYSICIAN TO THE ASYLUM.

LECTURE XVI.

*Description of some of the most frequent chronic forms of insanity;
recurrent attacks; morbid impulses; delusions.*

Of the 985 patients remaining in this asylum, when the last annual report was drawn up, there were only sixty-three in whom the duration of insanity had not already exceeded two years. In 169 of the patients, the duration of the malady could not be ascertained. Five hundred and forty-four had been insane more than seven years, and of these, 117 had been so affected more than twenty years; whilst fifty more had been imbecile or idiotic from birth. In twenty of thirty-eight patients discharged cured during the year comprehended by the report, the duration of the malady had not exceeded two years. Of the 985, therefore, remaining in the asylum, and with so many of whom you have now had opportunities of becoming acquainted, I fear not more than fifty are likely to be cured. Of 113 cases admitted in the same year, four had been affected from birth, seventeen more above two years, and twenty-one for a period which could not be ascertained; and as this character of the admissions must, as a matter of course, prevail in all county asylums not sufficiently large to receive every pauper lunatic soon after the malady appears, the study of these chronic cases, and their treatment, is of an importance that can scarcely be overstated.

It is for these patients, you must bear in mind, who constitute nearly all the population of this large asylum, and of other large asylums, that a cheaper management than that now existing is recommended by the authority of the commissioners in lunacy. Wherever you may happen to practise, you will find this subject occupying the attention of the magistrates of the county for some years to come; as systematic provision for the pauper lunatics must now be made in every county. You can only be prepared to offer useful opinions, if required, by studying the actual character of incurable patients, and the consequent and indispensable requirements of asylums for their safe keeping, and for their humane and enlightened treatment. It is my anxious wish to assist you in forming such opinions, on which the comfort and well-doing of hundreds of chronic lunatics may hereafter depend.

In your walks through our wards, you have become familiar with many forms of chronic insanity, far too numerous to be described, and all presenting stages of malady subsequent to the mania and melancholia spoken of in former lectures. The patients forming the subjects of these cases are, perhaps, all incurable, and I am sure you know enough of them already to feel an interest in arrangements which will affect these poor patients, for good or evil, until they die.

Cases of chronic mania comprehend the majority of cases in all asylums, with the exception, of course, of those in which recent cases are alone admitted, and from which all cases are discharged within a certain period, whether cured or not. One may say, generally, of the subjects of these chronic cases, that they are usually quiet, if not unnecessarily and foolishly irritated. Their appearance and their deportment are extremely various, often very singular, but sometimes scarcely, or not at all, differing from those of sane persons. You have often seen our male patients collecting at the dinner-hour, coming in from work, assembling in companies of thirty or fifty in the day-rooms, standing up with uncovered heads whilst a grace was read by one of themselves, reverently answering "amen," and sitting down with more order than so many labourers. You have observed them at the chapel, attentive to the service, so calm in countenance, so composed in manner, that you could scarcely believe that many of them were really insane. Yet of these, not a few were subject to recurrent attacks of violent excitement; many were affected with morbid or untrue sensations; some with violent and sudden morbid impulses; some with various delusions; many were incapable of five minutes' coherent discourse; and some

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had fallen into various degrees of mental imbecility, consequent on attacks of mania or melancholia.

The variety of phenomena presented in these chronic forms of mania is such as to defy, not description only, but enumeration. No two cases are precisely alike. The malady may be said to play through the whole range of the human character, —through all the faculties and functions, —in all possible modifications of sensation, —of the propensities, —of the perceptions, —of the feelings, —and of the intellect; and it is consequently displayed, in different instances, in every possible form of external manifestation. In each variety we see some illustration of the impairment of the directing power, whatever that power is, and the result is, some one or more of the faculties, affections, propensities, left to their own impulses; and we may find all this disorder originating in morbid conditions of nerves and organs of sensation and perception. The loss of some governing power is even perceptible, in many cases, in the irregularity with which the functions of the spinal and ganglionic nerves are performed. We also find various visceral functions, sympathies, and instincts, perverted; muscular actions in excess, or defective; sensations, external and internal, variously modified or lost. Thus we see one man's life becomes a continued anger, or a perpetual enthusiasm; one is the constant dupe of excited hope, and another mourns its total loss, never to be regained. Some are immersed in endless calculations; some exerting a continual effort of mechanical invention; and some passing a life in ambitious literary designs, and all fruitlessly. One man is unceasingly exercising his powers of motion and locomotion; another talks incessantly, or sings, or shouts, or swears, or destroys chairs, tables, crockery, glass, or bedding, like an automaton obeying a power it cannot resist or control. In some, the mind is joyful, and the patient dances: one man is seen to take six regular steps in one direction, and six regular steps backward; another swings his head about from morning to night, every now and then uttering a few syllables, or a few strange sounds like the low commencement of an Indian war-song; and some stand immovable all the day long, as fixed as statues, and uttering no sound.

Defective or excessive nervous stimulus, or stimulus unequally applied to different portions of the brain and nervous system, are the probable causes of all these various phenomena. Many of them resemble the habits of children at an age when the brain has not attained its completion; many of them are seen in persons under the influence of alcohol; many of them in hysterical persons; and if the experimenters are not deceived, in cases in which patients are subjected to the influences called mesmeric or magnetic.

There are some cases of incurable insanity in which the patient is almost always in a violent state. One of the worst of such cases you have seen in the female ward No. 5. A. M. — is an Irishwoman, thirty-five years of age, who has been insane six years. Soon after coming to the asylum she became violent, and has ever since remained either highly excited, or in a state of apparent tranquillity, but unsafe to approach. There are many days and nights in which she is in a state of complete frenzy; her countenance has a vague and wild expression, and she either walks about, or stands, or sits in one position, uttering fierce words, or fiercer inarticulate sounds, with a savage energy which appears quite inexpressible. If any one enters her room at such times, she springs upon them like a tigress: she will generally allow the nurses to attend to her; but the sight of men seems especially disagreeable to her, and in the course of six years there have been only two or three occasions in which she would suffer any of the medical officers to put a question to her without breaking out into loud and angry abuse and imprecations. After trying all practicable means of relief for some time, including baths of all kinds, we have been compelled to avoid any particular interference with this case, and to pursue the unsatisfactory but only safe course, of never appearing to take particular notice of her. Care is taken of her diet, dress, and general comfort, and she is generally persuaded to go into the airing-court, when the other patients are not out. Another Irishwoman, M. C. —, in ward No. 6, has been with us five years, and nearly the whole time violent and abusive, or sullen and morose, and always uncertain and dangerous; she converses as if possessed of all her faculties unimpaired, but makes accusations against all the nurses of using her cruelly, and of giving poison to her in her food. You have been amused, on entering the female ward No. 13, to see an elderly patient appear at her bedroom door, and instantly break out into the loudest abuse of us all, as if nothing gave her such entire satisfaction as to exhaust her strength in swearing at us, and in repeat-

edly banging the door. She salutes us in the same way every day in the year, and I have never known her quiet except once, when she had severely injured her hand, and even then she only repressed her rage for a day or two. A. C—, in female ward No. 3, who has been mentioned as so remarkably illustrating the sentiment of pride, is one of those patients whom no kind of address can soften, and no words can soothe. As soon as we approach her, her face assumes an expression of haughtiness, anger, and disgust, and she soon expresses these feelings in appropriate words. She is a woman of education and respectability; but we have never been able to devise means of conciliating her, or of doing her any kind of good. I know that most, if not all, of these patients were in other asylums before coming to Hanwell, and were often in restraints, and I am inclined to think that in some of them the continual unamiability now evinced may have been so created; for there are several male and female patients in the asylum who were equally unapproachable when I first knew them, and almost always in restraint, and with whom, now that they have been six years free from such applications, I am on terms that may almost be called friendly. Among those who have come to us before being put in restraints elsewhere, or at least a short time after the commencement of their malady, although many have continued violently excited for months, I do not remember any who have been invariably angry and dangerous even at that time, or who, although lapsing into a chronic state, are too ill-tempered to be approached. We have very few cases of perpetual excitement on the male side of the house. With the exception of C. S—, a German, in male ward No. 5, and R. C—, an old man, in ward No. 12, and J. M—, also an old man, in ward No. 3, I do not know any who are uniformly uncivil when spoken to, and at all times disposed to use passionate language.

Recurrent paroxysms of excitement take place in a considerable proportion of the chronic cases; requiring all the treatment and care which has been described to you as adapted to recent and acute cases of mania. The inconvenience and danger of removing such patients from an efficient asylum to one in which, for the sake of economy, less space is afforded to them, and in which there are fewer attendants, and few means of separation from others, must be obvious to any one who has a practical acquaintance with them. Even in their calmest intervals they require careful management and superintendence. In some of these cases the recurrent attacks are frequent, and of short duration. J. M—, in male ward No. 6, has had several, even during the few weeks occupied by this course of lectures. J. F—, in male ward No. 5, who is to-day excited, wild, and manifests a sort of fanatical enthusiasm, will, before your next visit, be calm and reasonable. I must observe, that patients thus affected were much injured by being always placed in restraint on the coming on of the paroxysm. They formerly passed half of their time in restraint, and became dissatisfied and sullen. The patient last mentioned justly appreciates all that has been done to him in his violent state; retains a sense of mortification if he thinks he has been unnecessarily thwarted, and of gratitude for all acts of forbearance towards him. J. F—, in male ward No. 12, remains calm and rational, but a little depressed, for many months at a time; unequal to exertion, but fond of reading, and most neat and orderly in his dress and in all his ways. But there are times when excitement shows itself in his manner, and in his dress and general appearance, and in his whole conduct; and this state lasts some weeks. Reasonably humane treatment makes such patients as these attached friends; they feel the comfort of being protected when they are ill, and well knowing their uncertain state, are contented to remain with us when they are better. They take an interest in the house, and become useful companions to the convalescent and curable. This is partly the result of the general order and arrangement of the asylum being productive of comfort to them in their best state; but it is also partly the result of our always having the means of managing them well when in their worst state. A different kind of asylum, different treatment, different attendants, the absence of proper medical care and of the means of temporary seclusion, together with the kind of superintendence to be expected in an incurable asylum, of which the government would be merely that of a workhouse or of a prison, would make all these patients unhappy, discontented, and generally troublesome.

The attacks of recurrent excitement are sometimes very sudden, and serious accidents would occur in any house of which the arrangements were not carefully adapted to meet them. When such arrangements are wanting, personal violence is substituted for them; the patient is bound with ropes or twisted sheets, or fastened down with many straps,

and becomes furious. The attack is prolonged by these means, and the patient becomes dirty and wretched; whereas, in a great number of the recurrent cases, if nothing is done to irritate the patient, attacks which seem very violent will pass off quickly, and leave no trace. Among the female patients, who are, perhaps, subject to more sudden fits of excitement than the men, you will occasionally see one rushing out of her room, with red face, violent gesticulation, and voice scarcely articulate from passion, seeming to threaten every one who comes near her. The patient needs seclusion for a time. If placed in her room, she will probably soon become calm; and the next day she may be seen engaged in household work, or industrious in the kitchen or laundry, or feeding the poultry; her countenance cheerful, her manner composed, and not offended by the quiet management of her fit of passion, which, indeed, she knows to have been the most proper for her. Such patients are particularly sensible of the consideration shown to them, by refraining, not only from restraints, but from prolonged seclusion; many of those who are now in the asylum present examples of this, and discourse reasonably and feelingly on these points of discipline.

I directed your attention this morning to some of our chronic patients who are liable to recurrent maniacal attacks. When the attacks are recurring, you would scarcely know some of them again. In one, whom we saw in female ward No. 8, M. W—, an Irishwoman of middle age, and almost always cheerfully employed in the kitchen, the recurrent paroxysm has just appeared, and her face has become pallid; her eyes seem sunk, and her fidgetty actions and perpetual talking are the chief signs of the existing and temporary excitement. All the habits of patients thus affected undergo a sudden and temporary change. One man, S. H—, in ward No. 10, generally refuses food during the paroxysm, and never at other times. Another patient blows a tin pipe with great vehemence whenever he is excited. J. G—, an epileptic woman, in the infirmary, always makes most urgent requests that her children may be sent for, just when her recurring malady is unfitting her for seeing them. We also know that J. D—, an elderly man, in ward No. 12, is becoming excited again, by seeing the state of his room. Several fragments of oranges are disposed on the table or chair, a handkerchief is carefully hung over a stick in the corner; his bed, in which he is sitting up, is covered with newspapers and hymn-books, on the margins of which he scrawls religious sentences. Pill-boxes, bits of cloth, portions of torn books, and various other articles, come out at such periods from one knows not where, and add to the confusion. This poor man, at such times, has a thousand requests to make, and the left side of his head commonly becomes sensibly hotter than natural. In other cases, we see women of gentle and retiring manners becoming confident and vivacious, singing with unwonted skill, and dancing with unexpected grace; or men of modest, grave, and reserved habits, become boisterous and swaggering, talk loud, sing vociferously, and play practical jokes on all within their reach.

E. S—, in female ward No. 5, who is usually lively, and fond of making pert observations during our visits, is rather more than fifty years of age, and has been insane, I believe, from about the age of twenty. Her malady is said to have been first occasioned by the shock arising from the sudden death of her husband, in consequence of a fall. During the last five years, in which I have almost daily seen her, she has several times passed through nearly every possible variety of mental disorder. From her usual lively state, she sinks into a condition of the utmost prostration, becomes wholly silent, lies in bed, scarcely touches food; her hands are cold, and her pulse scarcely perceptible. When I first saw her in this state, I thought her death was approaching, but I have now seen her many times so affected. At such times she appears to be quite sensible, and sometimes she will speak, although in a very low tone, yet quite rationally. From this condition she gradually rallies; she then gets up, appears restless, displaces everything in her room, or walks about, looking as if half asleep and ready to fall down, and her countenance becomes wild and anxious. To this state very lively symptoms succeed, and you will then see her dressed in striped trousers, wearing a frock of the same materials, and a round straw hat, with a broad pink ribbon about it, and a pipe in her mouth, dancing, singing, swearing, kissing the other patients, dressing them in her own hat, and seeming greatly to admire them in it, and conducting herself very much like a merry man-of-war's man. From this excitement she gradually relapses into her usual lively condition, but almost always varies a little from day to day. Sometimes for several days she seems not to recognise any of the persons about her, and she will sit

on the ground crying in the most pitiable manner. At times she is an industrious helper in the wards, and on other days she only smokes her pipe, or sometimes two pipes at once, and uses contemptuous expressions to those who notice her, or leans against the wall, with her eyes shut, making grimaces. Now and then for a week or two she is noisy night and day, talks nearly all the night, repeating anything that has been said during the day which has displeased her, or some sentence from the bible which she has heard read in the chapel, in tones expressive of anger, ridicule, or disdain, beginning the quotation again and again, and after uttering a few words, bursting into excessive laughter. After a time all these symptoms subside, her room is restored to neatness, and her own dress to propriety; and she is extremely civil and good-tempered, paying much attention to such of the other patients as are sick or helpless. Such cases as this require, in the different stages of an ever-varying malady, all the variety of means that can be commanded in an asylum; constant superintendence, occasional seclusion, medicine, carefully regulated food, the administration of stimulants, or their exclusion, vigilant watching, continual forbearance. No recent and curable case requires all this care in a greater degree. With all the oddities of this patient, she is a great observer, and very humane. One day I found her sitting on a bench, and crying as if her heart would break; she was quite unable to speak for sobs, and when I asked her what was the matter, could only point at a lame patient standing near her; and the nurses explained that she was crying because the other patient's "leg was so bad." She was always much hurt when she saw other patients in restraints, and I thought she became a better sleeper when the violent scenes induced by restraints became no longer known in our wards. On one occasion, after some days of great excitement, I saw her sitting composedly on a table, occupied in sewing, and she was very desirous that I should understand what she was about, saying, "I tore this dress when I was ill, and I am mending it now that I am better."

The frequent recurrence of maniacal paroxysms, and the singular subsidence of all the symptoms in the short intervals between them, are in some cases very remarkable. S. C. T—, in female ward No. 4, has a paroxysm about once a month, during which she is in a state of continual restlessness, and although always talking, does not speak a word of sense; but in the short intervals, she is so sensible, that you would imagine she never had been otherwise. In the paroxysms, her whole appearance is changed, and even her hair seems to be starting wildly up from her head. In some patients, the intervals are much longer, and yet, however long the tranquillity, all the violent symptoms come on again, as if there never could have been any calm. E. S—, a very little woman, in ward No. 8, remains for many months, or for a year, perfectly tranquil. Her mind is a little weak and childish, and irritability is soon induced by trifling disappointments and contradiction; but she is particularly orderly and decent in all her conduct and conversation, and, having been here twelve years, looks upon the asylum as a home which she never wishes to leave. But after a long interval, the first signs of a paroxysm become perceptible in her countenance, which loses its habitual mildness, and acquires a sharpness of expression; her face becomes slightly flushed, or sometimes dark coloured; her little figure seems to be dilated with an unusual importance, and she talks, with the air of a much-neglected and injured person, of not being allowed to go away from the asylum, although a great many other patients do, generally concluding by saying, that she hopes she is talking rationally. Occasionally, these threatenings pass away in a few days; and it is when these precursory symptoms are discerned, that so much good or harm may be done to these incurable cases. Great discretion is required in addressing them; they are soothed by kind and considerate words, but may be roused by an unfeeling or injudicious taunt, to the greatest excitement. If the paroxysm runs its full course, the patient soon begins to talk, either in a very loud tone, or in a very hoarse voice; and the change is so expressive in this and other cases, that one may know the degree at which the excitement has arrived without seeing the patient. All her character now seems altered; she is restless, violent, and dirty; abuses the nurses and the doctors, with whom at all other times she is on most amicable terms. When this state approaches she is always removed from a quiet ward, such as No. 12, to a ward for refractory patients, and seems quite satisfied with this arrangement, and is unwilling to go back to the quiet ward until she feels herself better. Then, her usual manners return, generally after a paroxysm lasting a few weeks; her countenance and her voice become natural, and all her habits

improve. She sometimes alludes to occasions in which she abused us when she was excited, saying that she knew at the time that it was wrong, but could not help it. At other times she tells us that she felt she was abusing us in her heart, although she controlled her tongue, and says she cannot account for this, as her will had nothing to do with abusing us.

Usually, in these chronic cases, when the excitement recurs, the tongue re-assumes the character of being thinly covered with white paint, which I have alluded to as an accompaniment of acute mania, and a probable indication of a state of cerebral irritation. The conjunctivæ acquire a kind of pinkness, and sometimes the edges of the eyelids become red and irritable. The pulse is also commonly a little quickened, and the skin rather warm, particularly the scalp, the hands and feet being not unfrequently cold; but in other cases I have remarked the entire absence of these precursory symptoms; and when they do exist, the attention is chiefly likely to be drawn to them by other symptoms, such as a change in the expression of the countenance, or in the sound of the voice, or in a departure from the habits of the tranquil state, and a re-assumption of those seen in former paroxysms. The desire for food is generally decreased, and for stimulant liquors increased, and the sleep is either not quiet, or not refreshing. Up to a certain point, the patient seems to be growing every day worse, and at last there is rather a sudden subsidence of the acute symptoms. In one of our cases which I pointed out to you last week in male ward No. 6, there has been so sudden a recovery from a most severe maniacal paroxysm, lasting several months, that it may almost be called instantaneous. All at once, the patient, who is very intelligent, says that he felt he was well. He was the previous day running wildly and fiercely about, as if without any sense, and the next day he felt able to go about the house and see several persons in it who, he knew, would rejoice at his recovery. This young man perfectly recovers the use of his understanding. I wish I could say that he was free from the danger of a terrible relapse.

I have again to confess that the most varied and timely applied medicines and supposed remedial means are in many of these cases utterly inefficacious, exercising not the smallest visible control either over the duration or the degree of the symptoms. There are cases, undoubtedly, in which relief is always obtained to some extent by the application of leeches to the forehead or behind the ears, by blisters put behind the neck, by aperient medicines, and by sedatives. The tincture of henbane, in doses of two drachms or more, is a safe and useful medicine, and may be given twice in twenty-four hours. In some cases, the acetate of morphia is more useful; and in others, the tincture of hemp is more serviceable than all the rest. But all the remarks made by me when speaking of the employment of sedatives in acute mania are more or less applicable to their use in the acute stage of recurrent excitement. The shower-bath, the warm-bath, the administration of antimony, are all sometimes productive of considerable benefit; but the truth must not be concealed, that the irritable state of the brain will, in some instances, continue uncontrolled until it begins to subside of itself, or in obedience to laws of which we at present know nothing. But all this time an unirritating treatment may modify the patient's character in the attack, and prepare for a steady convalescence when convalescence once begins. During the worst part of these attacks, it is always important to remember that all the faculties are not simultaneously and equally disordered. Some affections survive, some reason remains, and upon these we may act; upon these, indeed, everything that is said and done does always act, and, sooner or later, unquestionable results follow. A kind recollection will sometimes suspend very violent irritation, and sometimes cause a speech commenced in anger to terminate in tears. Reproachful words and tyrannous inflictions make the flame fiercer, and are never afterward forgotten.

Dr. Hutcheson, the physician of the Glasgow Asylum, one of the most humane and observant practitioners in insanity, informed me, some time ago, that having noticed in some cases that the recurrent attacks were preceded or accompanied by the vomiting of an acid fluid, he was led to try the effect of administering mineral acids, and that, in some instances, he thought the practice was successful. The indication of endeavouring to counteract any preceding morbid secretion or action is at least highly judicious; but does not appear to be often clearly afforded by any symptoms.

After all is done, and however slow the progress and long delayed the end, the recurrent paroxysms, although less violent, become more frequent or more prolonged, and the intervals shorter and less complete. The mind becomes weaker and duller, the countenance becomes unmeaning and

haggard, the body wastes, and the patient dies, seemingly worn out by chronic irritation of the brain.

Not a few of the patients whom you have regarded among the quietest of our many incurables, have passed through many long attacks of insanity, and a whole life of agitation, every action from youth upward having had a tinge of insanity. If such patients are now generally tranquil, it is not because they are incurable, but because they have been for years enjoying the advantage of an undisturbing treatment. In different circumstances, the violence of some of them would become extreme; and if such cases, from their supposed harmlessness, are removed to asylums for the incurable, and cease to be treated as they now are, the incurable asylums will soon present all the terrible features of the old system. In female ward No. 13, we conversed a little to-day with D. E—, a woman about fifty years of age. She has been in the asylum more than six years; she is a native of Wales, came early to England, led a profligate life, was drunken and abusive, and ruined all who became for a time attached to her, and at length became decidedly insane. For a long time after admission to Hanwell, she was one of our least appeasable patients, and her great strength and activity, her loud voice, and excessively irritable temper, made her the terror of the house. At first she was subjected to almost every kind of restraint, and very frequently; but never with good effect. The shower-bath was more beneficial, and by interfering with her as little as possible, she began to go on rather more quietly. But for one whole year not a day passed without many fits of passion, and even when left alone, she would talk for hours by herself, telling long and incoherent stories, generally including much abuse of all whom she mentioned. Her manner to visitors generally alarmed them; she used to come close to them, look steadily at them, seem to recognise them, and then call them Bill or Jack so and so, or Sir Thomas, or Sir John, or Lord this or that, and be polite or extremely uncivil to them, according to the view she took of them. She even entertained delusions as to the identity of the officers whom she saw daily. On some days she used to call the matron Lady Antrobus, and was then very friendly in her manner to her; but on other days the matron was Tilley Tupler, and then she was far from amicable. For some time after she came to the asylum, she called me her husband, and was invariably polite to me, and almost to me alone. Then she said she was the wife of Christ, and I was Christ. For a long time she called herself the Queen of Portugal, and I became Bill somebody from the workhouse, and was in very low repute with her. She used to call one of the house-surgeons Jack the carter, and much derided my civility to him. To many of the women she gave men's names. Yet at other times she knew us all quite well, used our real names, and talked very reasonably about the state and management of the other patients, sometimes making useful suggestions. It was long before we entertained any hope of amendment in the manners of this violent woman. Her well-formed forehead, and the activity of her intellect, were almost the only favourable appearances; but it is one of the instances in which a very gradual, and, at length, a very great, amelioration has taken place since all modes of bodily coercion have been entirely disused in the asylum, and all words of strong censure or reproach refrained from, and she is now usually quiet, and gives very little trouble. Occasionally for a few weeks she is fretful and passionate, and I feel sure that ill-treatment or neglect would soon make her as refractory as ever.

There are not many examples at Hanwell of intermittent forms of insanity, or of those in which very exact periods of excitement and calmness are observed. Some patients seem invariably to become excited in the spring, and also on the approach of cold weather. The vernal excitement is observable in different degrees in a great many of our patients. In some we observe a quiet day alternating with a noisy one, but not, I think, for long periods. Esquirol speaks of quotidian, tertian, quartan, monthly, and annual forms of insanity. I have for some time attended a case in which fourteen days of excitement alternate with twenty-eight days of tranquillity and rationality, the character being in every respect diverse in the different periods; and I have seen a case in a private asylum in which I know that for years a month of maniacal excitement has alternated with a month of sanity. The intermission is complete enough to allow the patient to go unattended to a neighbouring town to read the papers in the news-room, and make purchases; and in this tranquil month he regularly reads all the daily papers which have been received in the month of his paroxysm. Those who have the charge of this gentleman know to a day when his character will change; and when the attack comes on, he is converted from a

quiet, gentlemanly, good-humoured man, into a restless, mischievous, abusive, and violent maniac.

There is an old man in the infirmary, M. B—, who has been many years insane, and whose time is entirely divided, although not by very exact intervals, between a most vivacious loquacity and an almost entire silence; and in the silent fits alone he labours under spasmodic asthma. In some instances patients appear to be insane in the night only, or in the day only. Broussais mentions a case in which the patient, a lady, had for thirty years an annual attack of mania, lasting three or four months, during which attacks she suffered from two distinct forms of excitement, divided between the night and the day. In the night, the tragical scenes of the revolution, of which she had been a witness, were present to her imagination, and her actions and language indicated terror, grief, and rage. As soon as the day appeared, a change came over her mind, and she became lively, and sometimes gross in her demeanour. Her cries, reproaches, complaints, and general language, were precisely alike in each of these annual attacks.

One of the most alarming uncertainties in insanity is, its tendency to deliver up the person affected to some sudden impulse. Many crimes have doubtless originated in this manner, suddenly conceived and immediately committed, including murders and suicides. The impulse to break, tear, and destroy, is comparatively harmless, and yet more the impulse, so frequently exhibited, to play, or sing, or write verses. With the more violent impulses the patients can sometimes struggle, so as to overcome them. A young lady, who was consumptive, lost her mother. A state of great irritability succeeded, and the symptoms of consumption appeared to be suspended. A strong impulse was felt to use abusive language; but a consciousness of its being wrong was preserved, and she used resolutely to retire to her room and lock herself in. She would beg people not to speak to her or notice her; not even to offer her any civilities; feeling that if they did she must answer them abusively. When she had secluded herself, she used to scream loudly and long, being at the time quite conscious of its being foolish to do so, but unable to restrain it. When this state subsided, the consumptive symptoms reappeared, and death followed. Other patients have told me of their often having a great impulse to quarrel with anybody or anything, without knowing why. S. W—, in female ward No. 6, says, that when her paroxysms come on she cannot help trying in every way to put an end to her life, as by hanging or drowning, or with knives or scissors, or by swallowing glass; and that she cannot understand why she should do so. Another patient, not in the asylum, told me that she sometimes lay awake at night, looking at her husband in his sleep, and thinking how easily she might kill him by one blow of the broom-handle, and that when so tempted, she had awoke her husband, in order that his talking to her might drive these dreadful thoughts out of her head. The consideration of such cases may, perhaps, be forced upon you in circumstances of great responsibility, and they are extremely perplexing to medical jurists; whilst people in general have little or no faith in them, and are impatient of such excuses for crimes which naturally create sorrow and indignation in the public mind.

When we walk through the quiet wards of Hanwell, and consider wherefore so many tranquil and well-behaved persons remain confined in them, apparently for life, we find that a very considerable proportion of them are unfit to be at large, in consequence of some delusion, out of which actions would grow, which would be either very inconvenient to their families or to the public. In the female ward No. 12, you find an intelligent little woman sitting quietly in the day-room, full of conversation, very inquisitive, somewhat sarcastic, evidently pretty well educated, and particularly learned in the genealogy of great families. She considers that certain royal persons, ambassadors, magistrates, and doctors, have conspired to deprive her of her fortune and her liberty. She writes hundreds of letters in a year on these subjects, and if at large, would set out every morning and make a round of very unwelcome calls. Her nearest neighbour is a tall and very nicely-dressed person, of mild manners, speaking in a gentle voice, and engaged in embroidery. She gives no trouble to anybody; her small bedroom is arranged with admirable neatness; everything is in order, and everything displays taste. But if removed from the asylum to her family, old delusions would at once revive; she would see in them only enemies trying to persecute her, and to destroy her by poisoning her food. Very near her is a younger woman, equally neat, and equally industrious in beautiful kinds of work, and although often out of humour, never violent, and seldom irrational in her conversation; but if placed at home, she would display

her humble family, talk only of great people and of noble suitors, and become so haughty and so irritable as to be unbearable. A good-looking middle-aged woman occupies a room a little further on, who never troubles anybody; but reads her prayer-book or bible during a great part of the day, and passes much of her time in prayer. She thinks herself inspired, and that her mission is to save the world; and if set at liberty, she would preach in the corners of the streets, or lift up her warning voice in churches. A door or two lower down you meet with a stout fine-looking person, who smiles good-humouredly, and talks with some humour of the arts of deception practised by the magistrates and the physician for the purpose of keeping her here; and we are always asked for what possible reason we detain her. When at large, she will live in no settled home, undertake no employment, fancying herself perpetually pursued by the police, and by enemies and spies, and causing intolerable disturbance. In the room next to her is a quiet widow, also neatly dressed, and generally employed in fancy-work. She expresses herself very reasonably about the hardship of staying here, and of being neglected. But for years this poor woman declared that every house was haunted by people who annoyed her. Her husband moved from one residence to another until he became almost distracted, and well-nigh ruined. He has been long dead, but she will not believe it, and expects him to come and take her away.

In the male wards, you have seen, also, many of these cases, in which some inconvenient or dangerous delusion occasions the continued detention of the patients. When entering the first of the male wards from the chapel, or No. 11, you see a patient of tall and commanding figure, and peculiar countenance, walking erectly, and with an air of consequence; you observe that he is extremely neat in his dress, and scrupulously clean. He receives you with great politeness, and talks well on ordinary subjects, although with great prolixity. He spends his time in reading, writing, painting, and taking exercise. His whole room, the walls, the door, the ceiling, the window shutter, even part of the floor, are covered with allegorical paintings on the walls, political, theological, and moral. This patient considers that he ought to be the tutor of the Prince of Wales, to superintend his education for twelve years, and so to regenerate this nation and the world. He was sent to us after an attempt to answer a sermon just concluded by a worthy clergyman in the neighbourhood, and if at liberty, no one could say exactly what he would attempt.

Another patient in the same ward, peaceably occupied this morning in making a waistcoat, is of opinion that it is his duty to shoot the prime minister, and he has twice or thrice quietly represented to me the impropriety of detaining him when the Emperor of Russia visited England, as he certainly ought to have shot him. A few rooms lower down is a very well educated patient, of interesting appearance and manners; he is very tranquil, generally writing, and has great poetical taste and talent. He will tell you that he is the grandson of the Pretender, and that when he walks in the Park he is obliged to press his pencil-case firmly to his lips to prevent the guards from acknowledging him.

We met a young man in the tower ward, whose steady incoherence of language surprised you. He was a very intelligent mechanic, and science now only adds extravagance to his delusions. The paper which he gave me was a letter to his Royal Highness the Duke of Cambridge, in which he says—"I write to acquaint your Royal Highness of the murder of the Duke of Sussex, by an instrument of the fourth division of the government electrical telegraph, described in part in *Chambers's Edinburgh Journal* of September last. I am prepared to attend a coroner's inquest when the Royal family may desire. I am a person stolen November, 1841, by the agents of the St. Pancras Poor-Law Directors," &c. &c. Superscribed, "per Lord Brougham and Vaux."

Our conversation with this patient was interrupted by the advance of a tall, thin, melancholy-looking man, who calls himself Lord G—, and who put a large letter into my hands. This patient is uniformly quiet and well behaved; he is industrious, silent, and generally talks rationally; his business is that of a tailor, but his thoughts are constantly turned towards persons of great station. Every now and then he writes the long letters which I now show you, addressed to the Queen, to Earl Grey, Sir Robert Peel, &c. Before her Majesty's marriage he wrote as her lover; now he writes as her adviser only; and in both capacities, his letters are full of religious observations.

The other cases of delusion are too numerous to be even alluded to on the present occasion, but I shall direct your attention to some of the most remarkable of those not yet noticed when we meet again.

CONTRIBUTIONS TO CLINICAL MEDICINE.

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(This report is taken chiefly from that drawn up for the hospital case-book by
Mr. H. BENCRAFT, the resident physician's assistant.)

PERICARDITIS.

(CASE 30.—Concluded from p. 448.)

Inspection of the body twelve hours after death: weather cool.—*Exterior:* Emaciation considerable; complexion had a slightly yellow tint; a few scattered spots of purpura on the abdomen and on the legs; a mere trace of œdema of the feet.—*Head:* The membranes of the brain transparent and healthy; the veins between the convolutions and the vessels of the pia mater unusually empty; the arteries at the base slightly atheromatous; enough serum under the membranes to separate the convolutions a little, and about a drachm in each lateral ventricle; about half an ounce of clear serum in the occipital fossæ; external aspect of the brain very pale; substance pretty firm and equally so in all parts; the cut surface unusually pale, the red points being few and small; no other morbid appearance. Weight of the whole encephalon, (without the dura mater,) forty-four ounces and a half avoirdupois.—*Chest:* Some adhesions of the right pleura, covering the upper surface of the diaphragm, to that over the adjacent part of the lung; also of the pleura covering the thin edge of the lower lobe of the lung to the costal pleura; the bands were from a quarter to half an inch long, and tore readily, yet were not quite soft; similar adhesions of the left pleura to the diaphragm; about two ounces of serum in the right pleura, and one ounce in the left; surface of both pleuræ quite smooth, and no increased vascularity was apparent.—*Right lung:* Volume not diminished; the surface is of a palish colour generally, but is mottled with pink spots, of one-fourth to one-third of an inch in diameter, and especially observed over the upper lobe; the cut surface of the upper lobe is marked by a number of similar-scattered red spots; the substance of the lung is denser in these spots than elsewhere, and in some, it is granular; the spots are more numerous in the middle lobe, where, by their aggregation, they form larger patches; there are some in the lower lobe, especially near the surface of the lung, and one deeply seated, of the size of a walnut; there is too much serum in each lobe, but not much blood; there are similar patches in the left lung, less abundant in the upper but more abundant in the lower lobe than in the right lung; a number of the subdivisions of the bronchi were freely opened in both lungs and the mucous membrane in them was found to be quite pale. Weight of the right lung, twenty-nine ounces and three-quarters; left, twenty-one ounces, avoirdupois.—*Heart:* Anterior surface of the heart extensively uncovered by the lungs; universal close adhesions of the pericardium; they tore readily, but were not perfectly soft; a layer of moderately-soft lymph, about one-eighth of an inch in thickness, can be removed without force from the anterior surface of the left ventricle at its base; this lymph was of a red colour, and deeper in some spots than others; some fat under the pericardium; heart as a whole much enlarged. *Left ventricle:* Cavity considerably dilated; walls of about the natural thickness, being seven lines near the base; endocardium slightly thickened towards the aorta; aortic valves not thickened, and tested by water, they were found to prevent regurgitation; mitral valve much thickened; cordæ tendinæ also thick, and unequal in length; several vegetations on the auricular surface of the valve, varying in size from that of a small to a large pea; orifice dilated, admitting three fingers very freely. *Right ventricle:* Walls two lines and a half thick near the base; cavity, endocardium, and valves, healthy; tricuspid orifice of the natural size, admitting three fingers. *Left auricle:* Cavity dilated; walls natural; a deposit of soft lymph upon the lining membrane in the body of the auricle. *Right auricle,* of the ordinary size, and healthy; foramen ovale closed. *Aorta:* No spots observed in its interior; circumference opposite the free border of the sigmoid valves two inches and nine lines. *Pulmonary artery,* healthy in its large divisions; circumference not measured. *Blood:* A moderate-sized fibrinous coagulum in the right auricle; a small one in the right, and a still smaller one in the left ventricle. Weight of the heart, eighteen ounces.—*Abdomen:* The peritonæum contained about eight ounces of transparent yellow serum.—*Liver* enlarged; the transverse diameter measured thirteen inches, and the distance from the thick to the thin margin of the right lobe was ten inches; it descended two or three

inches below the ribs, and to within one inch of the umbilicus; the convex surface of the right lobe was attached to the diaphragm in several parts by adhesions from half an inch to an inch in length, and of medium firmness. The substance of the organ was paler than natural, and contained but little blood, and that was thin and watery; the consistence generally natural; but for the space of two inches from the thin edge of the right lobe, and over a circumscribed space, the texture felt firmer, was lacerated with more difficulty, looked closer and more compact, and appeared to contain more cellular tissue than elsewhere. Dr. R. Quain examined the organ under the microscope, and found that the secreting cells were smaller, the cellular tissue interlacing them more abundant, and the fat globules less numerous in the indurated portion compared with other parts of the same lobe; gall-bladder small, and the contained bile scanty, viscid, and deep-coloured. Weight of the liver, sixty-one ounces.—*Spleen* much enlarged, but chiefly in its transverse diameter, which measured seven inches; it adhered to the diaphragm at two spots, at each of which there was a deposit in the spleen, of a yellowish, soft, almost curdy-looking substance, of about the size of a filbert; the texture generally was firm, and of a palish colour; weight, thirteen ounces.—*Pancreas* rather large, very firm, creaks under the scalpel when cut; the cut surface is pale, looks dry, and the granules composing the gland separate very readily from each other.—*Kidneys*: Both kidneys exhibited precisely the same appearances; the volume was moderately increased; the capsule unusually adherent, and brought away portions of the kidney on tearing it off; the surface scabrous, pale, and mottled with vascular arborizations; the cut surface very pale; the cortical portion much atrophied, but no new deposit was visible; pelvis healthy; mucous membrane pale; weight of each kidney, five ounces and three quarters avoirdupois.—*Stomach* healthy; mucous membrane pale.—*Intestines*: The small intestines were carefully examined, and found to be healthy; the colon in its whole course is studded with the traces of ulcers, more or less completely healed; these spots were thirty or more in number, one or two only being in the cæcum; they were half an inch or more in length, and about one line in width, most of them transverse to the axis of the gut; the mucous membrane had a bluish or slate colour at the outer margin of the spots; towards the centre, the colour was whiter, and in most of them this part of the surface was not quite entire, being rough, and in some, depressed likewise. There was no preternatural redness in or about these spots. One of the spots near the cæcum had a radiated and somewhat circular figure. In the rectum, the folds of the mucous membrane had a dark-red colour, but there was no appearance of ulceration; mesenteric glands not enlarged.

SUMMARY OF THE CASE, WITH REMARKS.

Symptoms, diagnosis, and morbid appearances.—On this patient's admission, two or three of the most obvious features of the case showed that she was the subject of some chronic disease, and that to this an acute disease had recently been superadded. The existence of the former was proved by the emaciation and the aspect of the patient; and of the latter, by the pungent heat of the skin, pain, and anxious expression of the countenance. The nature and seat of these two affections, therefore, were the objects of our first inquiries in the investigation of the case.

The patient had been treated for ague, and the sallowness and paleness of the surface, the emaciation, the enlarged spleen, and her residence in the vicinity, at least, of a malarious locality, were circumstances which agreed well with such an opinion, yet it appeared that the rigors had always returned at extremely irregular periods, both in respect to the days and the hours of their recurrence, and the proof of the existence of ague was on this account deemed defective.

The more acute affection appeared to be either pneumonia or hepatitis, but the positive symptomatic evidence appeared to point more towards the latter than the former disease. There was physical evidence of condensation of the upper lobe of the right lung, and this condensation might be the effect of pneumonia, but it might also arise from other causes—*e. g.*, from tubercle or previous pleurisy. There were no other symptoms to show that any one of these diseases was the cause rather than another. There was no crepitation, no pain, scarcely any cough, and but a trifling expectoration, of a pituitous character. The frequent shallow respirations and greater mobility of the left side might equally arise from hepatitis. The pungent heat of the surface, which has been pointed out by Dr. Addison as distinctive of pneumonia, was, perhaps, in this case, the most distinctive of the symptoms of that dis-

ease, but I have observed this phenomenon in cases in which there was no other evidence of pneumonia, and am not yet, therefore, prepared to accept it as a pathognomonic symptom.

The following were the chief symptoms, in addition to the pyrexia, which were thought to point to the existence of hepatitis: considerable pain in both hypochondria, tenderness of the abdomen generally, but especially of the upper region of it, the position on the right side, enlargement of the liver, the colour of the alvine evacuations, and of the urine, especially at an earlier period of the case, and the sallow complexion. Several circumstances appeared to render it not improbable that abscess of the liver might be present—the enlargement of the right hypochondrium, (the difference between the two sides is stated, in the report, to have been one inch, but according to my recollection it was two inches,) the severe and irregularly recurring rigors, and the diarrhoea formerly present, and still persisting in some degree. Dr. Budd has recently shown (see his "Treatise on Diseases of the Liver") the very important connexion which appears to exist between dysenteric and some other ulcerations of the alimentary canal and abscess of the liver; and keeping his facts in mind, it seemed not unlikely that the diarrhoea in the present case might arise from ulceration of the bowels, and that this ulceration might have led to abscess of the liver.

These opinions appeared to be rather confirmed than invalidated by the further progress of the case to its fatal termination. The intercostal depressions were observed to be less visible over the right side of the chest, inferiorly, than over the left; there was copious vomiting of a curdy matter of the colour of verdigris, and a severe aphthous inflammation of the mouth made its appearance. The patient was ascertained to have extensive disease of the heart also, (of which we shall speak hereafter,) and this, with what has been stated, comprises the substance of the diagnosis during the life-time of the patient. We shall now see what was the light thrown upon the case by the inspection of the body after death.

Intestines.—1. The appearances in the colon showed that there had been extensive ulceration of the mucous membrane, the probability of which had been stated during life.

2. It seems very likely that the inflammation in the colon had been connected with the rigors and pyrexia, which occurred at the beginning of the illness, fourteen weeks before the patient's admission.

3. The disease of the colon was the cause of the diarrhoea, and also of the diffused tenderness, moderate in amount, of the abdomen.

4. Was the inflammation of the colon dysenteric? I believe it was, for extensive ulceration of the colon alone is perhaps observed in no other acute diseases besides dysentery. There is no mention, however, in the history, of any symptom of dysentery besides the purging; no pain, nor tenesmus, nor bloody evacuations. This silence is no proof that some of these symptoms might not be present. The purging would not have been named if the hepatic symptoms had not led to a careful inquiry about it; the patient was much exhausted, and would not, probably, remember many circumstances in the history of her disease; and although great pain and tenesmus could not be unnoticed, bloody evacuations might very readily escape observation. After admission, the evacuations were dark-coloured, but they were not examined by any person competent to say whether they contained blood or not. But again, great pain and tenesmus, and bloody stools, are not—as they are, perhaps, somewhat generally supposed to be—the necessary concomitants of dysentery. Dr. Abercrombie mentions various facts which appear to justify his statement that "dysentery may, in some cases, be distinguished by the morbid discharges from the diseased surface; but these are often entirely wanting, or are so mixed up with the feculent evacuations as not to be recognised; and, in point of fact, it will be found that the cases in which the evacuations most nearly resemble those of diarrhoea, are very often the most untractable and most dangerous." He further says, "It is probable that the symptoms vary considerably, according to the extent of the disease, and the part of the canal which is the primary seat of it. This appears most remarkably in the character of the evacuations." "When the disease is confined to the rectum, or the lower part of the colon, the evacuations appear to be scanty, and mucous or bloody, with retention of natural feces, or small scybalous discharges,—the dysentery of systematic writers." "When the disease extends through the whole of the colon, or through a considerable part of the small intestines, we may have copious discharges, at times of thin healthy feces, at other times, varied by mixtures of morbid discharges, and by articles of food or drink little changed. This appears to be the colonitis,

and the tropical dysentery of practical writers."—*Abercrombie on Diseases of the Stomach, &c.* Third edition. 1837. pp. 240-2.

In our case, the rectum was comparatively healthy; hence, probably, the absence of tenesmus, and the common symptoms of the dysentery described by systematic writers. Sir George Ballingall (quoted by Abercrombie) states that at first "the evacuations differ only in consistence from healthy fæces; as the disease advances, important changes take place in this respect, the evacuations become more scanty, and of a morbid appearance." Upon this Dr. Abercrombie remarks, "that is, probably, after, by repeated evacuations, the canal has been cleared of healthy fæces, and the subsequent evacuations consist chiefly of the morbid discharges from the diseased parts." Hence it becomes important, in a severe bowel complaint, to inspect carefully the appearance of the stools, in order to determine the nature of the disease with which we have to deal. I had a female patient in the hospital at the same time with this one, in whom a severe purging came on in the course of acute rheumatism. There was a good deal of pain, and tenderness of the abdomen, but no blood in the stools. The affection was obstinate, and made a great alteration in the aspect of the patient, obviously indicating that the disease was more than a common diarrhoea. After the first period of the disease had passed by, I desired the stools to be more strictly examined by Mr. Bencraft, the physician's assistant, who, from the appearance of the more fluid portion of them, was induced to examine it under the microscope, and ascertained that it consisted chiefly of pus. The disease was concluded to be inflammation, probably with ulceration of the colon, (dysentery,) and there was every reason to believe it to be of rheumatic origin.

5. What was the cause of the dysentery in the case before us? No cause could be assigned by the patient. There seems to have been no unusual exposure to cold. It could hardly be rheumatic, as in the case just referred to; for the rheumatism probably supervened at a later period only. May it have been produced by the renal disease? Bright's disease and acute rheumatism seem to produce many internal inflammations in common, especially inflammations of serous membranes and of the lungs. On the whole, however, the most probable cause is exposure to malaria. The fact of this exposure was not ascertained; but the patient lived near to the Plumstead Marshes, where ague prevails. She had been treated for ague, and the supposition agrees well with the enlargement of the spleen, and the peculiar complexion.

Kidneys.—1. The kidneys exhibited, unequivocally, the characters of one of the received forms of Bright's disease. There was no new deposit observable by the naked eye; but the increased volume, blanched colour, adherent capsule, scabrous surface, and atrophy of the cortical portion, could leave no doubt about the nature of the disease.

2. The urine contained a small amount of albumen, the proportion varying between one-seventh and one-fifth of the bulk of the fluid operated upon. The specific gravity was always low, about 10.12, and the colour pale. These characters are consistent with the appearances found in the kidneys; they led us to suspect Bright's disease, but they were not proofs in this case of its existence. An amount of albumen equal to that found here is often observed in various acute diseases, and the low specific gravity might have been caused by the anæmia alone.

3. The absence of dropsy is quite in accordance with the views expressed in the remarks upon several other cases, (see especially Case 24.) There was the renal disease, and, consequently, impoverished blood, and there was also considerable obstruction in the chest, taking the heart and lungs together; but the common tendency of these two causes, when co-operating, to produce dropsy, was probably counteracted by the diminution in the bulk of the whole mass of circulating fluid.

4. The causes of the renal disease in this case cannot be stated with certainty. The patient was scrofulous. It is possible she may have taken too much liquor, for she served at a canteen shop, and said she sometimes took gin. The repeated attacks of rheumatism, and the probable exposure to malaria, should also be borne in mind.

5. The renal affection would help to produce the anæmia, and was the most probable cause, as we shall see, of the acute internal inflammations.

Lungs.—1. The pneumonia was of the lobular variety, and most extensive in the right lung.

2. The symptoms have been partly adverted to already. In many cases of this form of the disease the physical signs are almost or altogether wanting. The resonance on percussion and the character of the respiration were modified here,

because the disease was of considerable extent. The spots, at first isolated, had coalesced into patches of greater or less size. The signs were observed on the right side only. It is probable that the disease began there, and that it subsequently extended to the left lung. The cough increased considerably before death. Owing to the greater affection of the right lung, the patient could lie best on the right side, and the ribs moved most on the left side. The respiration was more costal than diaphragmatic, contrary to what happens generally in pneumonia of the upper lobes. This peculiarity might be due, in part, to the form of the pneumonia; but it was perhaps chiefly occasioned by the inflammation of the serous membranes about the lower lobe of the lung, and on both surfaces of the diaphragm. The inflammation of these membranes was perhaps the chief cause also of the sharp pains in the hypochondria, and the tenderness on pressure over the same parts. The respirations were 48 in the minute, and the lips were perceptibly livid, notwithstanding their otherwise blanched appearance. The pungent heat of the skin seems to have been one of the symptoms of the disease. (See remarks above.)

Heart.—1. There were signs of old disease in the mitral valve, as well as evidence of existing inflammation of the endocardium, certainly in the left auricle, and probably also about the mitral valve.

2. The dilatation of the mitral orifice, together with that of the left auricle, showed that regurgitation had probably been permitted.

3. This regurgitation, together with the small amount of blood in the system, would keep the aorta comparatively empty and flaccid; hence its diminished calibre.

4. The appearances in the pericardium showed that the inflammation there was recent, and that the adhesions could not have existed long. The inflammations of the pericardium, and of the pleuræ and peritonæum, were probably of nearly the same standing; that of the endocardium may or may not have been more recent.

5. *Symptoms.*—The hypertrophy, with dilatation, was indicated by the force of the impulse, by the great space over which it was felt, and by the increased extent of dullness on percussion. Although the enlargement was very great, however, the dullness did not reach higher than the third rib. This distinguished the hypertrophy from much effusion of liquid into the pericardium.

There was a loud murmur with the systole at the apex of the heart, and at the lower angle of the left scapula. This was due to regurgitation through the diseased mitral valve. The second sound was not materially affected; hence there was, as usual, no obstructive mitral murmur. The large orifice, the vegetations on the auricular surface of the valve, and the thin (and therefore easily vibrating) blood, were all favourable circumstances for the production of such a murmur; but the force of the current, produced by the combined influence of the contraction of the left auricle, the suction power of the left ventricle, and the vis à tergo in the pulmonary veins, was still inadequate to excite such vibrations as were required to produce a distinctly audible murmur.

The systolic murmur was also heard at the base of the heart, and was transmitted upwards along the course of the sternum, and into the neck. Between the base and apex of the heart, the murmur was less loud than at either of these points. This fact seemed to point to two distinct sources of the systolic murmur, and other facts confirmed the inference, for the murmur in the neck could not arise from mitral-valve disease, and the murmur below the left scapula could not arise from aortic-valve disease. Hence there must be one systolic murmur having its source in the mitral, and another in the aortic valves. The aortic valves, however, were found healthy, and the aortic murmur, therefore, must have been due to anæmia. Two other reflections upon these murmurs may deserve to be recorded:—1st, There was acute endocarditis, without any sign or symptom of its presence beyond the signs of old disease of the mitral valve, and the symptoms due to other concomitant inflammations. No grounds, therefore, existed for a complete diagnosis. 2nd, The murmur at the healthy aortic valves could not be distinguished from that which arises from structural disease.

The pulse was jerking, soft, and thrilling, and the pulsations of the carotid arteries were unusually distinct. These characters were due, on the one hand, to the flaccid condition of the aorta already noticed, and, on the other, to the hypertrophy, with dilatation of the left ventricle. The aorta could be more quickly dilated, and to a greater extent, and the dilating power of the ventricle was at the same time increased;

hence the pulse was almost as jerking as in a case of regurgitation from the aorta into the left ventricle.

The pericarditis had evidently formed a part of the patient's last illness, but the exact time of its origin cannot be fixed. The inflammation had been severe, and had affected every part of the membrane, yet its course appears to have been quite latent, in the common acceptance of that term. There appears to have been nothing to draw the attention of the medical gentleman who saw the patient to the condition of the heart, and the history can leave us in no doubt that the disease was neither discovered nor treated. On the patient's admission, adhesion of the pericardium had no doubt already taken place, because the heart was carefully examined, and no friction sound, or sign of serous effusion, was present. The adhesion of the pericardium was not suspected; but now that we have the advantage of being able to compare the morbid appearances with the physical signs, we may, with some degree of probability, assign some of the latter to the adhesion of the pericardium.

(a.) The undulatory movement was visible over a very large surface, and with unusual distinctness, and these appearances were constant. These three circumstances, taken together, appeared to show that the heart was placed, if not held, in unusually close apposition with the walls of the chest. An undulatory movement may undoubtedly be produced by hypertrophy with dilatation alone; but I doubt whether the characters referred to be ever, in that case, so well marked.

(b.) Notwithstanding the great volume of the heart, the apex was not lower than usual, nor further towards the left side, and the base was something higher. This is certainly not what generally happens in enlargement of the heart, without adhesion of the pericardium, in most of which cases the apex is either depressed or displaced laterally, or both.

(c.) Some of the pain in the left hypochondrium may have been due to the changes still going on in the pericardium. The dyspnoea and increased pain on lying upon the back, in particular, I have observed in other cases of pericarditis.

Causes.—The old disease in the mitral valve may have been occasioned by the previous attacks of acute rheumatism. Some of the enlargement of the heart may have been consequent on this valvular disease, but the whole certainly was not. The absence of enlargement of the right ventricle shows that there could not have been much regurgitation through the mitral orifice for a long time, and even if there had been, it would not explain the great dilatation of the left ventricle, as compared with the hypertrophy. Much disease of the mitral valve appears calculated to lead to a diminution of the cavity of the left ventricle, and it certainly does so in many cases, and perhaps when operating, *per se*, it may do so in all cases. In the present case, I see no cause for the great dilatation, compared with the thickness of the ventricle; but the close adhesions of the pericardium to the heart and to the ribs would tend to prevent the walls of the ventricle from approximating towards the centre of the cavity. This supposition, however, would lead us to expect some, if not an equal, degree of dilatation of the right ventricle, which yet was not observed to exist. The recent pericarditis and endocarditis, as well as the inflammations in the pleuræ and peritonæum, of about the same date, may have been caused either by the renal disease or by the last attack of acute rheumatism, which began four weeks, and ceased one week, before the patient's admission. Either of these causes is a sufficient one, and each of them very commonly leads to similar results.

The causes of the pneumonia offer an interesting subject of inquiry. It is common for pneumonia to supervene in the advanced stages of many diseases, especially such as are associated, as in this case, with great debility, long confinement in bed, and febrile disturbance; it is likewise a common consequence of Bright's disease; but in neither of these circumstances does the pneumonia usually assume the lobular form. Lobular pneumonia, again, is a frequent sequel of capillary bronchitis, especially in children, in whom this kind of pneumonia is most frequently observed. In the present case, however, the minute bronchi appeared to be quite healthy. Again, this form of pneumonia, and perhaps this exclusively, is found in cases of purulent infection of the blood, consequent on phlebitis, or occurring in other circumstances. The pus globules are, perhaps, arrested mechanically in the capillary vessels of the lungs, and there excite inflammation. Hence the disseminated character of the inflammation in the first instance, and before the isolated spots have coalesced into patches of greater or less extent. This dissemination of the diseased points is analogous to what we see when mercury is introduced into the veins and arrested in the lungs, and also

in cases of secondary cancer of the lungs and liver, and other viscera. These considerations led me to look for some such cause of the pneumonia in this case, and a probable one may be found, I think, in the acute endocarditis seated in the left auricle. Granules of lymph were there found, pus also may have been secreted, and the particles of one or other of these morbid products may have been carried with the current of the blood to the lungs, and there have been arrested. Besides accounting for the pneumonia, this supposition would explain the very severe pains in the limbs and body, generally, which the patient complained of, far more than of any other suffering, during several of the last days of her life. Such pains are commonly present in phlebitis, with purulent infection.

Liver.—1. Besides the general enlargement of the liver, there was circumscribed disease in a portion of it. The disease appears to me to have been of the nature of cirrhosis in a very early stage.

2. The cause of it is somewhat uncertain. There is no proof that the patient had been a drinker. Might this inflammation of Glisson's capsule be another consequence of the renal disease, or might it have been excited by irritating matters carried through the portal veins from the ulcerated intestines?

3. Although the symptoms of acute hepatitis (as already detailed) were numerous, there was no evidence of anything more than partial inflammation of the peritoneal coat of the organ.

Spleen.—1. The enlargement of the spleen affected the transverse diameter chiefly, and corresponded in this respect with the extent and direction of the dulness on percussion during life.

2. The matter deposited in the spleen was found by Dr. R. Quain to have a granular appearance under the microscope, and closely to resemble tubercle. If it were tubercular, the case is an example of tubercle in an internal organ, and in an adult subject, without co-existing tubercle in the lung. This is contrary to the law made out by M. Louis, and which, although not universally, is yet very generally true.

Pancreas.—The pancreas was evidently diseased, as the description given will prove. Were the changes described the effects of inflammation, and, if so, was this inflammation also occasioned by the renal disease? Neither of these opinions appear to be improbable. There were no symptoms referable to the pancreas.

Pathology.—According to the views which have been taken there were two distinct centres or points of departure of the various morbid appearances which have been noticed. 1. Dysentery, probably arising from malaria, and leading to enlargement of the spleen, and perhaps of the liver, with much cachexia.

2. Bright's disease of the kidneys, which was, perhaps, the source (with or without the aid of the intercurrent acute rheumatism) of the inflammations in the pericardium, endocardium, pleura, peritonæum, liver, and pancreas.

Lastly, the endocarditis may have led to infection of the blood with one or more of the products of inflammation, and thus induced the lobular pneumonia, which appears to have been the immediate cause of death.

Treatment.—1. The depressed condition of the patient forbade any active treatment. A few leeches were applied over the hypochondria, and with relief to the sharp pains.

2. On the supposition that there was hepatitis, calomel and opium were given until the mouth became sore.

3. Such nutriment as the patient could take was allowed from the first, and after a time it was necessary to give stimulants, of which brandy was the chief.

4. It deserves to be remarked, that the pericarditis certainly, and the inflammation and ulceration of the colon very probably, had escaped detection, and consequently had not been treated. Both diseases had been very severe, yet both, I think, had been cured by the powers of Nature. The patient died, but, as it appears to me, of another disease; and I think there is every reason to believe, that notwithstanding the absence of treatment for the inflammations in question, life would have been spared, although perfect health could not have been restored. Such cases are very common. I have repeatedly seen pneumonia (one of the most fatal of all internal inflammations) and pleurisy terminate favourably without any active treatment, their existence having been overlooked until their course was nearly run. Surely these and similar facts should teach us a little more caution in assigning so large a part to ourselves, and so small a part to Nature, of the credit that is attached to the favourable termination even of cases of severe inflammatory diseases.

FOREIGN DEPARTMENT.

M. DUCLOS ON FISSURE OF THE ANUS IN INFANTS.

It is a generally received opinion, says M. Duclos, that fissure of the anus is not a disease to which infants are subject. M. Trousseau's experience, however, at the Necker Hospital, proves that such is not the case, and that infants, even during suckling, are liable to this distressing disease, as well as adults. M. Duclos gives, in the *Journal de Chirurgie*, two cases, which occurred under M. Trousseau.

The first case is that of a little girl, one year old, under treatment for a white swelling of the knee. This child had been constipated from her birth, but more especially for the four previous months, the bowels being moved only every third or fourth day. Two months previous, the mother remarked that every time the bowels were opened the child screamed violently. The pain appeared to commence with the effort of defecation, to continue during the passage of the faecal matter, and to be prolonged for a few seconds afterwards. For the last month, more especially, defecation had been exceedingly painful, and at each stool the child had voided a few drops of blood, either before or after the faeces, but never mixed with them. Sometimes the child, after a violent effort, would void a few drops of pure blood, scream violently, and make an effort as if to prevent the escape of faeces, in which case no stool took place. The general health was very good.

On examining the anus, the following was found to be the state of parts:—The circumference of the anus was perfectly healthy, but on deeply separating the folds, at the anterior part and between two folds of skin, a fissure, a millimetre in width and about five millimetres in length, of a red colour, was distinctly perceived. It was the more clearly seen, as the child, screaming violently, protruded the anus. The constriction at the anus was so great that the extremity of the little finger could scarcely be introduced. M. Trousseau prescribed an enema, composed of extract of ratanhy, one scruple; water, three ounces. The child kept the injection for five minutes, and returned it along with soft faeces. The injection was repeated daily for five days. Each time the passage of the faeces appeared less painful, and on the sixth day the injection was discontinued. The motions were then easy, free from blood or pus, and unaccompanied by pain. The child left the hospital ten days after, quite cured of the anal affection.

The second case occurred in M. Trousseau's private practice. The child, eight months of age, well developed, and in previous good health, had been suckled by the mother until the age of six months and a half. At that epoch, it was weaned, and was subsequently attacked with violent diarrhoea, which gave way under the use of emollients. The diarrhoea was followed by obstinate constipation. This state had existed for about eight days, when the child was seized, during defecation, by violent pain at the anus, and the faeces were found tinged with blood. From that time, the child suffered great pain on defecation, and for some minutes afterwards. The faeces were hard, and generally tinged with a few drops of blood. The child was constipated. General state satisfactory. On examining the anus, around its orifice there were found a little erythema and eczema, which had been occasioned by the diarrhoea, and were fast dying away. Behind, and to the left, on separating the folds of the anus, a fissure, about two millimetres in length and one in depth, of a rosy colour, was discovered. It was very distinctly seen on the child's protruding the anus in an effort for defecation. The anus was considerably constricted.

The same treatment was adopted as in the former case, and with equal success. The fissure cicatrized completely in about ten days, all pain on the evacuation of the faeces disappearing.

In these cases, says M. Duclos, the fissures were perceptible to the eye; but the seat of the pain, the mode of its manifestation, and the slight hæmorrhage on defecation, could leave but little doubt in the mind of the observer as to the nature of the disease, even in the absence of ocular demonstration. The symptoms, however, do not, if we judge from these cases, present absolutely the same form as in adults. In adults, the pain is generally most severe during the first hours which follow the excretion of the faecal matters. Often, indeed, it gradually increases for some time after the motion, until it attains an intolerable intensity. With the children whose cases are reported above, nothing similar occurred. The pain seemed to cease a few minutes after the escape of the faeces, only to reappear on the bowels being again moved. Nothing

appeared to indicate the presence of the slightest pain after the excretion of the faecal matter. It is difficult to account for the fact.

Another circumstance is worthy of notice—viz., the slight hæmorrhage which invariably accompanied each alvine evacuation. In adults, extensive and very painful fissures may exist, without there being the slightest loss of blood. M. Velpeau appears even to think that it is the general rule.

The rapidity with which these fissures were cured by the ratanhy injections is worthy of notice. Is a rapid cure to be expected in all such cases with young infants under similar treatment?

CALCULI OF THE PROSTATE GLAND.

A discussion which occurred recently at the "*Société de Chirurgie*," on prostatic calculi, and which is reported by the *Gazette des Hôpitaux*, elicited the following remarks on the subject:—

M. LENOIR stated that a patient, fifty-five years of age, had been addressed to him by a provincial surgeon, under the impression that he was labouring under vesical calculus. On introducing the sound, he found an obstacle which gave a clear sound, and which he thought was a vesical calculus, but on examining digitally by the rectum, he failed to recognise its presence. On exercising pressure, however, on the prostate, he caused the escape of about fifteen small calculi. They were of a dark-yellow colour, and presented facet surfaces; burnt, they gave a decided animal odour. The patient, who, when he entered the hospital, had all the symptoms of serious vesical catarrh, left nearly well. A few months later, he was again sent to Paris, under the idea that he was labouring from vesical calculus, and a number of small stones were again emitted, by pressure of the prostate. Vesical catarrh was present, as on the first occasion. M. Lenoir thought that the calculi were formed in the ejaculatory ducts, and that it was because they occupied the orifice, that these produced, when touched with the sound, the sensation of a stone in the bladder.

M. NELATON had met with a case at the Hotel Dieu, similar to the one of M. Lenoir. The friction of the sound over a hard substance in the region of the prostate had led him to recognise the presence of prostatic calculi. He managed to withdraw several by means of lithotric instruments, and the patient left apparently cured. Two months afterwards he returned with the same symptoms, indicating prostatic calculi, and, in addition, with a vesical calculus. He was not able to lay hold of the latter, in order to crush it, and was obliged to perform the operation of lithotomy. On scratching the surface of the incised prostate with his nail, he managed to make several calculi fall, similar to those described by M. Lenoir. The patient was cured. M. Michon, M. Guersant, and M. Laugier, thought that prostatic calculi were not rare; M. Malgaigne was of a contrary opinion.

ESSAYS ON

GENERAL PATHOLOGY.

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No. XIX.

ON LOCAL MOLECULAR PECULIARITY.

In a former Essay, (*THE LANCET*, 1844, vol. ii. p. 37,) I treated of constitutional peculiarity, but I then directed my observations chiefly to the consideration of hereditary states, equally affecting all the structures of the body. I propose to append a few remarks on local peculiarities of structure, also depending on molecular arrangements of a specific nature.

Now, in many cases, the characteristics of individual constitutions are most evident in certain parts of the system, and, perhaps, in all cases, the disposition manifests itself more palpably in some parts than in others. A certain aberration from the healthy molecular structure may be confined to particular organs, and this may be transmitted from the parent to the offspring. Bronchocele is sometimes evidently propagated by hereditary transmission, and may furnish us with a striking instance of the transmission of molecular peculiarity, most pronounced in a particular part of the body. It would be interesting to observe, in all cases of hereditary transmission, how frequently peculiarities have a local character; for though the whole body may partake of the constitution originally derived from the parents, still, certain parts which differed most from the common order of nature in the case of the parents, are also most peculiar in the offspring. Persons

having supernumerary fingers and toes, or other points of singularity, have been known to procreate children with the same deviation from the customary form. Instances have been adduced where "a parent has become epileptic from an injury, and the disease has been transmitted to those of his children only who were born subsequently to that occurrence."

It seems highly probable that hereditary local peculiarities might be easily traced in the nervous system, if a sufficient number of observations were only pursued with reference to that subject. Mental differences and susceptibilities which, it is to be presumed, are connected with peculiar physical developments in the nervous centres, are commonly recognised. Thus, many families throughout successive generations have been known to display particular traits of character, in some instances being distinguished for wit, courage, and energy of mind, and unfortunately, in others, for deplorable moral aberrations. Dr. Conolly observes, that "the natural or congenital constitution of the nervous system, or even of different portions of it, is most plainly discerned to be different in different individuals. From the very cradle may be observed a different degree of sensibility; and even a different countenance impressed by the hand of Nature herself, before human feelings have written their deeper lines upon it; a countenance indicative of a distinct and individual character, which is associated with an individual mode of receiving and being affected by external circumstances, and of exercising the internal faculties upon the impressions received."

On a large scale, changes of a constitutional nature affecting particular parts of the body, are no doubt, in a great degree, the result of social habits and customs, and are only evident in the lapse of ages, marking nations with the stamp of individuality. On this subject there is a little work written by Dr. Verity, entitled—"Changes produced on the Nervous System by Civilization;" but the language is not fortunate, and contains an affectation of uncommon and technical phrases. In this volume, Dr. Verity endeavours to trace the effect of civilization in gradually altering the condition of the nervous system, and its relation to the other parts of the body, developing powers of mind, and unfolding the rudimental organization. The contemplation of this subject "teaches us," says he, "how unconquerably slow must ever be the progressive stages of civilization, and that they must extend throughout centuries of time, no great permanent change in national or individual character taking place without additional nutrition, and a certain related development in the nervous masses."

The intellectual activity and refinement which characterize the present age are, no doubt, the results of physical changes, gradually worked out in the progress of ages; but the predominance of the nervous system over the other parts is, in many cases, to be looked upon as a peculiarity almost morbid, and certainly not attended with unmixed good. How much over-sensibility and hysteria are met with in the higher classes! In how many cases have extraordinary efforts of mental exertion, or restless ambition, brought their votaries to a premature grave! How often have the anxiety and excessive competition of private life rendered the existence of man a struggle and a "fitful fever," after which he may truly be said to "sleep well" in death. How often have melancholy and madness clouded the overwrought intellect, and brought wit and learning to a miserable grave! Of late, some attention has been bestowed on this subject, particularly by American writers; and the over-cultivation of the mind has been much and deservedly deprecated.

But though topical peculiarities in the molecular constitution of the solids are not unfrequently coincident with birth, they are, perhaps, still more commonly the effects of previous disease. In the same manner in which we have seen that general dispositions of the constitutions may be acquired by external influences, so also may arise alterations of a local nature. Inflammation is known to effect considerable structural changes, independently of what is commonly understood by the word disorganization. Ophthalmia sometimes leaves a degree of opacity in the transparent structures of the eye, which is less attributable to the deposition of lymph than to the alteration which it produces in the molecular arrangement; and it is probable that there is always more or less alteration effected by inflammation, though it may not be equally apparent. Sometimes it produces considerable changes in the cohesion of parts; and what is called *ramollissement* is not unfrequently the result of inflammatory action. At other times, a degree of induration occurs, which is not so much the effect of increased deposition as of a new arrange-

ment of the molecules. It may be partly ascribable to such changes that parts, which have once been the subject of disease, are afterwards more easily disordered by subsequent attacks, or rather, more liable to a recurrence of the malady on exposure to the occasions which originally induced it. It is a well-known fact, that when erysipelas has once occurred, it may be readily reproduced; that dysentery is succeeded by a repetition of inflammatory disorders, induced by the most trivial occasions; that ophthalmia is a disease which often returns on the slightest provocation; that pleurisy, also, is often attended with a relapse. In short, it may be stated as a general and important law, which scarcely admits of an exception, that when inflammation has once occurred it is more easily re-excited.

Of course, it must be admitted, that when a disease has once been set up, the same circumstances may be supposed likely to operate in reproducing it which originally gave rise to it, and this more especially in the case of diseases which are mostly of a secondary nature. At the same time, I think it must be granted that there is good reason to suppose that a local change has much to do with these repetitions of morbid action, and that disease leaves a peculiarity in the structure or constitution of parts.

In nervous derangements, we may trace, also, the existence of the same great law. If the nervous system have once suffered from any violent shock, it is probably more liable to be similarly excited by impressions. This may be considered as analogous to the memory—a kind of remembrance, which may be common to the nervous system, of past impressions—a waking of the old vibrations, (if we may be allowed a metaphor,) by causes similar to those which originally produced them.

In many cases, where we are quite unable to appreciate local changes, or detect any difference in the structure of parts, alterations may in reality have been effected: one man may be subject to frequent attacks of ophthalmia, and we shall not be able to say, in the intervals, in what consists the peculiarity of the conjunctiva. All must have observed the frequency with which the same particular, and often local, affection comes again and again in the same individual. It must be admitted that these dispositions are, more frequently than not, left by diseases of which they are properly the sequelæ; but they claim attention rather as local constitutions, weakening the tolerance of disease, than as local diseases in themselves. In every instance, therefore, it is desirable that a medical man should inquire in what manner his patient has previously suffered, to what complaints he is liable, and whether the organs which have been concerned are in reality completely restored. This should be done from no vague idea of imaginary tendencies and latent dispositions, but in order to guide him in his search for real lesions, and the examination of structural alterations. There can be no doubt that many organs which are supposed to be restored to health, will be found, on examination, to be suffering chronic changes, or to have experienced physical derangements, which render them an easy prey to the causes of disease. "We may rest assured," says Dr. Macartney, in his valuable and very original work on Inflammation, (p. 132,) "that in every instance where inflammation may invade a part, in consequence of remote or constitutional irritation, the reason of the part being the one to suffer is determined by as fixed laws as in those instances where parts become inflamed in consequence of local injury." Medical men are too readily contented with the word *weakness*, without always stopping to inquire in what condition the organ may really be. A patient complains that he has a tendency to a particular malady—he has a weak stomach, weak bowels, or weak lungs. Now in many cases these parts are prone to suffer, because they have previously been the seat of disease—because the circulation may have become impeded by the obliteration of minute vessels, as in the lungs; or the molecular structure of the organ may have been altered by some error in the nutrition of the part. In many cases, these acquired local peculiarities may be greatly counterbalanced by attention, as we find in respect to chronic ulcerations in the legs, and the correction of many disorders of a tedious and frequently-recurring nature. Local susceptibilities are sometimes determined by mechanical changes; and as these, in some few cases at least, are the result of natural processes, they can scarcely be regarded as morbid conditions, but we may consider them as states of local intolerance, in the same manner in which we treated of general constitutional intolerance. Of this kind are the physical changes brought about in the uterus and its appendages immediately after child-birth, which render them intolerant of the common causes of disease. It is well known that subsequently to parturition these parts have an unusual

* Alison's Practice of Physic, Part III. p. 700.

† Art. Hysteria, Cyclopædia of Practical Med., p. 676.

‡ Verity, on the Nervous System, &c., p. 67.

susceptibility to inflammation and other disorders. This is in some measure attributable to the mechanical laxity which follows the distention they have undergone; but it is also apparently augmented by an increased sensibility of the nerves, and a diminished tone of the vessels. To these acquired peculiarities of the uterus and its appendages we must doubtless look for the physical disposition of parts necessary to puerperal inflammation; for any cause of excitement, whether specific or not, operating on this condition of parts, might be allowed as sufficient to produce the disease.

Now disorders are said to fall most heavily upon those parts which have these acquired peculiarities; but perhaps it would be better to use more precise terms. Certainly they influence these parts the most, but, in the great majority of cases, they operate with equal force on the rest. In fact, that shock which other parts can sustain with impunity, here produces a great amount of mischief, just as any shock which a complicated piece of machinery may receive, is only evident in the more delicate parts of the mechanism. The whole, of course, feels the concussion; but that part which is the weakest alone shows any permanent indication of violence. The subject might be illustrated in various ways, if it were necessary, but it is sufficiently obvious on the smallest consideration.

In concluding these observations on the subject of constitutional peculiarity, I may just notice what are called the *temperaments* of the body, because I omitted to mention the subject in my former paper. I conceive the word *temperament*, in its customary application, does not differ essentially from the term constitution; but perhaps the former may be regarded as not merely expressing the physical condition of the body, but also as comprehending the influence of this condition on the functions of the body generally, and on the brain in particular. In this view, temperament includes the consideration both of the constitution of the body and the effects of such constitution. The term has long been in use, and is now commonly, though somewhat vaguely, employed. It seems to owe its origin to an ancient doctrine, it having formerly been supposed that the various elements of the body were mixed in different proportions, producing a kind of tempering according to the admixture. The temperaments usually enumerated are, —1st, the sanguine; 2nd, the phlegmatic; 3rd, the choleric; 4th, the melancholic; and 5th, the nervous; but with regard to the last, Dr. Prichard* remarks, that it is not sufficiently definite to deserve a place in the scale. The characteristics of the several temperaments are pretty generally known. The sanguine is denoted by the florid complexion, light hair, blue eyes, large bloodvessels, soft skin, and full and frequent pulse; the phlegmatic, by the light hair, grey eyes, pallid skin, small bloodvessels, slow pulse, deficient energy, and cold surface; the choleric, by the dark hair and eyes, with the swarthy and ruddy complexion. The melancholic temperament differs from the last, in the lank hair, slow pulse, and unhealthy hue of the complexion.

These various peculiarities of constitution certainly deserve a consideration; but it is to be regretted that the division is not more precise and scientific. Long ago, Sir Gilbert Blane remarked on the want of a good classification of temperaments, and I think the subject would well repay any one who would bestow on it the requisite attention. The common classification is indeed extremely difficult of application, nor is it always possible to say whether the case in point can be fairly expressed by any of the customary designations. It cannot be denied, however, that there are in reality a great many palpable varieties of constitution which we all recognise at once, and yet have no names to represent them. Were they to be fairly described and properly denominated, it would be of much assistance in the consideration of disease; though were too much nicety of discrimination attempted, I fear it would only still further perplex this interesting and important inquiry. With these remarks I shall, for the present, take my leave of the readers of THE LANCET.

In concluding these essays on general pathology, I have to regret many imperfections, and some errors, which have arisen in the condensation of the matter for the pages of THE LANCET; I have also to regret that arrangements have not permitted their publication in a more consecutive form. My object has been, as I stated at the commencement, "to insist on the importance of a philosophical analysis of morbid phenomena, with a view to a just estimation of the various elementary conditions of disease; and more especially to direct a proper attention to the laws of association by which these conditions are united, and to the modifications produced by their co-existence and complications."

* Vide Cyclopædia of Practical Medicine.

ON THE MISCHIEFS OF UNCLEANLINESS, AND THE PUBLIC IMPORTANCE OF ABLUTION.

By JOHN COVENTRY, Esq., Surgeon, King's Hatfield, Essex.

IN common, doubtless, with no small share of the readers of THE LANCET, I have frequently observed the very meagre contributions of medical men to the subject of hygiene, and regretted, that whilst every species of therapeutic enginery has been most diligently plied, the philosophy of health-preservation should have remained at so heavy a discount.

The ancient, venerated shrines of the "Dea Hygea," melancholily indeed contrast with the rampant Morrisonian lion crowning the New-road establishment, whose imposing externality so admirably conceals the ignoramus enclosed in his hide,—"*Asinum latere sub leonis specie.*"

The application of the fascies to quackery's thrice-contemptible carcass I leave to other and abler lictors; my present purpose is to excite attention to a most important but neglected section of hygiene—ablution, and to elucidate the various evils of dirtiness as deduced from the structure and functions of the skin.

Professing no new discovery, nor the instruction of the practitioner, I have presumed (and on that presumption ground my claims for admission into your columns) that I am placing in a striking and useful light a subject of the utmost interest to the lay readers of THE LANCET,—a numerous and influential class, including, more especially, members of the clerical and scholastic professions, managers of unions, prisons, insane asylums, and the like. In other words, I throw myself more upon the exoteric than the esoteric sphere of your periodical, for I hold it a great detriment to the community at large, to ostracize topics relative to our sanatory condition as a people from the medical periodical press, or, at best, very grudgingly admit them. The principal hygienic agents are, diet, climate, exercise, sleep, mental regulation, and ablution.

In a state of unsophisticated nature, man's instinctual tendencies doubtless form his best hygienic guides; he eats when hungry, drinks when athirst, reposes when tired, shelters and defends himself by clothing against summer-heat and winter-cold, in common, to a great extent, with the lower animals, and all this in virtue of the most cogent instincts, his reason being little concerned in the matter.

How different with man in a high state of social economy and artificial existence, when his complicated physical and moral relations render a rational code of hygiene a desideratum of no slight value.

Of the above-named hygienic agents, one, be it observed, labours under many disadvantages; it partakes less of the instinctive character than its fellows, asserts its claims to observance in vocables less peremptory, and possesses less self-evident, sensible recommendations. The infringements of its laws are not followed by such immediate chastisement, still, though the dart so long shaken over the culprit's head delays its stroke, the blow when struck is not the less severe. Hunger, thirst, raiment, labour and rest successive,—the timely dews of sleep, the tired muscle and the heavy eyelid, assert their rights in far too urgent a tone for refusal. Not so with uncleanness, the mischiefs of whose long-continued, silent operation are only at length recognised in their final issue in some formidable disease.

The clearest perception will be obtained of the uses and advantages of ablution, from a concise glance at the elaborate construction and manifold offices of the skin, that much-abused member of the body corporate, a covering dearer to a man than even the tailor's,—says the poet,—alas, too often, how infinitely less attended to! and to which ablution, neglected ablution, forms as natural a food as sleep to the drooping eyelid, or diet to the craving stomach.

The basis of the human skin is gelatine; in the language of organic chemistry, composed of fibrine or animal flesh plus ammonia and oxygen, and familiarly recognised by the two insoluble compounds it forms with tannic acid and boiling water,—leather or tanno-gelatin and animal jelly, hydro-gelatin. Into this gelatine foundation—corium or true skin—shoot countless bundles of nerves, absorbents, and bloodvessels, constituting the papillary layer of the corium, *tectus papillaris*.

Common sensation and the special sense, touch, are given by the nerves, whilst the vascular elements of the corium secrete the remaining proper cutaneous structures,—to wit, the colour-cells, *rete mucosum*, and superficial stratum of the skin, (epidermis, or cuticle.)

A fundamental organic distinction exists between the corium and the superincumbent cutaneous structures. The former is a

most exquisitely vitalized formation; the latter consist of the mere unorganizable products exuded from the corium.

The cuticle is, *quoad* our present subject, a structure of singular interest. Nerveless and unvascular, it possesses no inherent property of absorption and reposition; no capacity of accomplishing that ceaseless alternation of decay, removal, and regeneration, which characterizes every living substance. It is a perfectly extraneous exudation,—a *skin-skeleton*,—akin to the oyster or snail shell; or, equally low in the organic scale, it ranks under the category of hair, horns, nails, quills, feathers, and such like appurtenances of the higher animals.

The cuticle is exuded by the corium as soft, centrally-nucleated cellules, which coalesce into layers, the lowermost and last exuded constituting the pigment apparatus; and as the process of cell-formation constantly occurs from below, the upper tiers of vesicles become compressed by a *vis à tergo*, and, at the same time, their moisture continually evaporating from the surface, they at length desiccate: then, having no capability of spontaneous removal, they remain in the form of hard, horny scales, encasing the body, and obstructing its pores, unless removed by the timely use of the bath and flesh-brush.

There are certain morbid skin conditions, which admirably illustrate the true position of the epidermis in the organic series. Thus, a horn skin constitutes the singular disease, ichthyosis; a shell skin, the equally curious one, molluscum. In the well-known instance, the porcupine family,—casts of whose skins are amongst the trophies of the magnificent museum of Guy's Hospital,—the horny skin was not only acquired, but transmitted from parent to offspring.

The above-enumerated characteristics of the human epidermis render the question feasible as to how far uncleanness might have operated in the original causation of these and other remarkable skin affections.

The human hair and nails originate and grow on exactly the same plan as the cuticle; yet whilst few would commit the un-Chesterfieldian crime of allowing the hair to grow to eagle's feathers, or the nails to bird's claws, an unwashed skin is comparatively little thought of.

The cuticle is the immediate and actual seat of the skin-functions; how many and various conditions, then, has this structure, so elaborate in its simplicity, to realize! How distinct, yet consentaneous, are its diverse operations!

1st. The skin is an external lung, an aërating mechanism spread out over the body's entire surface. Both lungs and skin abstract oxygen from the atmosphere, which they replace by carbonic acid and watery vapour. A healthy cuticle, then, must be freely permeable by elastic fluids, (gases and vapours.)

2nd.—The cuticle is very profusely perforated by minute valvular orifices, openings of the sweat-ducts; the skin is the grand drainage-pipe of the body; and when, on indubitable authority, we learn, that computing 2500 square inches as the body's superficial contents, its linear amount of drainage-pipe is about twenty-eight miles—an hour's railway ride, forsooth! (Wilson)—we shall arrive at something like an appreciation of the importance of keeping this pipeage pervious.

Now, from the two just-named properties, the skin is manifestly complementary or vicarious in its functions to those two vital organs, the lungs and kidneys; therefore an obstructed skin throws the whole onus of elaboration upon these latter organs, which consequently become overworked and diseased.

3rd. This is not all. The skin is a decarbonizing organ; opening into the cuticle, in common with the hair follicles, are the orifices of the "fat glands," which secrete an oily matter (for the skin's lubrication) from the blood; if allowed to collect, this fatty matter checks the "transpirability" of the skin, by glazing it over with a sort of natural varnish, thus throwing the whole work of decarbonization upon the liver; its fat-cells become gorged, and thus arises that most grave malady, "fatty liver," good enough in a pasty, if there be, that is, any virtue in *pâté de foie gras*, but no trivial calamity to any unfortunate human possessor.

Carbon is retained, moreover, in the blood, depriving the sentient lining of the arteries and left heart of their proper stimulus; and carbon thus, with saline and other impure matters circulating through the brain, deranges that organ of organs. The connexion, then, between a clear head and a clear skin is closer than the unlearned might suppose.

4th. Many years back, Drs. Blackall and Osborne discovered that dirtiness was a great source of dropsy. To understand this, it must be recollected that in an impure obstructed skin are checked two of the skin's main functions—evaporation and exhalation.

A few words on each of these processes.

Exhalation and evaporation are operations common to plants and animals; in both, the former is a vital, the latter, a physical action. The vegetable exhaling organs are glands dispersed beneath the epidermis of the leaf, and open by pores upon the cuticle. In mode of formation, the closest similarity exists between the vegetable and the animal cuticle; both consist of indurated exuded cells, centrally nucleated, and similar physical causes similarly influence both vegetable and animal evaporation and exhalation.

The occurrence of evaporation, equally in dead as in living plants and animals, causing both to shrivel and desiccate, proves its purely physical nature.

Heat, drought, and motion, are the main promoters, both of evaporation and exhalation.

Liquid exhalation being constantly vapourizing on the surface of plants and animals, abstracting much heat, the free caloric of the body becomes latent in the vapourizing perspiration; and as elevation of temperature and increase of perspired liquid bear a direct ratio to each other, the human body can bear with impunity an incredible degree of heat. Thus, Sir Joseph Banks and Sir Charles Blagden made themselves comfortable in a room 52° Fahrenheit hotter than boiling water, and Chabert, the fire-king, remained unbaked in an oven heated to 600° Fahrenheit; one step more, and he might have cooled himself on a gridiron as in a freezing mixture!

In the pathology, too, or derangements of evaporation and exhalation, plants and animals strictly agree. My friend, Dr. Williams, (Swansea,) produced a state of blanching in the leaf by varnishing its surface, so as to obstruct the breathing or exhalant pores, (stomata,) and Dr. Fourcault, in the year 1844, dropped various animals by varnishing their cuticles.

Now, perceiving that an unclean skin was a kind of natural varnish and cement to boot, composed of cuticular detritus, sebaceous secretion, adventitious dirt and impurities, and seconding experiment by observation, Dr. Fourcault traced many dropsical cases to this original. Séguin estimates the amount of skin-secretion at about seven grains per minute; Dr. G. Bird, at thirty ounces in twenty-four hours. At all events, it is a quantity which, refuse material as it is, cannot be retained in the system without serious injury.

5th. The skin—*à fortiori*, the cuticle—heats as well as cools the body. Breschet and Bequerel found, that on shaving off the hair of rabbits, and greasing the cuticle, the temperature quickly sunk.

6th. Lastly, in the wake of these significant facts in proof of the mischiefs of uncleanness, follow what may be termed the local effects of dirtiness—skin-diseases proper; a whole cohort of pimples, blotches, parasites, "evils, and 'chimeras dire,' upon which it is not now the intention to expatiate.

In quitting the subject of the cuticle, its prolongation over the hair may be noticed. Dr. Bidder was the first to point out this fact, since which, Mr. Erasmus Wilson has aptly compared the hair-stem to a microscopic tree-stem, both consisting of three concentric layers of different densities,—in the tree known as pith, wood, and bark,—in the hair, (as shown by the microscope on either a vertical or horizontal section,) composed of nucleated cells, concentrically arranged, and also differing in density and compactness; the similitude to the tree-stem being indicated, however, by a soft central layer, the pith; a middle fibrous layer, the wood; an outer scaly layer, the bark. How unexceptionable the perfection of creation's works, alike evinced in the simplest and most complex! Contemplating the ineffable care and skill displayed in the construction of a hair or a straw, we cease to wonder at the extension of a superintending Providence to the meanest created object, and that even the very hairs of our head are all numbered!

With respect to the hair, dirtiness has its share in the production of disease. Thus, the extraordinary disease, *plica polonica*, is scarcely known, excepting amongst the unkempt serfs of the unfortunate country whose name it bears.

Having traced so large an amount of disease and misery to uncleanness, how deeply must we regret that London is still the "great unwashed," as tightly packed as the hides in a tannery. From year's end to year's end, the skins of the metropolis, "glazed and varnished," reek in their accumulated sordes, to the sad detriment of comfort, comeliness, health, and longevity. One would almost fear that, *more majorum*, the Knighthood of the Bath were the sole distinction between patrician and plebeian. Cheap baths for mechanics and artisans do exist, it is true; but alas! for their purity. They usually appear as if they had passed through an Augean stable, or ever they lave the soiled surface of the begrimed working man. How detrimental to our citizens to know, that

throughout all Scotland, from Maidenkirke to John o' Groat's, and in every considerable continental city, baths of the requisite purity and cheapness are within reach of the labouring classes. St. Louis, too, that magnificent hospital, daily proffers a gratuitous bath to the labouring public of Paris. The enormous funds of our metropolitan hospitals, and the well-known liberality of their governors, cause us to hint that, in the delay of parliamentary interference on the subject, they might follow so good an example. It is gratifying to ascertain that several eminent distillers and vinegar-makers in and about London—Messrs. Beaufoy, for example,—have caused the warm water of their immense refrigeratories to be distributed, gratis, to the poor. In conclusion, should a Council of Health be established, as contemplated by Sir James Graham, may we hope that every facility may be afforded for public bathing; that cleanliness may no longer be viewed as a luxury accessible only to the wealthy, but that, before the ensuing parliamentary session, the pores, as well as the ports, of our mother country may be rid of their imposts, and unreservedly thrown open.

April, 1846.

REVIEWS.

The Veterinary Record and Transactions of the Veterinary Medical Association. April, 1846.

THE *Veterinary Record* continues to be conducted with considerable spirit and ability, and the number before us contains many instructive cases and several excellent essays. Among the former, we may note a case of caries of a tooth, giving rise to symptoms resembling glanders; tetanus following castration; influenza; intussusception, with rupture of the cæcum; hæmorrhagic tumour in the colon; abscess of the brain; softening of the brain; ruptured spleen; hernia, &c. And of the latter, an essay on the purging croton, by Mr. Morton, one of the editors, and an essay, by Mr. Mayhew, on the distribution and use of tendinous structure as connected with muscular structure. We congratulate the editors on the result of their efforts, and trust that the important object which they have set before them—namely, that of elevating the character of the profession of which they are members—will prompt them to continue their exertions.

Mr. Mayhew, in the paper last referred to, gives the following ingenious explanation of the nature of the powers engaged in the maintenance of the integrity of the shoulder-joint:—

"If the fore extremity be allowed to undergo decomposition up to that stage when the muscular fibre easily ruptures, it will nevertheless be found that the integrity of the shoulder-joint is but slightly injured. It will be found easier to break the bones in the attempt than to tear the scapula from the humerus. Why is this? The capsular ligament is not so tense as to hold the bones closely together, nor so constricted as to offer very considerable resistance, while the muscular fibre gives way beneath the fingers. The scalpel will solve the mystery. The muscles of the shoulder are intersected by tendons, which, though expanded within the fleshy substance, can be distinctly traced from the scapula to the humerus in a direct and unbroken line. These tendons passing from bone to bone are the ligaments of the shoulder-joint. They bind the scapula and humerus together; they give security to the articulation; they admit of motion and they limit it. While distributed as intersecting membranes through the bodies of the muscles, they render traction upon the fleshy fibre impossible, yet, by their pliability, are capable of being acted upon when the inherent contractility is excited.

"Wherever muscles appear exposed to tension, there are they found intersected by membranous layers of white fibrous tissue, and the reason is obvious; where the chance of tension is slight, the fleshy fibre is sufficiently protected by its sarcolemma or myolemma, and by its vaginal investment or fascia, both of which I am inclined to regard as not only bracing the contractile fibre and preventing its displacement, but as also resisting any force calculated to excite its vital reaction."—p. 193.

Mr. Morton adduces several instances in proof of a poisonous effect being produced in the horse by means of croton.

"We have already stated that this work continues to be conducted with spirit and ability.

BRITISH AND AMERICAN MEDICAL JOURNALS.

Dr. CUNNINGHAM, in a letter to Professor Dunglison, narrates the following

CASE OF TWINS, IN WHICH ONE CHILD WAS BLACK, AND THE OTHER WHITE.

The writer says, "Since my return from Philadelphia last spring, an occurrence of extreme novelty and interest has fallen under my notice, which may be useful to the profession in a physiological point of view. A negro woman, owned by a planter in this neighbourhood, aged about forty-five, after having given birth to thirteen children during her life, none of which were twins, was, during the last spring, safely delivered of two at one birth, one being black, and the other white. I saw them when they were a few weeks old, and the contrast in colour, hair, &c., was indeed striking, so much so that four-fifths of those who examined them were of opinion that the negro was not the mother of both, that some deception was being played; but the mother persisted, and still declares them to be her own. That a black woman may give birth, at one time, to a black child and a mulatto, although extremely rare, I believe; but a case like the present is a phenomenon as inexplicable as it is interesting."

The editor of the *Medical Examiner* thinks it probable, that there is some mistake in the account of the above case, and that the child said to be white is either an Albino or a mulatto.

THE SALE OF GORGED LEECHES.

A pamphlet lately published by M. Chevalier, Professor of the School of Pharmacy, in Paris, contains an account of a fraud which has recently been practised by leech-merchants. The ponds which formerly furnished France with leeches have been for some time exhausted by the cupidity of the collectors, who sold the whole stock, young and old, and thus left no chance of reproduction. France has, for the last eighteen years, been supplied from Egypt, Turkey, Wallachia, Hungary, and Prussia. Between 1827 and 1844, no less than 500,000,000 leeches were imported into France, and the price has increased from fifteen cents. to forty cents. each. Wholesale dealers buy and sell them by the weight, and in order to increase their profit, gorge them with the blood of sheep and other animals, thus making 1000 small leeches, weight two pounds and a half, value seventy-five francs, equivalent, by the addition of two pounds of blood, to four pounds and a half, and obtaining for them 180 or 200 francs. Several members of the Academy of Medicine have investigated the subject, and confirm M. Chevalier's statement, deprecating the fraud, and warning the public against such an imposition, alike injurious to commerce and to health.—*Pharmaceutical Journal*.

METHOD OF FIXING DRAWINGS.

The same Journal affords a hint, which may be useful to some of our anatomical draughtsmen, in fixing their sketches, for which it is necessary to

"Dissolve pale resin in spirit of wine; lay the pencil drawing on its face upon a sheet of clean paper, and brush the back of the drawing with the solution. This penetrates through the paper in a few minutes, and as the spirit evaporates, the resin is deposited as a varnish on the drawing. This has the advantage of not cockling the paper, which aqueous solutions will do, and as the brush only passes over the back of the drawing, none of the pencil-marks are in any degree removed. This process will not answer with drawings on card, or any other substance too thick to be penetrated by the solution. In this case, a weak solution of isinglass may be placed in a shallow dish, the drawing being passed through it so as to wet every part without touching it with a brush." To this the editor adds, "We can recommend the above processes in the cases alluded to, and agree in thinking that the use of a brush is objectionable. For delicate drawings no method is better than that of preparing the paper previously with a coating of size, and inverting it over steam when the drawing is finished, as well as during the process when requisite."

THE LANCET.

LONDON, SATURDAY, MAY 9, 1846.

WE have received the following letter, and the accompanying correspondence, from Dr. ROBERT LEE. This we propose to treat after the same manner as the documents recently furnished by Dr. MARSHALL HALL, and we shall take some future opportunity of setting forth what Dr. LEE professes to have done in discovering the nerves of the uterus:—

To the Editor of THE LANCET.

SIR,—I consider it to be my duty, on public grounds, to place the accompanying letters in your hands.—I am, Sir, your obedient servant,
R. LEE.
4, Saville-row, 24th April, 1846.

It will be necessary to premise, in a consecutive way, a few particulars respecting the early papers sent by Dr. LEE to the Royal Society on the nerves of the uterus. Dr. LEE's first paper, "On the Nerves of the Gravid Uterus," was read to the Society December 12th, 1839. It was referred to Mr. OWEN and Mr. KIERNAN, who, after an examination of Dr. LEE's dissections by the microscope, decided that what he had considered nervous structures were nothing but bands of cellular tissue. Under these circumstances, considering its rejection inevitable, Dr. LEE withdrew his paper from the Council.

The second paper, affirming all that had been previously maintained, was referred to Mr. LAWRENCE, and was published in the *Philosophical Transactions* for 1841.

The third communication, "An Appendix to a Paper on the Nervous Ganglia of the Uterus, with a further account of the Nervous Structures of that Organ," was also referred to Mr. LAWRENCE, and was published in 1842.

The fourth paper, "On the Nervous Ganglia of the Uterus," was read on the 19th of June, 1845, the last meeting of the session, but it was not referred. At this meeting, the title only of Mr. BECK's paper on the same subject was read, but this was referred, shortly afterwards, to Dr. SHARPEY and Dr. TODD. Thus, Dr. LEE's paper was read and not referred; Mr. BECK's paper was referred, but not read, at this meeting.

At the meeting of the Physiological Committee on the 27th of October, the recommendation to award the Royal medal in Physiology to Mr. BECK was adopted. After this, Dr. LEE's paper was referred to Sir BENJAMIN BRODIE, who recommended that it should be printed. The paper was subsequently blackballed by the Physiological Committee, and then ordered to be printed. It will appear in the forthcoming Part of the *Physiological Transactions*. The extraordinary vacillations respecting this paper cannot fail to strike the reader.

Another and last paper, entitled, "Further Researches on the Nerves of the Uterus," was read to the Society, April 23rd of the present year. Upon this paper no formal decision has yet been pronounced; but it is worthy of remark, that in the discussion which followed the reading of the paper, Dr. SHARPEY pronounced it as his opinion, that the structures considered nerves by Dr. LEE, were in reality muscular fibres. Thus, apart from the decision that Dr. LEE's dissections are not nerves, there are the opinions of Mr. OWEN and Mr. KIERNAN in favour of *elastic tissue*, of Dr. SHARPEY in favour of *muscular fibre*.

The following correspondence arose, as will be seen, out of the award of the Royal medal in Physiology to Mr. BECK:—

LETTER FROM DR. LEE TO DR. ROGET.

4, Saville-row, 13th Nov. 1845.

MY DEAR SIR,—You were present, I believe, at the meeting of the physiological committee, when it was recommended to award the Royal medal to Mr. BECK. Did it not occur to you, that it would have been proper to have compared the dissections of Mr. BECK with those I had recently made, before coming to a decision, which will have the effect of making it appear that all my descriptions and delineations of the nerves of the uterus are incorrect?—I remain, my dear sir, very faithfully yours,
ROBERT LEE.

To Dr. Roget.

DR. ROGET'S REPLY.

18, Upper Bedford-place, Nov. 13th, 1845.

MY DEAR SIR,—The committee of physiology had received, before they came to the decision respecting the award of the Royal medal, which you refer to in your letter of this morning, two separate reports on Mr. BECK's paper, drawn up by the referees, to whom it had been sent for examination, and for their opinion of its merits, and the recommendation by the committee of the award of one of the Royal medals to the author of the paper was made, after these reports had been read to them, and taken into their consideration, at one of the fullest meetings of that committee we have ever had.

These reports being confidential, I am not at liberty to communicate to you, but as there will probably soon be another meeting of the committee, I will not fail to read to them your note to me of this morning.—I am, dear Sir, faithfully yours,
P. M. ROGET.

The chief particulars respecting the dissolution and (as Dr. LEE contends) the illegal re-formation of the Committee, we have already given. Mr. BELL, the secretary of the Physiological Committee, has published a letter, in which some further facts are elicited. His version of the meeting of the 27th of October is as follows:—

"After the usual routine business had been gone through, Dr. Roget, one of the secretaries of the Royal Society, stated—by mistake, as it afterwards appeared—that the Royal medal for the year was not to be awarded in the physiological section; and Mr. Lawrence consequently left the chair and quitted the room. This gentleman left in haste, and was the only one who had gone, when Dr. Roget, on further examination of the records, informed us that he had been mistaken, and that it was absolutely necessary that the recommendation of the Royal medal should take place on that day. In perfect good faith, and I am sure without any bias for or against any particular paper, the committee again took their seats, Dr. Todd being in the chair. A list was then made by myself of all the physiological papers that had been read during the last three years: each paper was considered *seriatim*; and Mr. BECK's paper was, after much consideration, selected for recommendation for the award of the Royal medal."

Thus, then, as we remarked last week, it appears, from the pen of the secretary to the Committee, that "the Royal medal in physiology is so inconsequential a matter, that the committee come to the meeting which is to recommend its award, without knowing what they have to do; and at the fag-end of this sitting, they, without any previous consideration or examination, recommend its award to a paper which only two of them had seen, and which was well known to be the subject of controversy."

We understand that fifteen papers were put up for the medal. How could this Committee fairly judge of fifteen papers impromptu? They might almost as well have allowed the authors to prick for the medal!

Part of the "usual routine business" was the recommending Mr. OWEN for the Copley medal; but Mr. OWEN was a member of the Council, and as such, a medal could not be awarded to him without violating the regulations of the Royal Society: this recommendation was therefore cancelled. The fact of their cancelling this recommendation is a reason why they

should also have cancelled the recommendation to Mr. BECK, when that was found to have been made in opposition to the regulations. This incident respecting Mr. OWEN is another proof of the incapacity of the Physiological Committee. It is singular that their steps should have been retraced in Mr. OWEN's case. Other members of Council have had medals illegally awarded and given to them, but the Councils have not been consistent even in their injustice.

Another point worthy of notice in the above quotation from Mr. BELL, is the making a list "of all the physiological papers that had been read during the last three years." The list ought to have been of papers *printed*, and not merely *read*; this itself was a glaring irregularity, sufficient to have vitiated the recommendation; but Mr. BELL was doubly wrong, for Mr. BECK's paper had not even been *read* to the Society.

We must produce another quotation from Mr. BELL's letter, for the purpose of placing it in contradiction with a statement in Dr. ROGET's letter given above. Mr. BELL says, "There is not a word of truth in the assertion that Dr. SHARPEY drew from his pocket a report of Mr. BECK's paper; there was no such report on this or on any other paper, nor was Mr. BECK's paper treated or considered in any way differently from any other." And again, "It is asserted further, that it was not until after Mr. LAWRENCE's departure, that the report was produced by Dr. SHARPEY. This assertion has been disposed of already: there was *no such report*." (The italics are Mr. BELL's.) Let our readers compare this with the following extract from Dr. ROGET's letter.

"The committee of physiology had received, before they came to the decision respecting the award of the Royal medal, which you refer to in your letter of this morning, two separate reports on Mr. BECK's paper, drawn up by the referees, to whom it had been sent for examination, and for their opinion of its merits; and the award of one of the Royal medals to the author of the paper was made after these reports had been read to them, and taken into consideration, at one of the fullest meetings of that committee we have ever had."

The one says there was *no report* on Mr. BECK's paper; the other says there were *two reports* drawn up by the referees. Dr. SHARPEY was one of the referees, it will be remembered. It may be supposed that Mr. BELL and Dr. ROGET refer to two separate meetings; but this cannot be, for we are informed there was no meeting of the Physiological Committee from the time at which Mr. BECK's paper was referred, till the meeting at which the recommendation was made. Mr. BELL is the secretary of the Physiological Committee. Dr. ROGET is senior secretary of the Royal Society. Their testimony on a plain thing of fact, about which there could be no mistake, is in direct contradiction. Which is true? Which is false? This matter, above all things, must be explained. Dr. LEE has a right to demand these two reports, if any such ever really existed. But, says Dr. ROGET, they were "confidential." Faugh!

Dr. ROGET speaks of the full meeting of the Committee. We must explain this: there were present, Drs. BOSTOCK TODD, ROGET, and SHARPEY, and MESSRS. BOWMAN, KIERNAN, and BELL. Dr. ROGET said, in his first letter, that he had never expressed an opinion on Mr. BECK's dissections, so that his name must be withdrawn. Mr. BELL says, he "refrained from voting," and Mr. BOWMAN did not vote, so that the medal was really given, under all the doubtful circumstances that have been detailed, by Drs. BOSTOCK, TODD, and SHARPEY, and Mr. KIERNAN. The Physiological Committee numbers twenty-five.

After the receipt of Dr. ROGET's letter, Dr. LEE, we are informed, had an interview with him, in which he expressed his opinion of the nature of the proceedings. Dr. ROGET advised him to address the Council, but Dr. LEE preferred, in the first instance, to address the secretary himself.

DR. LEE TO DR. ROGET.

4, Saville-row, 17th Nov. 1845.

MY DEAR SIR,—Having been two years in the council of the Royal Society, I am aware that none but members have a right to know what has taken place at the meetings, before the decisions are publicly announced. I cannot therefore, with propriety, send any statement to the council, as you recommend me to do. Having acquainted you, one of the principal office-bearers and guardians of the honour of the Royal Society, with the unprecedented and illegal proceedings in the physiological committee, it is for you to determine whether the council, in ignorance of what has taken place, shall be permitted to proceed in a course injurious to the moral character of the Royal Society, and destructive of my scientific reputation.—I remain, my dear sir, very sincerely yours,

ROBERT LEE.

Dr. Roget.

(A copy of this letter was sent to the Marquis of Northampton.)

Not having received any answer from Dr. ROGET, Dr. LEE next addressed the following protest to the Council:—

LETTER FROM DR. LEE TO THE PRESIDENT AND MEMBERS OF THE COUNCIL OF THE ROYAL SOCIETY OF LONDON.

MY LORDS AND GENTLEMEN,—I feel compelled to protest against the council's award of the royal medal, from the conviction that by doing so, I shall vindicate the truth, which is now assailed, and prevent the council from committing an error which will reflect signal discredit on the Royal Society itself.

The first ground of this protest is, that not one member of the physiological committee, except Mr. Lawrence, has examined my two recent and most perfect dissections of the nervous system of the uterus, which were described by me in a paper read to the Royal Society at the last meeting in the month of June, and which paper, contrary to the recommendation of the referee, (Sir Benjamin Brodie,) has been refused a place in the *Philosophical Transactions*. Drs. Todd and Sharpey having therefore never seen these dissections, nor the dissection figured in the *Philosophical Transactions* for 1842, though requested by me to do so, have consequently framed their report with an imperfect knowledge, or rather in a state of total ignorance, of what had previously been done by me on the subject; which report has nevertheless been adopted by the physiological committee, and made the ground of a recommendation to the council for this award. The council cannot fail to perceive that an examination of all my dissections ought to have been made by Drs. Todd and Sharpey before any fair and just report could be drawn, much less a recommendation to the council for the award of the Royal medal.*

The second reason for my protest is, that this award casts a doubt on the accuracy of my descriptions and delineations of the nerves of the uterus in the *Transactions* of the Royal Society. More than fifty distinguished English and foreign anatomists have carefully examined my "Dissections," which first displayed this great nervous system, and have borne testimony, in writing, to the truth of my published statements. Many of these anatomists are fellows of the Royal Society, and much superior in scientific reputation to the individuals who, without examination, have urged the physiological committee to recommend this award.

A third reason which I have to assign to the council for this protest is, that the recommendation of the physiological committee was made in a hasty and irregular, if not in a positively illegal manner—a manner calculated to excite suspicions respecting the motives of those who have been most active in promoting this award.

A fourth ground for protesting against this adjudication, is the established practice of the Royal Society, in which it has ever been the rule to abstain from giving an opinion on any disputed point of fact, or deciding on a subject which is still in controversy.

For these reasons, I beseech the council of the Royal Society to suspend this award, until all the circumstances

* It appears from the Minutes that the Committee adopted the Report, but made no recommendation to the Council on the subject.

detailed in this protest have undergone a rigid and impartial investigation. The interests of science, and the honour of the Royal Society itself, render an inquiry imperative upon the council.—I have the honour to remain, my lords and gentlemen, your faithful and obedient servant,
4, Saville-row, Dec. 1, 1845.

ROBERT LEE.

No notice was taken of this protest; Dr. LEE, therefore, after the circulation of the annual address of the President, sent in the subjoined statement to the Council. This will be found to bear out, in every important point, the facts we have already communicated.

A LETTER FROM DR. LEE TO THE PRESIDENT AND COUNCIL OF THE ROYAL SOCIETY OF LONDON.)

MY LORDS AND GENTLEMEN,—In the printed address of the president, delivered at the last anniversary meeting of the Society, (Dec. 1,) it is stated that the Royal medal had been adjudged by the council, “complying thereby with the recommendation of the committee of physiology.”

It is proved, by the following statement of facts, that no recommendation was made by the committee of physiology to the council for such an award, and that the statutes of the Society, and regulations ordered by the Crown for the award of royal medals, have been violated by the late council.

On the 28th of October last, the committee of physiology met. Mr. Lawrence, who had been the referee on all my papers on the nerves of the uterus, published in the *Philosophical Transactions*, was president of the committee on that occasion. When the committee had recommended the council to award the Copley medal to Mr. Owen, and transacted other business, the secretary informed Mr. Lawrence that there was no further business before the committee to transact, on receiving which intimation, Mr. Lawrence dissolved the committee, and left Somerset House.

No sooner had the president taken his departure, than the remaining members of the dissolved committee re-formed themselves. Dr. Todd took the chair, and the meeting, thus re-constructed, proceeded to consider the award of the royal medal in physiology. Fifteen papers were named, or put in competition, for the medal. One of these was my “Supplement to a Paper on the Nervous Ganglia of the Uterus,” which had been read to the Society on the 19th of June, and which contained additional and important evidence in confirmation of the accuracy of my descriptions and delineations of the nerves of the uterus, in the *Transactions* of the Royal Society. This paper had remained unreferred four months, after having been read to the Society. Another paper, put in competition for the medal, was one on the nerves of the uterus, by Mr. Beck, which had never been read to the Society, but had been referred, on the 3rd of July, to Drs. Todd and Sharpey. Two separate reports from Drs. Todd and Sharpey were produced and read, and then this meeting resolved to recommend the council to award the royal medal to Mr. Beck.

After this transaction, the next act of the meeting was, to refer my supplement to Sir B. Brodie, to ascertain whether it was worthy of publication. Sir B. Brodie recommended the committee of physiology to print the paper, but the committee, on the 6th of November, resolved, “that Dr. Lee’s appendix be not recommended to be printed.”

On the 30th of October, the council of the Royal Society met, and on the recommendation of the re-constructed meeting, held two days before, resolved, “that one of the royal medals in physiology be awarded to T. S. Beck, Esq., for his paper entitled ‘On the Nerves of the Uterus.’”

The council then resolved itself into a committee of papers, to determine whether the paper to which the royal medal had just been awarded, was fit to be printed. The medal was awarded to a paper which had never been read to the Society and had not been ordered to be printed.

On the 7th of November, in an interview which I had with the president, I stated to his lordship, that the award had been made without investigation, and that the recommendation to the council had not proceeded from the committee of physiology, but from an illegally constituted meeting, after the committee had been dissolved by the chairman. His lordship replied, that the council had awarded the medal on its own responsibility; that it was at perfect liberty to decide independently of the committee, and that it was of no consequence whether the recommendation came to the council from the committee regularly constituted, or the minutes of the meeting had been confirmed. The medal has been awarded, added the president, the thing is done, and it is too late to say anything more about it.

About the middle of November, the president sent a requisition to the committee of physiology, ordering them to state the grounds upon which they had recommended the award of the royal medal in physiology. On the 20th of November, the committee met, and resolved, “that Dr. Todd and Dr. Sharpey be requested to draw up a report on the claims of Mr. Beck’s paper to the award of the royal medal, and that Mr. Beck’s paper be sent in succession to the several members of the committee of physiology resident in London.”

At this meeting Mr. Lawrence requested the secretary to show him Mr. Beck’s paper, but it was not forthcoming, and the secretary stated that it was in the author’s possession, contrary to a statute of the Society, enacted expressly for the purpose of preventing the perpetration of literary and scientific frauds.

On the 27th of November, the committee met, when the report of Drs. Sharpey and Todd was read and adopted. On the 1st of December, this report came before the council, and it has been printed in the Proceedings of the Society, and in the Address of the President at the Anniversary Meeting, as if it had been the true report of the committee of physiology on the claims of Mr. Beck’s paper to the award of the medal. That such is not the fact can readily be proved, for the medal was awarded by the council a month before, and on the recommendation of the re-constructed meeting on the 28th of October, when two other reports were produced and read by Drs. Todd and Sharpey, which reports, Dr. Roget states, “are confidential,” and have not yet seen the light.

The following notice is affixed to the first part of the *Philosophical Transactions* for 1845, and the same notice has been affixed to every volume of the *Philosophical Transactions* published since 1837:—

“Her Majesty Queen Victoria, in restoring the royal medals, has been graciously pleased to approve the following regulations for the award of them,—That the royal medals be given for such papers ONLY as have been presented to the Royal Society, and inserted in their *Transactions*.”

The medal in physiology was awarded by the late Council to a paper which had never been read to the Society, and has not been inserted in the *Philosophical Transactions*.

I can now demonstrate that the highest honours of the Royal Society have been conferred for destroying, and not for displaying, the nerves of the uterus. If the council will appoint a competent tribunal to investigate the subject, the truth of what is now affirmed will speedily be discovered, and the injury inflicted on anatomical and physiological science by these irregular, unjust, and most unphilosophical proceedings, be repaired. The moral character of the Royal Society requires that a rigorous examination be made, without delay, into the whole of these extraordinary transactions.—I am, my lords and gentlemen, very faithfully yours,

ROBERT LEE.

4, Saville-row, Burlington-gardens, April 2nd, 1846.

DR. ROGET’S REPLY.

Royal Society, Somerset House, April 3rd, 1846.

SIR,—I am instructed by the President and council of the Royal Society to inform you, in reply to your communication, that they do not consider themselves authorized to revise the grounds on which a royal medal has already been awarded; and I am further directed to communicate to you a resolution which they have adopted, with a view to the prevention of future difficulties in the awards of royal medals, and I accordingly enclose a copy of that resolution.—I am, sir, your obedient servant,

P. M. ROGET, Secretary.

Copy of a Resolution agreed to by the Council of the Royal Society on the 2nd of April, 1846.

Resolved,—That instead of the usual form of notice for the awards of the royal medal in the year 1849—viz., “The council propose to give one of the royal medals in the year 1849, for the most important unpublished paper in physics communicated to the Royal Society, for insertion in their *Transactions*, after the termination of the session in June, 1849—the council propose also to give one of the royal medals in the year 1849, for the most important unpublished paper in geology or mineralogy communicated to the Royal Society for insertion in their *Transactions*, after the termination of the session in June, 1846, and prior to the termination of the session in June, 1849”—the following form be substituted—viz., “The council propose to give one of the royal medals in the year 1849, for the most important paper in physics communicated to the Royal Society after the termination of the session in June, 1845, and prior to the termination of the session in June, 1848, and published in the *Philosophical Transactions*.”

That the notice of the award of the royal medal in the department of geology and mineralogy be similar, and that the notices for subsequent awards be in accordance with this regulation.

No attempt is to be made to remedy injustice; the only thing they vouchsafe is a practical confession of the wrong, and a promise not to do the like again. This is, indeed, a stinted justice. Now that the medal has been awarded, and that the *exposé* has commenced, the members of the Physiological Committee have been busy enough in looking at the dissections of Dr. LEE and Mr. BECK. We have authority to relate an incident which occurred during Dr. TODD's examination of Dr. LEE's preparations.

Dr. TODD was shown the nerves of the unimpregnated uterus, and about these he would at first make no admission. He afterwards admitted the ganglia at the cervix, but wished to see the connexions between the ganglia of the cervix and the nerves of the body of the uterus. Dr. LEE showed him what he considered to be a newly-discovered ganglion, but which Dr. TODD would not admit to be nervous in structure. He was then shown the ganglia and plexuses at the neck of the gravid uterus. He was satisfied with these, and wished to see the nerves going from these ganglia to the body. They then examined an injected preparation, and in doing this, Dr. LEE took up the great sympathetic above its bifurcation into the two hypogastric nerves; Dr. LEE then put the right hypogastric nerve upon the stretch, and showed it running down to the ganglia at the cervix uteri. Dr. TODD looked at it, and in the most positive manner declared, to Dr. LEE's surprise, that what he showed him was NOT nerve! Dr. LEE expressed his astonishment at his ignorance, and told him that it was the hypogastric nerve which had been known to GALEN, and to all succeeding anatomists for the last two thousand years. We need not add one word.

Such is a repetition of the details concerning the award of the last and long-to-be-remembered medal in physiology. They are startling, and almost sufficient to shake the Royal Society to its centre. That such things should have occurred during the presidency of the MARQUIS OF NORTHAMPTON, will for ever be a reproach to this nobleman. It could not be supposed that he should comprehend the nature of anatomical details, but it might have been supposed, that on accepting the first office in the first scientific society in the world, he would so far have studied the statutes and regulations by which it is governed, as to have rendered the perpetration of these irregularities impossible. That he did not is a clear evidence of his unfitness for the elevated post he has occupied, unless, indeed, he can claim something approaching to Royal impunity, and pass the blame downwards entirely to the acting officials.

TRUTH and justice compel us to make a few additional remarks on the last letter of Mr. NEWPORT. This gentleman cannot rest upon that letter; he must either bring his innuendoes out into such relief that they shall amount to straightforward accusations, or they must be retracted as devoid of all meaning whatever. If Mr. NEWPORT does neither of these things, a very low estimate indeed will have to be formed of him and his proceedings. An open accuser, he may depend upon it, right or wrong, is more tolerated than the framer of mere insinuations; for an insinuation is, in fact, an accusation, only made by the coward instead of the man of courage.

Mr. NEWPORT is too full of innuendo; he might take for his motto the words of, we believe, MACHIAVELLI,—“*accusez toujours*,” he seems possessed with the idea, that to throw against an enemy a heap of accusation is the sure way to work him mischief. But we will more particularly refer to an objectionable portion of his recent letter. He says, “during more than three years prior to my first acquaintance with Dr. HALL, in May, 1832, I had been engaged in investigations on the respiration of insects, and, *confiding in his honour*, I frankly communicated the results of these investigations to Dr. HALL shortly after the commencement of our acquaintance.” Either this means nothing at all, or it means that Mr. NEWPORT found his *confidence* in Dr. HALL betrayed, and that Dr. HALL had forfeited his *honour* by some conduct in reference to these communications. These are the innuendoes that are fairly presented by the passage in question. Now, we ask, has Mr. NEWPORT given any reasonable ground for making such an insinuation? Can he give any? Has Dr. HALL ever claimed any views of Mr. NEWPORT's as his own? Has he ever, since his acquaintance with Mr. NEWPORT commenced, published anything at all similar to the results of Mr. NEWPORT's investigations and communications? We are able emphatically to answer no to these questions. Let Mr. NEWPORT prove the contrary, if he can; but let him be straightforward instead of tortuous; let him make a track like the arrow, rather than like the serpent. Mr. NEWPORT's hints and his facts must corroborate each other. We repeat, that Dr. HALL has never claimed, as his, anything which Mr. NEWPORT has put forward as his own. Dr. HALL has even expressed that Mr. NEWPORT should have all his own, and something more, rather than that he should ever come into collision with him.

But we must detail, even to repetition, a few facts. Long before he had ever seen Mr. NEWPORT, Dr. HALL had been engaged in researches on respiration, and his two papers on this subject had been read to the Royal Society, some months before the introduction of Mr. NEWPORT to him. Mr. NEWPORT had also been previously engaged in an experimental inquiry into respiration. Dr. HALL experimented on bats, hedgehogs, and dormice, in their hibernant states; Mr. NEWPORT chiefly on insects in the larva and pupa states. The facts developed in the two series of experiments are very similar; but it is not evident that, as Dr. HALL had published his investigations before Mr. NEWPORT's appeared, and before he had ever seen him, to Dr. HALL must belong the merits, both of originality and independence, when any similarity between them occurs? Mr. NEWPORT may also have been original and independent,—no one, that we are aware, has ever said otherwise,—but the priority undoubtedly belongs to Dr. HALL. Dr. HALL, however, soon passed to other and more important subjects, becoming shortly after this engaged in the prosecution of his great discovery, and he has never, from that day to this, prosecuted the subject of his early labours; the field has been left entirely to Mr. NEWPORT. Under these circumstances, is it not most extraordinary that a forfeiture of honour and a breach of trust should be imputed to Dr. HALL? Such an imputation has, however, been made, and we call on Mr. NEWPORT either to retract or to substantiate it. At present, the insinuation is in a state of recoil upon Mr. NEWPORT, and the blow will be severe, unless he can, in a clear, open, straightforward manner, without quibble or reserve, produce a full explanation. As it is, the profession will see that Dr. HALL has in this matter treated him most gene-

rously; he has never publicly insisted on a priority and originality which of right belonged to him, and yet these crooked and unpardonable insinuations are promulgated.

With respect to the other collateral, but still more important matter, the charge of "misrepresentation" which sullies the pages of the *Philosophical Transactions*, we believe there cannot be two opinions. Mr. NEWPORT believed that Dr. HALL sent his letter to the Council with a view to his prejudice. As we stated last week, Dr. HALL did not—and we have authority for the statement—send Mr. NEWPORT'S letter to the Council; he simply gave it to Mr. KIERNAN, who was not a member of the Council, or, we believe, even a Fellow of the Society at the time. Any use Mr. KIERNAN may have thought proper to make of it was entirely independently of, and unknown to, Dr. HALL. Now that we have made Mr. NEWPORT aware of these facts, he ought to be the first to apply for the erasure of that note from the pages of the *Philosophical Transactions*, which, through a misconception of his, contains, what we still maintain to be, a false statement. It is monstrous that such a man as Dr. HALL should for ten years have been branded as guilty of misrepresentation in the pages of the *Philosophical Transactions*, upon such grounds! We blame the officials of the Society, the guardians of its honour, not less than Mr. NEWPORT.

Such are the facts of the case; but we repeat the observation made in our last, that had Dr. HALL sent Mr. NEWPORT'S letter to the Council, the act of doing this could not justly be termed "misrepresentation." Even if the secretaries believed, with Mr. NEWPORT, that the letter came to the Council direct from Dr. HALL,—which they must have had opportunities of knowing was not the case,—their conduct in printing the groundless insinuation was most reprehensible. There can be no doubt, that when Dr. HALL sent an express to Mr. CHRISTIE, (not to Mr. CHILDREN, as we erroneously stated,) to inform him of the falsehood which deformed the *Transactions*, inquiry and reparation ought instantly to have been made. The redress ought to have been as prompt as the denial of Dr. HALL; that it was not so, compromises the honour and fair dealing of Mr. CHRISTIE. There is small claim on his part to that which we have so much insisted on, "*La Probité Scientifique*,"—a phrase which we are proud to take for our motto in these exposures. It was, we repeat, perfectly monstrous that Dr. HALL'S honour should have been stabbed, with such an absence of all provocation.

THE present state of the government of the WORCESTER INFIRMARY has become a subject of great interest with the members of the profession practising in that city and neighbourhood. It has also, we think, a very general bearing upon medical affairs throughout the kingdom. With the general business of the Infirmary we shall not interfere, although it must be a matter of surprise, and, as the chairman of the committee of governors (Mr. CURTLER) most reasonably says, "one that calls for investigation," that there has been for some years past a great irregularity in the expenditure, in one year as much as 527*l.* more than in the preceding year, although with 273 in-patients less. In addition, the late secretary—who seems to have been allowed considerable latitude in his accounts—dies, with his accounts, running over two years, not made up, and with arrears against him of no less than 375*l.*; yet the rule is, that he shall make up his ac-

counts every month. Coupled with this, one of the auditors resigns his office, declaring that he cannot get the accounts to audit. Besides, as concerns the general business of the Institution, it appears that several charges of neglect have been preferred against the medical staff of the hospital: these were referred to a sub-committee, who have reported that they were all unfounded; but before this report was made, it seems, from the published abstract of the proceedings, that the whole of the medical officers entered the committee, and insisted upon being considered members of that and of every other committee. This led to a very angry discussion as to such a right, which ended in some of the non-medical gentlemen leaving the room. The business of inquiry, however, went on, the meeting was adjourned; and at the second meeting a similar scene occurred, the medical men still refusing to retire, although the unanimous opinion of the non-medical portion was, that "they had no right to attend, and ought not to do so." Now, whether the medical staff of this Institution possess the right or not to attend all meetings of the governors, special or general, from custom or by rule, is a matter for the governors to decide; but while we have every sense of fellowship and interest for the respect and honour due to our brethren, we cannot help feeling that these medical gentlemen are not taking high ground in this matter. When a man shows himself eager for defence, the world says he is guilty. We all know with what feelings of kindness and delicacy the medical attendant is regarded, even in London; but in the country, where he is frequently the intimate friend, he possesses far greater influence; and it cannot be supposed that the unusual presence of the whole of the medical officers at a meeting for inquiry, could be without effect upon the members, and could but interfere with the conscientious discharge of their duties: the result proves that it led to very angry words; and undoubtedly the medical officers have lost their dignity and forgotten their *amour propre*, in taking the course they did. But while upon this matter, we may just remind the medical officers of this Institution, that one of the cases was shown to have been in the hospital for a month without being once seen by a principal surgeon. None but the house-surgeon and his pupil saw him, says the report. Now we possess correct information that this is by no means an uncommon occurrence in this hospital; moreover, when the motion was proposed, "that the medical officers be exonerated from all blame of neglect," one of the committee objected, "that he had several cases to bring forward when he could sit on a committee without interruption," and the motion was withdrawn accordingly. The medical officers may reply that their attendance is a charity; but this is a partial view of the case; most of them have pupils, whose fees, if there were no other obligation, should compel them to perform their visits most regularly: let them take their example from the physicians and surgeons of the London hospitals, where men of the most extensive and harassing practice are the most punctual and zealous in their duties, with a view to afford the most prompt benefit to their poor patients, and also to improve both their pupils and themselves.

We come now to a more important matter, which has arisen out of this inquiry. At a meeting of the committee of governors, a memorial was presented, signed by fourteen physicians and surgeons practising in the town, desiring to be

admitted to see the practice of the hospital, more especially the operating part of it. This appears to us a very reasonable request, and, inasmuch as it would tend to the benefit of all parties, we think it should be frankly granted. It is certainly customary to admit practitioners to all the London hospitals, and to some of the principal ones in the large provincial towns, and when it is remembered that many of the cases sent to the hospital have been under the previous care of medical gentlemen not attached to the Institution, it is clear how desirable it is that the final treatment of the cases and especially the post-mortems, when made, should be seen by all who have attended the patients. Not that any man should be allowed to thrust himself upon every case in a meddling and inquisitorial spirit, with a view to find fault with the treatment or diagnosis; but let any respectable practitioner be allowed the courtesy of visiting the wards, the operating theatre, and the post-mortem room of every hospital. We feel convinced the privilege would not be abused, and that any paltry disposition to detract from the professional skill of the staff officers, regardless of the love of our art, and the pursuit of science, would only be despised. Thus the medical attendants would be so kept upon their mettle, that the study and treatment of the cases must be of a high character. A zeal in the practice would be excited, and, we venture to hope, a more complete cordiality and fellow-feeling would spring up amongst the members of our enlightened community.

THE MEDALS OF THE ROYAL SOCIETY.

(LETTER FROM DR. SHARPEY.)

To the Editor of THE LANCET.

Sir,—In a leading article in the last number of THE LANCET, referring to the recent award of one of the medals of the Royal Society, the writer has thought fit to make animadversions on the part I took, or am supposed to have taken, in the matter, which are not only calculated to represent my conduct and motives in an unfavourable light, but to give a false colouring to the whole proceedings. I have therefore to request the favour of you to give an early insertion to this letter, which, I may state, is communicated solely on my own responsibility, and without the sanction or cognizance of any other member of the physiological committee.

The main charge made, or insinuated, is, that certain parties, of whom I was one, contrived, in furtherance of an unworthy design, to reconstruct a meeting of a committee, after a chairman, (Mr. Lawrence,) supposed adverse to their views, had dissolved it, and that these parties had succeeded in perverting one of the highest rewards in the gift of the Society to gratify feelings of enmity towards one person, or of undue favour to another. To be exposed to such imputations is a hard penalty the committee has to pay, for the fault, at most, of a mere informality, which entirely arose from a misapprehension on the part of a gentleman altogether disinterested in the issue—an informality afterwards corrected, in itself of little moment, and harmless, except for the opportunity it has afforded for cavil and misrepresentation.

But "something more" has now, it seems, been discovered, to darken the complexion of the affair, and to be eagerly thrown in to season the dish of calumny. At page 500 of your last number, the following passage occurs:—"We are also enabled to state something more respecting the Beck medal. It now appears that Mr. Beck's two dissections were made at the instigation of Dr. Sharpey, and that the expenses attending them were defrayed, through Dr. Sharpey's influence, by University College! The dissections were partly executed in Dr. Sharpey's own dissecting-room, and three years ago he had confidently predicted, that about this time Dr. Lee's dissections would be overthrown. The profession already knows the manner in which Dr. Sharpey endeavoured to fulfil his own vaticination; that he and Dr. Todd were the referees of Mr. Beck's paper; and that it was on their report that the council and physiological committee grounded the award. As far as Dr. Sharpey was concerned, seeing the part he had

taken in promoting Mr. Beck's labours, it was little better than passing a medal from his right hand to his left."

Now, as to the real state of the case. I first became acquainted with Mr. Beck, from his attending my lectures as a student ten years ago. I have reason to believe, that subsequently he was on much more intimate terms with Dr. Lee than with myself, and I know that he was an implicit believer in the correctness of Dr. Lee's opinions respecting the uterine nerves. Some three years ago, Mr. Beck called on me, and stated that he had obtained the uterus of a woman who had died shortly after delivery, and that he contemplated making a minute and careful dissection of the nerves, in the hope of contributing to settle the questions then at issue regarding them. He expressed his desire that the preparation, when completed, should be deposited in the museum of University College. Mr. Beck also informed me, that Dr. Lee, with whom he was then in frequent communication, was perfectly aware of his intention, and approved of it. Desirous that the truth should be made out, whatever might be the issue, I heartily concurred in his proposal, and, further, thought myself warranted in recommending that the museum should be at the charge of the necessary spirits and glass. All this was perfectly well known to all who cared to know about it. It will therefore be seen, that although I encouraged Mr. Beck's undertaking, it was not entered upon at my "instigation." Mr. Beck's dissections were made at his own house. I remember that he at first brought the uterus to the college to put it into spirits, but if he really began or proceeded any way with his dissection there, as alleged, it must have been for a very short time indeed, for I have no recollection of it. In the course of his long and laborious pursuit, which was conducted quite independently of me, I occasionally called on him to learn his progress, still, I feel confident, not oftener than ten or a dozen times in two years; and though on such occasions I encouraged him to proceed, I neither directed nor superintended his labours. His researches, which were originally undertaken to clear up particular points then in question, eventually extended much farther, and he communicated the results to the Royal Society.

Next, as to the charge brought against me personally as member of the committee of physiology of the Royal Society. When the paper first came before the committee on the question of its being printed, some time last summer, the chairman proposed to refer it to me to report on its merits; this duty I declined, explaining to the meeting the interest I had taken in Mr. Beck's researches. Eventually, the paper was referred to Dr. Todd and myself, I consenting to be named along with that gentleman. But, as it happened, my nomination, as far as regarded the question of printing the paper, proved to be merely a formal one, for at the next meeting of the committee, which took place in October, the paper was recommended for publication on the report of Dr. Todd, I happening not to arrive in time,—I had not prepared any report, and had not communicated with Dr. Todd on the merits of the paper during the whole of the long interval. It was at this same meeting that the recommendation of the award of the royal medal took place. I was present then, and concurred in the recommendation, from the responsibility of which I have no desire to shrink. On its being proposed to recommend the award to Mr. Beck, I felt it my duty to give my opinion on the result of his labours, but I neither made the proposal nor did I suggest to others to make it; in fact, I had never expressed nor hinted anything respecting the royal medal to any member of the committee, nor to any other person; to say the truth I had not been thinking about it. I may add, that on this occasion also, I explained to the meeting the relation in which I had stood to Mr. Beck. The medal was awarded by the council at a meeting which was held a few days after; though a member, I happened not to be present at that meeting.

After this, Dr. Lee waited on the president, complained of the proceedings of the committee and council, and required that they should be rescinded. The matter thus came before the committee for re-consideration; and on being named, along with Dr. Todd, to report the grounds of the recommendation of the committee, I did not shrink from the duty; we had nothing to do with the abstract of the paper to which you refer, which, indeed, I first read in your pages. If in this stage of the proceedings I on any occasion expressed myself warmly, it was from feeling indignant that the conduct and motives of the committee should be aspersed as they had been, and also that a gentleman in the position of Dr. Lee should, as a fellow of the Society, exert himself to arrest a reward adjudged to a young labourer in the same field of science, who had arrived at conclusions different from his own.

I cannot but smile, Sir, at the simplicity of those who would impute to myself and others the notion that error could be made to appear truth by the temporary sanction of a reward. I know full well that such a distinction could only render error more glaring, and the humiliation attending it more signal. But deeply as I should feel such humiliation, were the present decision in the end to be reversed by the unprejudiced opinion of the scientific world, yet the pain would be little in comparison with that inflicted by the successful imputation of unworthy conduct. Unhappily, there are men but too prone, by nature and habit, to put the worst construction on the motives and actions of others, and if what I have stated be insufficient to convince them of the rectitude of my conduct, I know it would be useless to appeal to a character which, whatever may be its faults, has never yet been accused of dishonesty. I must be content to rely with confidence on the good opinion of those whose minds are more happily constituted.—I am, Sir, your obedient servant,

May, 1846.

W. SHARPEY.

* * The leading article in the present number was written before the receipt of Dr. SHARPEY's letter. Dr. SHARPEY is much mistaken if he supposes we intended to accuse him of dishonesty. We believe, on the contrary, that of himself Dr. SHARPEY would always act with honour: no one, we are sure, would more highly and cordially than ourselves eulogize his general conduct and scientific labours and character. Unfortunately, a corporate conscience is proverbially of easy virtue; and it is not the first time that men, otherwise upright, have, when acting in a collective capacity, committed acts which as individuals they would shrink from. In a series of articles carrying an extraordinary number of facts, it is of course easy to impugn some isolated statements; but in the main, we are sure the profession will adjudge that we have been singularly correct. The only point respecting Dr. SHARPEY which we have to retract, is the statement that he in the first instance "instigated" Mr. BECK to commence his dissections. This we do withdraw most cheerfully. Dr. SHARPEY treats the reformation of the Committee, and the recommendation of the Royal medal after the departure of the chairman, Mr. LAWRENCE, as "the main charge;" and this he considers as "harmless;" and a "mere informality." We dissent from these opinions—we consider the irregular re-constitution of the Physiological Committee bad in itself, and clearly open to unfavourable construction. This was the *first* censurable procedure. The hasty award of the medal, about which no one seems to have known or thought till the moment it was disposed of, was the *second*. The direct contradiction which now lies between Dr. SHARPEY, Dr. ROGER, and Mr. BELL, is a *third*. The award of a Royal medal to a paper which had not been printed, contrary to the regulations, is a *fourth*. The permitting Mr. BECK's paper to leave the custody of the proper officers of the Society—a permission which has been refused in other instances, and which is also contrary to the regulations—is a *fifth*. The suspicious discrepancy between the accounts of Mr. BECK's paper, published in the "Abstract of the Transactions of the Royal Society," in the report by Drs. SHARPEY and TODD, referred to in the President's Address; and in a note in Sir B. BRODIE's recently published "Lectures on Pathology and Surgery," is a *sixth*. The uncertainty, the perfect ignorance, in fact, in which the scientific world at present remains, as to what Mr. BECK really received the medal for, is a *seventh*. Not one of these but is of the utmost importance.

The whole subject is full of facts deeply interesting to the scientific world.

THE MEDALS OF THE ROYAL SOCIETY.

(NOTE FROM MR. BECK.)

To the Editor of THE LANCET.

SIR,—In the article upon the Royal Society, which appeared in your journal of the 2nd of May, it is remarked—"It now appears that Mr. Beck's two dissections were made at the instigation of Dr. Sharpey," and that "the dissections were partly executed in Dr. Sharpey's own dissecting-room." As

both these statements are untrue, I beg to forward you an account of the circumstances as they occurred.

In February, 1843, a woman, under the care of a midwife, died from uterine hæmorrhage immediately after delivery at the full period. As this appeared a favourable case for the examination of the uterine nerves, I called upon Dr. Lee, with whom I was then on intimate terms, in order to offer the preparation to him. Dr. Lee was from home, but I left a note, stating the object of my visit. I also added, that if Dr. Lee did not wish for the preparation, I would take it to University College, and endeavour to demonstrate the nerves, as displayed by him to Dr. Sharpey and Mr. Quain. Two days after this, Dr. Lee called upon me in my absence, and wrote on the back of his card, that his engagements were such as to prevent him making use of the preparation, but if I would do as I had expressed in my note, he would feel obliged to me.

Thus, Dr. Sharpey had no knowledge whatever of my intentions until the preparation was sent to University College. Nor was any portion of the dissection made there; for it soon appeared that the inconvenience of spending three or four hours from home in the middle of the day was so great, that it would be impossible to do it. The preparation was consequently removed to my own house, and I commenced the dissection in perfect good faith, and under the firm conviction that I would show Dr. Lee's system of nerves as he thought he had made them out. I continued dissecting until the end of June, during which period Dr. Lee several times called, saw me working at the dissection at my own house, and expressed great interest at the result. But as I removed the cellular tissue from the nerves, and proceeded to clean "the utero-cervical ganglion," I thought I saw a plexus of nerves in its centre; and no sooner was the doubt expressed by me that it was not a ganglion, but a plexus surrounded by dense cellular tissue, than Dr. Lee immediately ceased calling.

Since then, I have continued the investigation, the results of which will be published in the next Part of the *Philosophical Transactions*, having been delayed thus long in consequence of the time required to engrave the drawings.

I remain, yours, &c.,

T. SNOW BECK.

Upper Marylebone-street, May 4th, 1846.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

SURGICAL CASES TREATED AT THIS HOSPITAL.

(Reported by HOLMES COOTE, Esq., Fellow of the Royal College of Surgeons of England, Surgeon to the North London Ophthalmic Institution, and formerly House-Surgeon to St. Bartholomew's Hospital.)

DISLOCATION OF BOTH HUMERI FROM A FALL—REDUCTION A FORTNIGHT AFTER THE ACCIDENT.

CASE 6.—Richard M—, aged fifty-nine, whilst walking along the Minories, trod upon a piece of orange-peel, slipped, and, falling heavily upon the left side, was stunned. He remembers stretching out the left elbow, and crossing the right arm to break the force of the fall. He was carried to a chemist's shop, where he soon recovered. The left shoulder, which was bruised, was examined, and pronounced "sprained," and he was directed to apply a liniment.

He came to St. Bartholomew's Hospital a fortnight after the accident, and was admitted under Mr. Lawrence.

Jan. 22nd, 1840.—The left humerus, separated from the side, was dislocated under the pectoral muscle, where the head of the bone could be readily felt; there was a great hollow under the acromion, and he was unable to raise the hand to his head.

Upon examining the right shoulder, of which he made no complaint, and which was stripped for the purpose of comparing the two joints, a hollow was noticed under the acromion; the head of the humerus was found in the axilla, he could bring the elbow close to the side, but was unable to raise the hand to his head. Both forearms were bent, the right supporting the left. The right limb performed its movements so freely that no one conjectured at first that it was injured. The patient, who was evidently still suffering from the blow on the head, answered questions incoherently, and could scarcely give any account of himself.

With a long jack-towel the patient was fixed to the bed; a second towel was attached by the clove-hitch to the left wrist; the heel of the surgeon was then put in the axilla, and continued extension was made by four assistants. In a quarter of an hour the bone slipped into the socket with a snap. Similar extension was then applied to the right wrist; the patient being very faint, the bone was easily replaced in about

five minutes. Large wedge-shaped pads were placed in the axilla, and the two arms were confined to the sides by rollers. There was great tendency to displacement in both joints; the left humerus slipped out twice during his stay in the hospital, but was reduced each time without difficulty. At the end of a fortnight, the rollers were removed, and he left on the 14th of February. Motion and sensation were perfect in both limbs, and he had completely recovered his mental faculties.

An obscure injury to a joint is often considerably elucidated by a comparison with corresponding parts upon the opposite side of the body. In the case of dislocations of the humerus, it is desirable that the surgeon should be aware of the possibility of such an occurrence as is here described. An examination of the opposite limb would in this patient have led to a serious error, had not the due and proper relations of the different bony prominences, and the direction of the axis of the bones, been made the points of chief consideration.

PENETRATING WOUND OF THE CHEST WITH A FORK.

CASE 7.—William T—, aged twenty-seven, a tall, sallow man, subject to fits of melancholy and depression, plunged a carving-fork several times into the chest just below the left nipple, early in the morning of March 17th, 1846. The instrument was stained with blood three and a half inches from the point. A surgeon was called in, who ordered him to be conveyed forthwith to St. Bartholomew's Hospital in a cab. Admitted under Mr. Lawrence.

There are eight small punctured wounds below the left nipple, and between the fourth and fifth ribs. The cellular tissue around is emphysematous. He is pale, faint, and agitated, and complains of a weight when drawing breath. The pulse is very feeble, and the extremities are cold.

The wound was closed with strips of adhesive plaster.

18th.—The emphysema has extended over the whole left anterior surface of the chest.

23rd.—The wounds are all healed; the emphysema remains; he has had no unpleasant symptom.

27th.—The emphysema has disappeared. He is fit to leave the hospital, being perfectly convinced of the folly of his attempt.

30th.—Discharged.

Some surprise may be experienced how a sharp instrument, penetrating the cavity of the chest to the depth of three and a half inches just below the left nipple, and wounding the lung, could have missed injuring the heart and pericardium. The heart, an organ of variable size, is separated from the walls of the chest in this situation by the thin edge of the left lung, which rests upon the pericardium. An instrument entering at the left nipple, and directed obliquely outwards and backwards, (as would be the case if the patient was right-handed,) would pass from this portion of lung to the left of the heart, into the general pulmonary tissue.

SEVERE LACERATED WOUND EXTENDING INTO THE ELBOW-JOINT.—THE EXTERNAL CONDYLE CHIPPED OFF FROM THE HUMERUS.

CASE 8.—Joseph E—, aged eleven, a healthy lad, was caught by the right arm between two cog-wheels connected with machinery in motion. Admitted under Mr. Lawrence a few minutes after the receipt of the accident.

Dec. 8th, 1845.—The integuments upon the outer surface of the right upper extremity, from the middle of the forearm up to the insertion of the deltoid, are severely bruised and torn. A deep lacerated wound extends through the skin and muscles down to the elbow-joint, which is opened. The external condyle, chipped off from the humerus, is held only by a few tendinous and fleshy fibres. There is considerable venous hæmorrhage, but the brachial artery is not wounded. The right side of the head and the left arm are slightly bruised.

Mr. Lawrence removed the external condyle by severing with a scalpel the soft shreds which retained it. The arm, bent at right angles, was supported upon an inclined plane placed by the patient's side in bed, and a cold lotion was applied. Milk diet.

Considerable swelling of the arm and forearm, with some heat, ensued, but the boy did not suffer much, and no active treatment was required. On December 13th it was noted: "The arm and forearm are less swelled and tense; there is no pain upon pressure, either above or below the wound; there is partial sloughing of the surface of the wound. He makes no complaint, and sleeps well at night. A bread-poultice.

14th.—The slough has separated from the wound, leaving a florid granulating surface, which discharges healthy pus. A second slough, of the size of a crown-piece, is noticed to-day upon the integuments immediately below the shoulder-joint. He is quite easy, and feels hungry. Broth diet.

16th.—The slough of the upper arm, about eight inches in length, has separated, leaving a healthy granulating surface; meat diet.

Feb. 4th.—The granulations have reached the level of the surrounding skin; the wounds are cicatrizing. The forearm can be moderately flexed and extended; rotation perfect; the limb is dressed and rolled.

26th.—He has left his bed.

March 18th.—The forearm has become firmly fixed at a right angle; rotation perfect.

28th.—Discharged, at the request of his friends.

The termination of this case must be regarded as favourable, considering the extensive laceration and division of soft parts, the wound of the joint, and the injury inflicted upon the articular extremity of the humerus. A limb thus seriously damaged by machinery, would be first examined by the surgeon with reference to the question of amputation. As, however, the large vessels were uninjured, the internal condyle and both bones of the forearm entire, and the patient young, there could be no doubt about the propriety of attempting to preserve the limb. A parallel case is related by Mr. Key, in which the integuments of the arm of a boy aged nine, were severely torn, the elbow-joint was laid open, and the internal condyle chipped off by a roller in motion.* The patient, as in the present instance, did well, although the internal condyle was removed by Mr. Key, and the important articulation of the ulna with the humerus was destroyed. The first point to be borne in mind, is the prevention of inflammation. The limb must be elevated upon an inclined plane, placed by the side of the patient in bed; the forearm must be flexed at an angle, so as to render the hand useful in the event of ankylosis, and a cold lotion should be applied.

Much swelling and tension will, of course, ensue, but the patient may consider himself fortunate, if, with a contused wound, extending into a joint, he escape without the formation of abscess. Owing to the great extent of the wound in this instance, the pus was most probably discharged as soon as formed, instead of being collected in a cyst. In children, the progress of these cases is much more favourable than in men, whose constitutions have mostly been tried by some cause or another, and who are often impatient of the necessary confinement and restraint.

Portions of bone, when so far separated as to be connected only by a few tendinous or fleshy fibres, should be regarded as foreign bodies, and be immediately removed. Their presence, especially in a joint, would excite inflammation, and prevent the healing of the wound, until they had been discharged by Nature.

TUNBRIDGE WELLS INFIRMARY.

CASE OF COMPOUND LUXATION OF THE KNEE-JOINT.

(Reported by THOMAS YATE, Esq., House-Surgeon to the Infirmary.)

JOHN U—, aged twenty-one years, a labourer, was admitted into the Tunbridge Wells Infirmary on the 11th of April, 1846, under the care of Mr. Hargraves, with compound dislocation of the right knee-joint. Whilst working in the railway tunnel near this place, he fell from a scaffold, a height of ten or twelve feet. A heavy piece of timber falling after him, appears to have struck him on the front of the lower part of the femur; and the upper part of the leg lying at the time across an iron rail, a compound dislocation of the tibia forwards was caused, the internal condyle of the femur being driven through an extensive wound in the popliteal space, the external condyle resting on the posterior part of the head of the tibia. The leg being bent forwards and outwards, the tibia appeared to be twisted somewhat laterally; the patella was pushed upwards, its inferior edge directed forwards, and its posterior surface resting on the articulating surface of the tibia. A depression was perceptible superiorly; the limb was shortened about an inch and a half; the leg could be slightly rotated inwards or outwards, more particularly outwards, but not flexed until after the reduction of the dislocation, which was, however, easily effected. There was profuse hæmorrhage at the time of the accident; no pulsation could be felt either in the posterior peroneal or in the tarsal artery.

The surgeon first in attendance, after reducing the dislocation, and having carefully closed the external wound with sutures and adhesive plaster, applied a bandage over the whole; it was deemed prudent to wait awhile before deciding on amputation. On the 14th, however, it was evident that no adhesion had taken place; moreover, considerable constitu-

* Key's "Practical Observations on Surgery," p. 365. 1814.

tional irritation had set in, and on raising the leg to remove some of the dressings, a sudden gush of blood, evidently from a very large artery, determined Mr. Hargraves to amputate immediately. The limb was removed, by means of the flap operation, at the lower third of the thigh, but, apparently owing to the great loss of blood sustained at the time of the accident, the poor fellow rapidly sank, and died five hours after.

Dissection of the injured parts.—On removing the integuments, great extravasation of blood was found, quite filling up the popliteal space, and extending nearly to the ankle. Both heads of the gastrocnemius were extensively lacerated; the internal quite torn through; the popliteus torn across; the semi-membranosus lacerated; the tendinous expansion forming the ligament of Winslow torn into shreds, but the round tendon not injured; the biceps very slightly injured; the tendons of the sartorius, gracilis, and semi-tendinosus quite perfect. The popliteal artery was lacerated to the extent of half an inch, but not torn quite through, and (as was apparent when the joint was re-dislocated) pushed together with the vein and nerve external to the outer condyle of the femur. The internal lateral ligament was torn from its attachment to the femur, carrying with it a small portion of bone; the external lateral ligaments were not injured; the external or anterior crucial ligament was torn through, but the internal or posterior crucial ligament was not injured; the aponeurosis supplying the place of a capsular ligament, besides being extensively torn behind, was also ruptured in front, just external to the ligament of the patella, where a portion of the head of the tibia had protruded.

There are several points of great interest in this case well worthy of notice. It appears at first astonishing that fatal hæmorrhage had not been the consequence of such an injury to the popliteal artery, but the fact of this vessel being put upon the stretch and firmly compressed over the external condyle of the femur, and a coagulum having formed around the injured part, will sufficiently account for the cessation of the bleeding; a state approaching deliquium animi, no doubt also favoured this circumstance. The displacement of the internal condyle was such as could not possibly have occurred without the rupture of the internal lateral ligament, which, arising from the internal condyle of the femur, passes downwards and forwards to the head of the tibia, but the external lateral ligaments, which arise from the external condyle, and descend backwards to the head of the fibula, were not necessarily injured. Again, the anterior or external crucial ligament, which arises from the posterior part of the external condyle, and descends obliquely forwards to the fore part of the head of the tibia, was, as might be expected, ruptured; but the posterior, or internal crucial ligament, which arises from the fore part of the internal condyle and descends vertically, or rather backwards, to the head of the tibia, was not injured. The leg could be easily rotated outwards, owing to the complete separation of the internal lateral ligament; but the rotation inwards was very circumscribed, owing, doubtless, to the resistance offered by the external lateral ligaments, which were unbroken.

Sir A. Cooper relates a case of compound luxation of the femur backwards and outwards, where neither the lateral nor crucial ligaments were ruptured; but in his case, the external condyle was driven backwards and outwards, the internal condyle being thrown forwards upon the head of the tibia—a state of things which will be seen to be exceedingly probable, if we consider the anatomical relation of those parts.

In conclusion, the above case, in my humble opinion, goes far to prove the propriety, perhaps I might say the necessity, of immediate amputation in a compound dislocation of this joint; for surely we cannot reasonably expect Nature to repair so serious and extensive an injury.

NEW METHOD OF PRESERVING ORGANIC MATTERS.

At a late soirée, held by the Marquis of Northampton, Dr. Silvestri, physician to the Royal Hospital at Naples, and chief physician of his Majesty's guard of honour, exhibited several preparations made according to a method discovered by him. By this process, organic matters are perfectly preserved, being converted into a substance possessing the hardness of stone, and admitting of being polished. Among the preparations shown, were a portion of human liver, a section of a kidney, a section of a testis, and some hands and heads. In these specimens the texture was perfectly apparent when examined with a magnifying-glass, but the substances

themselves had acquired the hardness and resonance of stone. The head of a ram possessed the stony hardness peculiar to these preparations, while the ears and hairs retained their natural softness and pliability. Birds, submitted to this process, retain their feathers uninjured either in colour or pliancy; fishes are coated by a kind of transparent varnish; and the cornea retains the transparency of life. Dr. Silvestri has also succeeded in preserving flowers in the same manner, the petals retaining their natural hues, and the stem and leaves their pliancy and verdure. He gives the following statement of the applications of his discovery:—

“An entire corpse, without being injured in the slightest degree, can be brought to a consistency approaching to petrification, and preserved for an indefinite period in full perfection of form, with the hair, nails, &c. Like a statue, it can also be placed in any given position, as illustrative of individual character or station.

“Animals of every species, from the elephant to the insect, are susceptible of being reduced to the same state of consistency and preservation. The plumage, fur, wool, and all other adjuncts of nature, remain entire, retaining the same colour, firmness, and flexibility that they had at the moment of death.

“The same result can be produced in the single parts, organs, &c., of any organic animal body, without undergoing any alteration whatever, even though injected previously to the operation.

“All the objects in question may be petrified in such various degrees of intensity as may be judged necessary for the purposes of dissection, observation, examination, &c., with perfect freedom from stench, and all else of an objectionable nature, either when handled, or preserved as objects of curiosity.

“Flowers and plants can be preserved unchangeable, with their colours, form, leaves, and stems, as if just gathered.

“THE ADVANTAGES OF THE NEW DISCOVERY ARE:

“That the processes hitherto practised for the embalming and temporary preservation of human bodies become needless, as under the circumstances every one would have recourse to the discovery in question, which would also foster the natural desire to rescue from corruption the remains of illustrious men, and of individuals dear to their respective families.

“That zoological societies may provide specimens of animals preserved in full integrity by the new process, which also renders further trouble unnecessary, as they emit neither bad odour nor injurious exhalations, too often the case in the common method.

“That such persons as have enjoyed the companionship of domestic animals, or have received services from them, will be able to preserve and display them after death, as monuments of their sensibility and gratitude.

“That for the convenience of students in natural history, glass cases, with double fronts, may be formed, to facilitate the exhibition and knowledge of the various classes and species of animals, for the furtherance of the verification of facts.

“That schools, theatres, and cabinets of anatomy, will be able to secure in abundance, objects prepared by the above method, for the observation of nature itself in the various branches of descriptive, comparative, and pathological anatomy—studies prosecuted hitherto with the aid of decaying corpses, inappropriate or imperfect specimens modelled in wax, or pasteboard, or preserved in spirits of wine, which invariably operates injuriously on such objects as are placed in it.

“Instructors and scientific men will not fail to provide themselves with specimens of the operation of this new discovery, which will enable them to study, for the first time, the internal construction and tissue complete and unchanged. A more interesting contemplation can scarcely be conceived.

“In the preservation of flowers and plants, botanical societies and collectors will profit by the new discovery.”

Dr. Silvestri has also discovered a fluid for preserving animal matters, and which he considers will be found a complete substitute for alcohol.

THE OBJECTS OF MEDICAL REFORM.

To the Editor of THE LANCET.

SIR,—I have been reading your statement, made at a meeting of Associated Surgeons, held at Freemasons' Tavern, with which I entirely coincide, and I expressed similar opinions in a letter sent the other day, in answer to an invitation to attend a meeting of the National Association of General Practitioners.

The government ought to keep two objects in view; 1st, to secure an efficient examination of all persons intending to enter the medical profession; 2ndly, to provide the most effectual means to restrain those from practising who are not legally qualified. As regards all other differences about names or titles, which are of minor importance, let those be settled by the different corporate bodies themselves.

A register of all legally-qualified practitioners now in practice should be kept, and an examining board constituted, to examine in all the different departments of the profession, whose certificate should be the licence to practise, all other examinations being merely honorary. The one-faculty system is the correct one, and would be embraced by the majority of members. As secretary of an Association for Medical Reform, I have had many opportunities of becoming acquainted with the sentiments of the different branches of the profession here, and I should say that the physicians seem disposed to let well alone. The higher grades of the surgeons are anxious to secure a more efficient examination, and are quarrelling about the distinction of "fellow" and "member;" but the great bulk of them are most desirous of obtaining an efficient protective clause, (which I am glad to perceive is your own opinion,) and to which I bear my testimony of approval, as being equally necessary both on the part of the public and the profession. Quackery abounds on all sides, among both rich and poor, in the shape of hydropathy, homeopathy, &c., &c., so that it is exceedingly difficult for many regularly educated practitioners to obtain a livelihood, particularly as charitable institutions are numerous, and many avail themselves of their advantages who could and ought to pay for attendance.

In future, all practitioners should be prevented from keeping open shops, and exposing drugs for sale; but there is nothing discreditable in compounding your own medicines when prescribing them, and it would add to the respectability of the profession if the physician would confine his practice to consultation, as was the case formerly, whereas, now, some of them do not scruple to receive a five-shilling fee, and at the same time refuse to have a surgeon called in, in consultation "over them," as they please to term it. Grades ever did and will exist. These ought not, however, to be founded in names, as "physician," "surgeon," and "apothecary." The first grade should consist of the individual who is learning the principles of the profession, and acquiring experience under the direction of another; secondly, the person who has undergone a full examination, and given sufficient proof of his being competent to undertake all the duties of his profession; thirdly, the person who by his superior talent and enlarged experience has acquired the confidence of the profession and the public, and is called to consult in urgent cases.

It is somewhat questionable whether it is desirable to dispense with the apprenticeship altogether. I think two years might be spent profitably in this manner, but perhaps it is better that it should be voluntary, according to circumstances. The abolishing of compulsory apprenticeship will be attended with material alterations. The master will feel more independent of the pupil, but the pupil, perhaps, will be deprived of beneficial restraint. In most cases the general practitioner will have to dispense his own medicines, which will have a tendency to induce him to charge for his attendance instead of medicines, and will be beneficial in this way; but, on the other hand, it will deprive him of much valuable time.

Unanimity is the great desideratum for effecting any beneficial change. I trust that all parties will act harmoniously, for the benefit of the public and the improvement of the profession, all minor differences merging in the good of the community, and that you, Sir, may be enabled to place such a Bill in the hands of Sir James Graham as will not only please but profit all concerned.—I am, Sir, your most obedient servant,
Leeds, April, 1846. GEO. BULMER.

THE QUACKS AND THEIR ABETTORS.

To the Editor of THE LANCET.

SIR,—There is still one glaring and shameful practice which both you and your numerous correspondents have overlooked when speaking of quacks and their abettors, and I think I cannot do better than by giving you a case in point. What think you of a physician of one of our hospitals in this town making a regular practice of meeting druggists in consultation,—nay more, this very honourable physician will not only do that, but he will call for the druggist, and take him to the case in his carriage! Is not this "too bad," and a direct insult to those who are duly qualified to practise, and have

spent hundreds, if not thousands, of pounds upon their education,—who, perhaps, are toiling on to get a living in a gentlemanly, honourable, and respectable way. How is it possible that any efforts to keep up the dignity and honour of the profession will ever succeed, when hospital physicians will degrade themselves by stooping to such disgraceful means of getting a guinea? I consider it a direct encouragement to defraud the legally-qualified practitioner out of his just rights and dues. By the way, this physician is a magistrate. I should like to ask him if he ever thinks; because if he reflects for one moment when he is meeting his worthy friends, the druggists, he must be conscious that he is countenancing that line of conduct, I might say dishonest conduct, of which, if the like occurred (I mean one man defrauding another) in any other profession or business, and came before him in his magisterial capacity, he would no doubt justly visit by inflicting the greatest punishment the law would allow. Let him beware; the eye of the profession is upon him. This is the case, then, of the quack-encouraging physician. I ask, again, what think you of him? About a fortnight ago, a man was tried at our borough assizes, before the recorder, for setting himself up as a lawyer, and obtaining money under false pretences, and was sentenced to be transported for seven years for the offence. What a disgrace to our lawgivers that property should be considered of such high value, and have laws to protect it, when, at the same time, there is no law to protect life from being endangered by the false pretences of impudent and illegal practitioners!

The suggestions thrown out by Dr. Barnes might meet this shameful defect in our laws, if the registrar-general would take care to appoint men of character, intelligence, and industry, to the situation of district-registrar, and also see that they were furnished with lists of all legally-qualified men; or else how easy would it be—in fact, I know it is done—for druggists to sign their names, and so, "surgeon," in the case of a death occurring in their nefarious practices. There is a druggist in this town who keeps a horse and gig, and goes out visiting his patients regularly.

What is the use of throwing out suggestions or proposing plans for the suppression of quackery, when it is encouraged by hospital physicians,—when even the legislature will not interfere, or, at least, declares its inability to frame laws for our protection?

What think you, Sir, of the following case of "midwife's midwifery"? A midwife attended a woman in her labour; a fine healthy child was born; the ligature applied round the cord, and so on; the child put into a flannel and placed on the bed for a short time. When they came to remove it for the purpose of washing and dressing, lo! it was dead, and the flannel full of blood! The truth was, that the midwife was drunk at the time, and punctured the cord between the ligature and the child's body, consequently it bled to death! But hear the sequel. To save any more trouble about it, she gave the parties a certificate, stating that the child was still-born, and with that, it was buried at one of the churches in this town. On making inquiries whether such really was the case, I found it true enough, and that it is a common practice to do so—that is, to bury children from a midwife's certificate. This case requires no comment from me; it sufficiently speaks for itself. How easy would it be to get a wretch to murder a child, where the birth of it was wished to be concealed, and then give a certificate stating it was still-born, when it could be buried publicly, and without suspicion.—I have the honour to be, your obedient servant,
J. G. SPROSTON, M.R.C.S.L. & L.A.C.

Birmingham, April 28th, 1846.

NEWS, REMARKS, AND CRITICISMS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE TRIENNIAL PRIZE IN ANATOMY AND PHYSIOLOGY AWARDED TO HOLMES COOTE, ESQ., F.R.C.S.

THE triennial prize of fifty guineas, instituted by the College of Surgeons, for the encouragement of anatomical and physiological researches and discoveries, has just been awarded to Mr. Holmes Coote, F.R.C.S., of St. Bartholomew's Hospital, and Argyll-street, for an inquiry into the,—

"ANATOMY OF THE FIBRES OF THE CEREBRUM, CEREBELLUM, AND SPINAL CORD IN THE HUMAN SUBJECT, TOGETHER WITH THE ORIGIN OF THE CEREBRAL, SPINAL, AND SYMPATHETIC NERVES, SPECIALLY ILLUSTRATED BY THE ANATOMY OF THE SAME PARTS IN THE LOWER VERTEBRATE ANIMALS."

The dissertation, which extends to 400 folio pages, and is

illustrated by numerous figures, chiefly drawn by the author; is founded on original researches into the minute anatomy of the brain in man, and in various animals of each class in the vertebrate kingdom.

Those members of the council who have examined the dissertation and dissections, consider that they constitute highly valuable contributions to our knowledge of an intricate and difficult subject, and are exceedingly creditable to the industry, learning, and ability of the author. We hope, therefore, that Mr. Coote may be induced to make public the important results of his labours.

THE JACKSONIAN PRIZE FOR 1846 AWARDED TO
THOMAS STAFFORD LEE, ESQ., M.R.C.S.

The Jacksonian prize, for the best dissertation on "Tumours of the uterus and its appendages; their structure, pathology, and treatment," has been awarded to Mr. Thomas Stafford Lee, M.R.C.S. of Upper Gordon-street, Euston-square.

DISTRIBUTION OF PRIZES IN THE MEDICAL FACULTY OF UNIVERSITY COLLEGE.—The annual distribution of prizes in the faculty of medicine, at University College, took place on Thursday, April 30th, in the theatre of the institution. The Right Hon. Sir E. Ryan presided on the occasion. Dr. Williams, dean of the faculty, read the annual report, which stated the number of students attending the faculty during the present year to have been 292. The principal features of the year were, the establishment of a professorship and a class of practical chemistry, and the foundation of a prize of 40*l.* for the student who had distinguished himself during the three previous sessions for general proficiency and acquirements.

The prizes were distributed as follow:—

Prize of 40*l.* for general proficiency, Mr. James Hakes, London.

Medicine.—Gold medal, Mr. J. T. Clover, Aylsham, Norfolk. First silver medal, Mr. F. C. Webb, East Stonehouse, Devon. Second silver medal, Mr. S. F. Statham, Cranford, Middlesex.

Botany. (1845).—Gold medal, Mr. W. Cock, Cornwall. Silver medal, Mr. F. C. Webb.

Anatomy and Physiology.—Gold medal, Mr. A. Williams, Scarborough. First silver medal, Mr. T. Park, Lincoln. Second silver medal, Mr. J. T. Clover.

Chemistry.—Gold medal, Mr. T. Park. First silver medal, Bholanath Bose, Calcutta. Second silver medal, Mr. B. Davies, Carmarthenshire. Essay prize gold medal, Mr. W. Fowler, Tottenham.

Anatomy.—Gold medal, Mr. W. D. Wilkes, Salisbury. First silver medal, Mr. A. Williams. Second silver medal, Mr. J. T. Clover. Junior class silver medal, Mr. T. Lawrence, Bath.

Comparative Anatomy.—Gold medal, Soorgo Coomar, Chuckerbutty, Calcutta.

Materia Medica.—Gold medal, Mr. J. Blyth, Abergavenny. First silver medal, Bholanath Bose. Second silver medal, Mr. J. Lawrence.

Medical Jurisprudence. (1845).—Prize, Mr. J. E. Wood, Rochdale.

Midwifery.—Gold medal, Mr. T. Park. First silver medal, Mr. J. Boothe, Rochdale. Second silver medal, Mr. E. J. Barker, Longton.

Pathological Anatomy.—Gold medal, Mr. T. A. Cammack, Spalding.

Surgery.—Gold medal, Mr. J. E. Wood. First silver medal, Mr. W. Cock. Second silver medal, Mr. J. T. Clover.

Dental Surgery.—Silver medal, Mr. R. De Champs Ball, Plymouth.

KING'S COLLEGE, LONDON.—MEDICAL SCHOOL: Distribution of Prizes, Saturday, April 25, 1846; the Lord Bishop of London in the chair.

SCHOLARSHIPS.—Senior scholarship, William Brinton; John Reid, proxime accessit. Second-year scholarship, Samuel James Augustus Salter. First-year scholarships, George Robert Cubitt; John Cox Lynch; Charles William Daniel Williams.

PRIZES: 1st Division.—1. William Brinton; 2. John Thomas Arlidge. Henry Stevens, certificate.—Second Division. 1. Walter Battushall Gill; 2. John Reid.—Third Division. James Wilkinson Elliott.

Anatomy.—Charles Thompson. Edgar Malcolm, William Henry Cook, certificates.

Materia Medica.—Duncan Ferguson.

Chemistry.—Henry Brady Johnson, certificate.

Botany.—John Thomas Arlidge. Samuel James Augustus Salter, Charles Thompson, aqs., certificates.

Forensic Medicine.—1. Henry Turner Lane Rooke; 2. John Reid. Thomas Bridgewater, John Farmer, certificates.

Comparative Anatomy.—Thomas Bridgewater.

CHARING-CROSS HOSPITAL. DISTRIBUTION OF PRIZES.

—On Wednesday last, the annual distribution of prizes to the successful students connected with this institution took place in the spacious hall of the hospital. The Rev. George Hull Bowers, B.D., in the absence of Lord Robert Grosvenor, M.P., occupied the chair. The prizes were as follow:—

Chemistry.—Thomas Sutton Ludlow, first prize, silver medal; George William Paternoster, second prize.

Materia Medica.—George William Paternoster, silver medal; Robert Hamilton, second prize; F. W. A. Rawlins, certificate.

Anatomy.—Senior class: Henry Lambden, silver medal.—Junior class: George William Paternoster, silver medal; Robert Hamilton, certificate.

Midwifery.—Senior class: George B. Payne, silver medal; Henry Watts, certificate.—Junior class: Henry Lambden, silver medal; C. R. Durell, second prize.

Physiology.—Henry Lambden, silver medal; George Master Young, second prize.

Medicine.—Joseph Fayrer, silver medal; John William Staggall, second prize; C. R. Durell, the prize in the junior class.

Surgery.—Senior class: Joseph Fayrer, silver medal; John William Staggall, second prize.—Junior class: C. R. Durell, silver medal.

Botany.—C. R. Durell, silver medal; Joseph Fayrer, second prize.

Medical Jurisprudence.—J. W. Staggall, silver medal; Joseph Fayrer, second prize.

Governors' Clinical Prize.—William Cox.

General Proficiency.—Henry Watts, the gold medal, value fifteen guineas.

Diligence and General Good Conduct.—Messrs. Jago, Lynch, Westley, and Stillman.

DISTRIBUTION OF PRIZES AT ST. BARTHOLOMEW'S HOSPITAL.—Yesterday, the annual presentation of the scholarships, prizes, and honorary distinctions, to the pupils studying at this Hospital, took place in the hall of the institution. Alderman Lucas presided on the occasion. The prizes were delivered in the following order:—

Wix Prize, founded by the Rev. Mr. Wix, the Hospitaller, for the best essay "On the Connexion between Revealed Religion and Medical Science."—Mr. George R. Kingdon, B.A., Cantab., London.

Bentley Scholarship, of fifty pounds a year for three years, given by the Treasurer.—Mr. Walter Yonge, St. Ives, Cornwall. Mr. Joseph Eld, Coventry, honorary certificate.

Scholarships in Anatomy and Physiology, of forty-five pounds a year for three years, from the Scholarship Fund.—Mr. E. Lowe, Congleton. Mr. Thomas Simpson, Lincoln, hon. certificate; Mr. H. L. Jerrard, Honiton, ditto.

Bentley Prize, given by the Treasurer for the best report of surgical cases.—Mr. Mitchell Henry, Manchester.

Collegiate Prize, given by the Treasurer.—Mr. Thomas Simpson, Lincoln.

Medicine.—Dr. Burrows.—First prize, Mr. Edward Hall, Newtown, North Wales; second prize, Mr. Joseph Eld, Coventry; honorary certificate, Mr. G. J. Knight, Tilbury Fort.

Clinical Medicine, awarded by the physicians of the Hospital.—Prize, Mr. E. Hall, Newtown, North Wales; honorary certificate, Mr. Thomas W. Crosse, Norwich; ditto, Mr. Joseph Eld, Coventry.

Surgery.—Mr. Lawrence.—First prize, Mr. Joseph Eld, Coventry; second ditto, Mr. Thomas W. Crosse, Norwich; Third ditto, Mr. Horace B. Dobell, Cheltenham.

Anatomy.—Mr. Skey.—Senior Class: First prize, Mr. Joseph Eld, Coventry; honorary certificate, Mr. Thomas Simpson, Lincoln; ditto, Mr. H. J. Waterland Thealby, Lincoln.—Junior class: honorary certificate, Mr. H. Fessanges, Mauritius; ditto, Mr. Joseph German, Derby.

Physiology.—Mr. Paget.—Senior class: equal prizes, Mr. Joseph Eld, Coventry, and Mr. Thomas Simpson, Lincoln; honorary certificate, Mr. H. J. Waterland Thealby, Lincoln.

Physiology.—Junior Class: Prize, Mr. H. F. Malden, Worcester. Honorary certificates, Mr. S. W. Aldred, London; ditto, Mr. H. B. Dobell, Cheltenham; ditto, Mr. Joseph Harvey Milford, Derbyshire; ditto, Mr. C. C. Piper, Guildford; ditto, Mr. H. M. Hoskyns, London.

Midwifery.—Dr. Rieby.—First Prize, Mr. Joseph Eld, Coventry; second ditto, Mr. Gustavus Irwin Knight, Tilbury Fort

Practical Midwifery—Dr. RIGBY.—Prize, Mr. Charles F. Williams, Devonport. Honorary certificate, Mr. James Hinton, London; ditto, Mr. J. B. Collyns, Dulverton; ditto, Mr. Thos. James, Louth; ditto, Mr. Ernest P. Williams, London.

Chemistry—Mr. GRIFFITHS.—Equal first prizes: Mr. C. C. Piper, Guildford; Mr. G. J. Thurston, London.—Equal second prizes: Mr. Edward Kiott, Bromley; Mr. C. Drew, Okehampton.—Honorary certificate, Mr. T. B. Knott, Greenacre Moor, Manchester.

Materia Medica—Dr. ROUPPEL.—First prize, Mr. A. D. Dunstan, Cornwall.—Second prize, Mr. T. B. Knott, Manchester.—Honorary certificate, Mr. G. J. Thurston, London.

Botany—Dr. F. J. FANE.—First prize, Mr. Joseph Eld, Coventry.—Second prize, Mr. Joseph Harvey, Milford.

Medical Jurisprudence—Dr. BALY.—Prize, Mr. Edward Whately, Berkhamstead. Honorary certificate, Mr. Thos. James, Louth.

The presentation of the prizes occupied some time, each recipient being cheered by his fellow pupils, as he advanced to the table to receive his prize.

SYDENHAM SOCIETY.—This Society held its fourth anniversary meeting on Friday, the 1st inst., at its rooms in Frith-street.—Dr. Paris, President, in the chair. It appeared from the report read by the secretary, that during the first year, only 1750 copies of it had been printed for members; but in consequence of the increase in the Society, this number was added to, subsequently, to the extent of 400 copies. The second year, 2250 copies were issued; but this was found inadequate to meet the subsequent demands. References of a complimentary kind were made respecting Simon's "Animal Chemistry" and the works of Paul of Egina, and the report went on to express the regret of the Council at the delay which had occurred in the publication of the volumes of the past year. It was also stated that many irregularities had occurred in the delivery of the volumes, in consequence of removals and errors in the addresses sent to the Society. It was announced to be the intention of the Council to publish a fourth volume for the current year. The Council had abandoned their intention, expressed at the last meeting, of reprinting the works of Dr. W. Hunter. A correspondence has been opened with several distinguished continental scholars, to determine to what extent assistance might be relied on in carrying out the views of the Council, with respect to a complete medical bibliography. The works of Harvey would shortly be issued to the members, and those of Hewson were proceeding with rapidity. It had been considered also desirable to republish certain valuable papers which had appeared in the *Transactions* of medical societies previous to the present century. Dr. Simpson had undertaken to edit a volume of obstetrical essays, which had been selected by the sub-committee. It was intended to publish also a series of essays, in one volume, on the head and neck, extracted from the papers and prize essays of the French Academy of Surgery. It was proposed, also, to publish the works of Hippocrates, and among the intended publications was a general Index to the various medical journals, volumes of medical essays, &c.

It was announced that the various hints received from members in the country would be attended to by the Council, who also expressed their desire to make the works they selected as valuable as possible to all.

With respect to the financial condition of the Society, it appeared, from the treasurer's report, that there had been expended—in advertisements and other petty expenses, 27*l.* 17*s.* 11*d.*; to editors of works, 13*l.* 5*s.*; to bookbinders, 108*l.* 11*s.* 9*d.*; paper, 306*l.* 12*s.*; printing, 500*l.*; secretary, 275*l.* The balance in hand last year was 900*l.*; the subscriptions amounted to 2214*l.*, the interest to 23*l.* 14*s.* 8*d.*, and dividends to 5*l.* 13*s.* 10*d.* Several smaller sums made the income a trifle larger; and the balance left in hand, after all expenses had been paid, was 571*l.* 14*s.* 10*d.*

The report was then received and adopted; and after the usual votes of thanks had been proposed, seconded, and carried, the following was declared to be the list of the new office-bearers:—

President—J. A. Paris, M.D., F.R.S., President of the Royal College of Physicians.

Vice-presidents—W. P. Alison, M.D., F.R.S.E., Professor of Medicine in the University of Edinburgh; Sir Benjamin C. Brodie, Bart., F.R.S., Sergeant-surgeon to the Queen; Sir William Burnett, M.D., F.R.S., K.C.H., Inspector-general of Fleets and Hospitals; W. F. Chambers, M.D., F.R.S., K.C.H., Physician to the Queen and to the Queen Dowager; Sir James Clark, Bart., M.D., F.R.S., Physician to the Queen and to the Prince Albert; Sir Philip Crampton, Bart., F.R.S.,

Surgeon-general to the Forces in Ireland; Sir Alexander Crichton, M.D.; W. G. Crosse, Esq., Norwich; Joshua Henry Davidson, M.D., First Physician to the Queen for Scotland; John Davy, M.D., F.R.S.; Charles Hastings, M.D., Worcester; John Kidd, M.D., F.R.S., Regius Professor of Medicine in the University of Oxford; P. M. Latham, M.D.; Robert Liston, Esq.; Sir Henry Marsh, Bart.; Sir James M'Grigor, Bart., M.D., F.R.S. Lond. and Edin., Director-general of the Medical Department of the Army.

Council—Henry Ansell, Esq.; W. R. Basham, M.D.; W. D. Chowne, M.D.; John Clendinning, M.D., F.R.S.; Bransby Cooper, Esq.; James Copland, M.D., F.R.S.; John Erichsen, Esq.; John Forbes, M.D., F.R.S.; Arthur Farre, M.D., F.R.S.; Caesar Hawkins, Esq.; Edward Headland, Esq.; John Hilton, Esq., F.R.S.; Thomas Hodgkin, M.D.; Samuel Lane, Esq.; James Luke, Esq.; Jonathan Pereira, M.D., F.R.S.; Benjamin Phillips, Esq., F.R.S.; G. O. Rees, M.D.; William Sharpey, M.D., F.R.S.; Samuel Solly, Esq., F.R.S.; George James Squibb, Esq.; Theophilus Thompson, M.D., F.R.S.; Erasmus Wilson, Esq., F.R.S.; James A. Wilson, M.D.

Mr. Wm. Bowman has been elected Assistant-surgeon to the Royal London Ophthalmic Hospital.

Mr. JOHN SCOTT, late Surgeon to the Ophthalmic Hospital, has bequeathed a large portion of his immense fortune to various public charities.

Three medical men were in the list of bankrupts of Friday week, one residing in London, two in the provinces.

LONDON HOSPITAL: TESTIMONIAL TO DR. BILLING ON HIS RETIREMENT FROM THE HOSPITAL.—A number of medical gentlemen who were colleagues and pupils of Dr. Billing at the London Hospital, have presented to him, on the occasion of his retirement from that institution, a massive salver, with the following inscription:—"To Archibald Billing, M.D., A.M., F.R.S., Member of the Senate of the University of London, Fellow of the Royal College of Physicians, Honorary and Corresponding Member of the Medical Societies of Brussels, Dresden, Florence, and New York, formerly President of the Hunterian Society, Vice-president of the Royal Medical and Chirurgical Society, &c. Presented on the occasion of his retirement from the office of Physician to the London Hospital, after a quarter of a century of eminently valuable services, in testimony of their sense of the benefit conferred upon the profession by his establishment of Clinical Lectures in London, in the year 1822, by his attached pupils and professional friends connected with the institution."

AWARD OF PRIZES IN MEDICINE AT THE LONDON HOSPITAL MEDICAL SCHOOL: Session 1845-46.—First prize in Medicine, competed for by third-year's students, was awarded to Mr. John Climensson Day, St. Ives, Huntingdon, and Mr. John James Rygate, Grays, Essex, equal; each a gold medal. Second prize in Medicine, competed for by second-year's students, was awarded to Mr. Edward Haycock, London; silver medal and books.

ANNIVERSARY OF THE SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.—The annual dinner of this Society took place on Saturday, the 18th ultimo, at the Freemasons' Tavern, and was attended by about sixty of the members and their friends. Sir Charles M. Clarke, Bt., the President, in the chair.

The chairman, in proposing the health of the vice-patrons, paid a hearty tribute of respect to the memory of Dr. Denman, one of the founders, if not the founder of the Society, and the father of the present Lord Chief Justice Denman, whose election as a vice-patron had recently taken place.

The presence, as a guest, of Wm. Hunter Baillie, Esq., son of the late Dr. Baillie, many years president of the Society, gave the chairman a fit opportunity to speak of the character of that distinguished physician and excellent man. The kindness, the integrity, the uprightness of Dr. Baillie in all his social and professional relations, which endeared him to every member of the profession that he adorned, were dwelt on with the hearty admiration of a kindred spirit; indeed it was gracefully and truly observed by Mr. Baillie, while returning thanks for the honour done to himself and the memory of his lamented father, that in recording the virtues of Dr. Baillie, the worthy chairman had well described his own.

In connexion with the army and navy, and the recent victories in India, the courage and humanity shown by the medical officers there, and on board the ill-fated *Eclair*, were judiciously and feelingly alluded to.

The acting treasurer, Mr. Hunter, referred to the printed

report as evidence of the prosperity and efficiency of the Society, but remarked that the assistance which it annually derived from the benevolence of individuals could not yet be dispensed with.

The following donations were received:—Dr. Latham, 30*l.*; John Ware, Esq., of Clifton, 21*l.*; George Cooper, Esq., of Brentford, 21*l.*; Dr. Chambers, 20*l.*; Sir Charles M. Clarke, Bt. 10*l.* 10*s.*; Dr. Alex. J. Sutherland, 10*l.* 10*s.*; Dr. Joseph Moore, 10*l.* 10*s.*; T. A. Stone, Esq., 10*l.* 10*s.*; R. R. Pennington, Esq., 10*l.* 10*s.*; John Propert, Esq., 5*l.* 5*s.*; J. F. Chilver, Esq., 5*l.* 5*s.*; John Hunter, Esq. (acting treasurer), 5*l.* 5*s.*; Sir James McGrigor, Bt., 5*l.*; W. H. Baillie, Esq., 5*l.*; Martin Ware, Esq., 5*l.*; John Bacot, Esq., 3*l.* 3*s.*; R. R. Robinson, Esq., 2*l.* 2*s.*; — Drew, Esq., 2*l.* 2*s.*; R. B. Upton, Esq., 1*l.* 1*s.*; A. Ure, Esq., 1*l.*

THE QUACK'S TRAGEDY.—An inquest was held, on the 20th of April last, before Mr. Middleton, deputy coroner for Easington ward, at the village of Herrington, on the body of George Atkinson, a boy eleven years of age, who, it is alleged, died from the improper treatment of an unlicensed practitioner. The deceased was the son of Thomas Atkinson, hired to Mr. Brown, a farmer at East Herrington. A short time ago he had a scald head, and Mr. Brown recommended his father to apply for advice to a man named Thomas Dickinson, who resides at Sunderland, but travels into the country, and amongst other places was accustomed to see patients at the Plough Inn, Herrington. The boy was taken to Dickinson, who said he did not ail much, and he would "put him to rights" for half-a-crown. The money was paid, and "the doctor" sent him a box of ointment, which was to be rubbed on the boy's head, and which he said would cure him. An inflammation of the brain ensued. Dickinson was again called on to prescribe, and he ordered that the boy should have no opening medicine, but plenty of whisky. The poor child's parents gave him two or three glasses. Their son became gradually worse under this treatment; they then called in Mr. Tweddle, a surgeon, at Houghton-le-Spring, but it was too late to be of any service, and the boy soon after died. The circumstances becoming known to some of the neighbours, they gave information to the superintendent of the rural police, who obtained a warrant from the coroner for the disinterment of the body. A post-mortem examination was made, and it was ascertained that the boy had died of water on the brain. The inquest was adjourned.—*Durham Paper.*

BOOKS RECEIVED FOR REVIEW.

The Vegetable Kingdom, or the Structure, Classification, and Uses of Plants, illustrated upon the Natural System. By John Lindley, Ph. D., F.R.C.S., and L.S., &c. London: Bradbury and Evans. 8vo, pp. 908.

A System of Surgery. By J. M. Chelius, &c. Translated from the German by John F. South, Esq. Fasciculi 9 and 10. London: H. Renshaw.—Edinburgh: Machlachlan and Stewart.—Dublin: Fannin and Co.

The Modern Treatment of Syphilitic Diseases, both Primary and Secondary, comprising numerous formulæ for the preparation and mode of administration of the new remedies. By Langston Parker, Esq., Surgeon to the Queen's Hospital, Birmingham, &c. Second Edition. London: Churchill, 1845. Small 8vo, pp. 228.

Mercury in Fevers, Dysentery, and Hepatitis, as they occur in India, and with reference to lesions in mucous surfaces and glandular structures. By John Stuart Sutherland, M.D., Assistant-Surgeon, Bengal Medical Establishment. Edinburgh: Machlachlan and Stewart. 8vo, pp. 95.

Cyclopedia of Anatomy and Physiology. Edited by R. B. Todd, M.D., F.R.S., &c. Part 27. London: Sherwood, Gilbert, and Piper.

The Physiology of the Nerves of the Uterus, and its Appendages. By Joseph Swan. London: Longman, Brown, and Co. 8vo pamphlet.

The Medical Examiner and Record of Medical Science. Edited by R. M. Huston, M.D. Nos. 11 & 12. Philadelphia, November and December, 1845.

Remarks on the Slavery and Slave Trade of the Brazils. By B. T. Nelson, R.N., late Senior Assistant-Surgeon of H.M.S. Crescent, at Rio Janeiro. London: Hatchard. 8vo, pp. 85.—A well-written pamphlet.

Liebig's Physiology, applied in the Treatment of Functional Derangement and Organic Disease. By J. Leeson, M.R.C.S.E., &c. London: Renshaw. 8vo, pp. 220.

Burial-Ground Incendiarism. By George A. Walker, Surgeon. London: Longman, Brown, and Co. 1846. pp. 48.

Scrofula; its Nature, its Causes, its Prevalence, and the Principles of Treatment. By Benjamin Phillips, F.R.S., Assistant-Surgeon to the Westminster Hospital. London: Baillière, 1846. 8vo, pp. 379.

Thoughts on Animalcules; or, a Glimpse of the Invisible World revealed by the Microscope. By Gideon Algernon Mantell, Esq., LL.D., F.R.S., Author of the "Wonders of Geology," &c. London: Murray. pp. 144.

Outlines of the Course of Qualitative Analysis followed in the Giessen Laboratory. By Henry Will, Ph.D., Professor Extraordinary of Chemistry in the University of Giessen. With a Preface by Baron Liebig. London: Taylor and Walton. 8vo, pp. 104, exclusive of Tables.

Moral Philosophy, or the Duties of Man considered in his Individual, Domestic, and Social Capacities. By George Combe. Third Edition. Edinburgh: Machlachlan, Stewart, and Co.—London: Longman and Co. Royal 8vo, pp. 116.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, May 1st, 1846:—H. Gardner, S. Lowe, H. H. Harvey, W. P. Ward, A. Jowett, C. G. Ellis, H. Pritchard, J. T. Arlidge, T. G. Wrench.

APOTHECARIES' HALL, LONDON.

Names of Gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, April 30th, 1846:—Henry Thomas Hartnoll, Exeter; James Yates, Eccleshall; Joseph Hesslegrave, Marsden; Francis Robert Houghton; James Parett, High Easton, Essex.

CORRESPONDENTS.

A very old Subscriber ought to publish his criticism in his own name. Mr. Liston boldly challenged the propriety of his professional conduct on the occasion to which our correspondent has referred. His paper was publicly read before the first surgeons in London. Mr. Liston attended for the purpose of answering objections and sustaining his views, and he was completely triumphant. The points urged by his opponents were scarcely deserving of consideration.

The paper of Mr. W. Yates, of Nottingham, on "Ligature of the Veins," is unfortunately mislaid: we have no doubt that it will be discovered in a day or two, and it shall be published. If Mr. Yates has a spare copy by him, it would save us some trouble if he forwarded it to our office.

The report of the trial was not published in *THE LANCET*, as it appears to us (to use a vulgar phrase) to have been a "dead cross." A lady, it was represented, had charged a medical practitioner, who resided, we believe, in Rugby, with having "murdered another of his patients." An action for defamation was instituted against her, and when the cause was brought into court, and the counsel met, the lady apologized, the parties respectively agreeing to defray their own costs; so that the generous doctor had to pay, we suppose, nearly a hundred pounds, for having been designated a murderer. Dr. Ranking, we believe, will find a report of the silly proceeding in the *Times* newspaper. It appeared in that journal among the reports of the Spring Assizes, in the Midland Circuit.

The letter of Mr. Stookes was received, and shall be published next week. We regret that it is omitted from our present number.

Such a note as that of H. R. can produce no effect unless it be authenticated by the name and address of the writer.

We thank Mr. Cooper for his polite note, and beg to state to him that the article to which he directed our attention has, by some accident, escaped our notice.

The author of the note, signed *Nat. Institute*, must be well aware of the real cause of Sir James Graham's defeat. There is no necessity now for debating that disagreeable subject. It would be quite useless to publish in *THE LANCET* the article which our correspondent has extracted from a newspaper.

A Constant Reader of THE LANCET.—At a public meeting at the Freemasons' Tavern in the spring of last year. The application should be made to the honorary secretaries.

N. The practice is not injurious; but he had better be accompanied by his instrumental companion.

Mr. H— shall receive a private communication.

The communication of *Justitia*, and a portion of Mr. Beecroft's letter, shall be published next week.

Mr. Davis's letter arrived too late for insertion this week; it shall be attended to speedily.

Communications have been received from—Dr. Little, (London Hospital;) Dr. Edwin Lee; Mr. Markwick; Mr. D. Edwards, (Bath;) Dr. Ranking, (Bury St. Edmund's;) Mr. Warwick; Mr. Acton, Islington, (two communications;) Mr. Tucker, Studens, (Glasgow;) Mr. McVeagh, (Dublin;) Mr. Tripe; Dr. Sharpey; Mr. Cattell; H. R.; Mr. Norton Shaw, (Teddington); Dr. Ormerod; Mr. Holmes Coote; Mr. Graham, (Lincoln); Dr. Lankester, (with a communication from Bonn;) Scalpel; Jus; N.; One of the Disgusted; A Constant Reader; Mr. Stookes; Mr. W. Yates, (Nottingham); Mr. Storks; Dr. Mantell; Mr. Graham, (Lincoln); Mr. Gilbert; H. G.; Vindex; J. I. I.; and Mr. Thomas Fourné, (Bath.)

UNIVERSITY COLLEGE HOSPITAL.

CONTRIBUTIONS TO CLINICAL MEDICINE.

BY JOHN TAYLOR, M.D.,

PROFESSOR OF CLINICAL MEDICINE IN UNIVERSITY COLLEGE, AND
PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL, LONDON.*(For the particulars of the history of this case before the patient's admission I am indebted to the kindness of Dr. BALLARD, who obtained them from the relatives.)*

PERICARDITIS, WITH RENAL DISEASE.

CASE 31.—A man, aged thirty, formerly subject to epilepsy; after exposure to wet, had rigors; cramps in the legs and arms; delirium; epileptic fits; pain in the chest and abdomen; albuminous urine; stupor; coma; death on the eleventh day.—*Morbid appearances, with remarks; grounds of diagnosis during life; kidneys small and granular; microscopic appearances; no symptoms of Bright's disease besides albuminous urine; importance of testing the urine in all cases of disease; explanation of the absence of oedema, although the renal disease was advanced; brain pale, with very little serous effusion; mode of connexion between the head symptoms and the renal disease; light thrown by such cases upon other cases of probable blood diseases; simple apoplexy; typhus fever; relation between the coma and convulsions and the pericarditis in this and similar cases; exposition of the view generally received; another explanation of some of the cases proposed, and the grounds of it stated; effusion of recent lymph and serum into the pericardium; thickening of the serous membrane; hypertrophy of the left ventricle of the heart; curability of pericarditis without the occurrence of adhesions; signs of pericarditis; importance of percussion; fallacious marks of hypertrophy without dilatation, and of concentric hypertrophy; explanation of the appearances.—Causes: of the renal disease; of the cardiac hypertrophy; relation between the last two diseases; causes of the pericarditis; predisposing and exciting; their modus operandi.—Treatment: effects of free purging in comatose affections arising from renal disease.*

GEORGE B.—aged thirty, admitted Friday, Dec. 26th, 1845; of ordinary stature, and melancholic temperament; resides at Pentonville; has lately been employed as a light porter, and also in selling muffins in the streets; his father died of apoplexy fifteen years ago, at the age of forty-eight years; his mother is healthy; he was always a great eater, taking sometimes three or four pounds of food at one meal; generally drinks water or chocolate, of which he would sometimes swallow three pints at a draught. From carelessness, he has not always been sufficiently clad in the winter season. One of his brothers died of consumption. At his birth the patient had a rupture in the right groin, for which, after five weeks, a bandage was applied, and, with a view to prevent crying, medicine was given, which induced a constant sleepy state for a fortnight. At four years of age, he had a fit for the first time. He was attacked, during sleep at night, with choking in the throat; struggling and convulsive movements of the belly. This lasted two or three hours, and was followed by loss of power in his feet and hands. The wrists dropped, and he used to drag the feet in walking. He rolled his head about; had pain in the head, and frequently squinted. Six months after the first, he had a second fit, which seized him whilst at play. He fell to the ground, lost his consciousness, foamed at the mouth, and was much convulsed. When he had recovered, he was again found to have lost the use of his arms and legs; but he did not squint. In six months he gradually recovered the use of his legs, and, subsequently, of his arms. He continued to have convulsions of greater or less severity every day, but did not lose his consciousness. At fourteen years of age, when returning from the country, where he had been sent for the benefit of his health, he was seized with another fit similar to the former ones, with the addition of violent convulsions of the face, and loss of consciousness. This fit continued for two days and a night. Since then he has frequently had slight attacks of the same nature. He has had no fit within the last three or four years, but only some occasional "working" in the muscles of the face. Sometimes there appeared to him to be two candles burning when only one was on the table, and this within the last twelve months. He is able to read pretty well, but he sometimes forgets everything, and cannot read at all. He has been subject to cramps in the legs for a long time, to relieve which he often gets out of bed, and stands upon the cold hearth.

No. 1185.

Present attack.—On Thursday, the 18th instant, after eating a hearty breakfast, he went out, and did not come home till evening. He was wet through, but quite sober. His friends do not know whether he had eaten anything, but he had little appetite on returning. On the 19th, he laid in bed until mid-day, having chilliness, with cramps in the legs and muscles of the forearm, bending back the first two fingers of the hand. He complained of pain between the shoulders and a weight on his chest. He appeared to breathe with difficulty, lying on his back with his legs drawn up. On this and the succeeding days, he appeared unable to lie on either side. He laid very quietly except when the cramps occurred, and then he appeared in great agony, and threw off the bed-clothes. He had pain in the left side also, which he stated was relieved by pressure. He had no cough or vomiting; the bowels were confined. His mind appeared to be confused, and at times he became unconscious. These symptoms continued on the 20th and 21st. He did not sleep in the night, but laid moaning and not moving, except when the cramps occurred. He was slightly delirious on the night of the 19th, and more so the following night. On the 21st, his brother put two leeches over the left mammary region. At that time he would sit up in bed for an hour together, with his arms crossed, and pressing on his stomach with the body bent forwards, and the head resting on the chest. On the 22nd, he got up and sat on a chair by the fire, talking incoherently. The urine has been scanty and high coloured. Up to the morning of the 26th, he continued in the same state, being very restless, and not keeping the same posture for any considerable time, so that he was generally up every day for a longer or shorter time. His appetite was very bad, and his thirst slight. He took but little, except on Christmas-day, when he had some turkey. On the 26th, whilst in bed, at eight o'clock in the morning, he had what his brother called a convulsion fit. He had not slept in the night, and had been delirious. The fit lasted for half an hour; the belly was alternately contracted and relaxed; the jaws were clenched, and the teeth ground together; the face became pale, and foam issued from the mouth, whilst the head was dropped forwards. The arms and legs were not affected; the breathing was not oppressed, and there was no lividity of any part of the body. After the fit ceased, he did not go to sleep, but recognised his friends, and expressed his willingness to go anywhere to be cured. At ten o'clock he had another fit of the same nature. He was put into a cab and brought to the hospital. He had a third fit in the cab, foamed at the mouth, and the arms and legs were convulsed in addition.

When brought in he was unconscious, and could not stand. The eyes watery; pupils of the natural size, and contracted readily on exposure to the light. About half an hour afterwards, he began to vociferate loudly, and to attempt to get out of bed. In the afternoon, he vomited a considerable quantity of undigested food, oranges, potatoes, and pudding. When visited at noon, he appeared to understand partially what was said, but gave scarcely any rational answer to any question put to him. He tossed himself about in the bed in all positions, resisted, but not violently, the steps required in examining him, called out loudly, and refused to do anything required of him. His behaviour altogether was very much like that of an ill-tempered man deeply intoxicated. Complexion sallow; expression of the face heavy; the brow is frequently corrugated; extremity of the tongue swollen, red, and excoriated, (as if it had been injured by the teeth.) Pulse small, and frequently intermitting; skin not at all hot. There was greater dullness on percussion over the left mammary region than the right; sounds of the heart not quite healthy, but no distinct murmur. The right side of the chest behind appeared fully as dull as the left, and the respiratory murmur rather feeble. Ordered to be cupped over the nape of the neck to ten ounces; to take five grains of calomel, with ten grains of compound extract of colocynth immediately, and a dose of salts and senna two hours afterwards.

27th.—Intellect not much improved. His temper is wayward; refuses to do what he is desired, unless very kindly addressed; still vociferates loudly at times. He told his brother he did not know him; refuses to take his medicine, and spits it out if it be forced into his mouth. Occasionally he appears to doze, but his eyes remain half open; says he has no headache; pupils of the natural size; no heat of the skin. His posture varies; sometimes he lies upon the back, sometimes upon the belly, or on either side, but mostly upon the right side, with the knees more or less drawn up. He twists his body about occasionally, as if in pain, and says he has pain across the upper part of the belly. This pain comes on in

paroxysms, during which the abdominal surface is drawn in, and feels hard. In the intervals there is no pain; some tenderness on pressure is felt over the upper region of the abdomen; has flatulent eructations; no appetite nor thirst; bowels have not been opened since the 21st; no cough nor expectoration. The respirations, when the abdominal pain is absent, are both costal and abdominal, deep, and sixteen in the minute; but during the pain, they are costal only. Has no palpitations of the heart. Pulse, during sleep, 92, and regular, but when the pain is present, the pulse becomes very irregular, and more rapid. Nothing further observed in the physical examination of the heart, which, however, was very cursorily made. Urine, twelve ounces passed, very pale in colour, with a greenish tinge; specific gravity 10.11, faintly acid; a slight whitish powdery deposit, leaving the urine cloudy above it. Tested with heat and nitric acid, one-fourth of its volume of albumen is thrown down. To take one-fourth of a grain of elaterium, suspended in water, with a little mucilage, three times a day, until the bowels are freely purged.

28th.—About eight o'clock A.M. he became worse, breathing deeply and heavily; he appeared stupid, and not able to see. He did not speak during the day, and appeared to be unconscious. The nurse attempted repeatedly to give him his medicine, but after it had remained in his mouth for a time, it flowed out again, the patient being unable to swallow. At three P.M. he had an injection, containing half an ounce of oil of turpentine, with olive-oil and gruel. He died at six P.M. The nurse states, that since his admission he has passed a large quantity of water; at first, on the floor of the room, but on the 27th and 28th, in the bed.

Post-mortem inspection twenty hours after death.—*Exterior:* No oedema; no apparent emaciation; limbs muscular; cadaveric rigidity considerable.—*Head:* Membranes of the brain healthy; veins between the convolutions and in the pia mater unusually empty; arteries at the base slightly atheromatous; only enough serum under the membranes to separate very slightly the convolutions; about half an ounce of clear serum in the occipital fossae, and a drachm in each lateral ventricle; the whole external aspect of the brain very pale; cerebral substance, rather firm, but equally so in all parts; cut surface of the brain paler than usual; the red points few and small; the whole encephalon was carefully sliced, and no other morbid appearance observed. Weight of the encephalon, exclusive of the dura mater, forty-four and a half ounces avoirdupois.—*Chest:* No adhesion of the pleurae to each other or to the pericardium; no effusion of lymph or serum.—*Lungs:* Volume rather small than otherwise; the upper lobes crepitating; the lower less so, and more brittle; the right lung contains more blood than the left; the upper lobe of the left is paler, and the lower crepitates less than the right; bronchi not examined. Weight of right lung, seventeen ounces; of left, fifteen ounces.—*Heart:* The pericardium contained ten ounces of bloody serum; nearly the whole serous surface, both that covering the heart and aorta, and the fibrous bag, was covered with a layer of soft coagulable lymph. This was about one-twelfth of an inch thick, had a red colour, a very scabrous surface, and was easily separated from the serous membrane beneath; one or two long adhesions near the base of the left ventricle at its anterior surface. When the soft lymph had been removed, the pericardium, covering a considerable portion of the posterior surface of the left ventricle, was found to be thickened, dense, and opaque; some deposit of fat over the right ventricle; the heart was enlarged, very firm, and of a rather globular figure. Left ventricle: Walls very thick, being eleven lines near the base; muscular substance firm and pale; cavity little, if at all enlarged; endocardium but slightly opaque; aortic valves scarcely thickened; mitral valve and orifice healthy; the latter admits two fingers. Right ventricle: Walls rather too dense, being three lines thick near the base; cavity, lining membrane, valves, and orifices, healthy; the tricuspid orifice admits three fingers; auricles of the ordinary thickness and capacity; foramen ovale closed; no yellow spots in the aorta; pulmonary artery healthy; circumference of the former vessel three inches two lines, and of the latter, three inches five lines; some coagulum, chiefly colourless, in the right ventricle and auricle, less in the left ventricle. Weight of the heart, free of blood, and without the fibrous pericardium, eighteen and a half ounces avoirdupois.—*Abdomen:* No serous effusion into the peritonaeum; some adhesions between the spleen and diaphragm; stomach healthy; intestines not opened, but had a natural appearance externally. Liver: volume rather diminished than increased, especially the left lobe; consistence firm; colour darkish red; gall-bladder of moderate size; bile thin, and paler than ordinary. Weight of liver fifty ounces. Spleen: rather small; capsule opaque,

and thickened in spots; weight two and a half ounces avoirdupois. Kidneys: Left, volume very small; capsule firmly adherent; surface of kidney mottled in colour and very scabrous; cut surface mottled; the distinction between the tubular and cortical parts is in some places indistinctly marked; cortical portion atrophied and studded with a yellowish-white opaque deposit; substance of the kidney very firm: weight two ounces. The right kidney was similar, in volume and outward appearance, to the left, but was reserved for injection; urinary bladder contracted and healthy.

Dr. R. Quain injected the right kidney, and examined it under the microscope, and I am indebted to him for the following account of the appearances which he observed. On removing the capsule, the same appearances presented themselves as in the kidney of the opposite side. In addition, however, many of the granular elevations on the surface were seen filled with the coloured injection. The microscope showed a considerable quantity of a delicate filamentous tissue, extending throughout the substance of the kidney, also a quantity of granular matter, and many nucleated cells. Some of the granular matter possessed a high refractive power, and might consist of minute fat globules. This did not seem to occupy the nucleated cells, but floated freely. The injection was not traced into the fine capillaries, or Malpighian tufts.

SUMMARY OF THE CASE, WITH REMARKS.

Symptoms, diagnosis, and morbid appearances.—The history of this patient's illness had to be furnished by his friends, so that when I first saw him, it was necessary to form the best diagnosis I could, and to adopt a plan of treatment without a knowledge of most of those particulars which have been detailed, but which were only subsequently ascertained.

From what I learnt of the convulsions, I concluded that they had been epileptic, and the appearance of the tongue, as if injured by the teeth, confirmed this impression. The incoherent, stupid condition of the patient, might be only one of the ordinary sequelae of epilepsy, lasting longer than usual. The existing symptoms might have arisen from intoxication, but the convulsions rendered it unlikely that this was the sole cause. Knowing that Bright's disease is a frequent source of such symptoms, I requested that the urine might be obtained and tested, and suspended my judgment of the nature of the case, until this had been done. The next day, I learnt that the urine was albuminous, and of low specific gravity, that the intellect had been much disordered for a week before the patient's admission; and finding, moreover, that the symptoms persisted, instead of passing away, as in ordinary epilepsy, I concluded that the case was one of Bright's disease, and that the convulsions and other head symptoms were the sequelae of this. Other circumstances occurring at the same time, obliged me to see the patient in a hurried manner, and therefore I did not examine the heart with care, nor attach a due importance to the symptoms which were observed in connexion with that organ.

Kidneys.—1. The appearances which have been detailed are most characteristic of Bright's disease, and in an advanced stage.

2. Prior to the occurrence of the head symptoms, however, nothing appears to have happened that could have led to a suspicion that any renal disease existed. There was no obvious emaciation nor deterioration of the general health. The characters of the urine were such as are common in Bright's disease, and the case therefore shows the importance of testing the urine in all cases of disease which come before us, and the important light which such a practice is calculated to throw over many otherwise obscure diseases.

3. There was no oedema whatever, although the renal disease was so considerable. A main reason of this was, no doubt, the absence of any considerable permanent obstacle to the circulation through the lungs or heart. (See Case 24.)

4. The symptoms referable to the nervous system, besides the distinct epileptic convulsions, were, frequent cramps in the legs and arms, delirium, confusion of mind, and, lastly, stupor, ending in fatal coma. All these symptoms are such as have been proved by ample experience to arise in many cases of Bright's disease. They appear to be induced by the accumulation of deleterious matters in the blood, consequent on the imperfect action of the kidneys. In many such cases, chemical analysis has proved that an excess of urea is present in the blood, whilst no morbid appearance can be detected within the head. Similar symptoms are likewise produced by extirpation of the kidneys in the lower animals. In this case, the brain was unusually pale; there was rather more serum under the membranes than in health, but not so

much as is found in many fatal diseases without head symptoms. These were the only morbid appearances in the head, and they were simply those of anæmia, the consequence of the deficiency of the colouring matter of the blood, to which Bright's disease gives rise. Such cases, by establishing the connexion between certain symptoms and a poisoned state of the blood, help to illustrate other and analogous cases, in which the same or a different poison is mixed with the circulating fluid. Many cases of "serous apoplexy" and of the "simple apoplexy" of Abercrombie have probably been cases of Bright's disease, in which the state of the kidney has been overlooked. The delirium, pain, stupor, coma, and occasional convulsions, in cases of typhus, viewed in connexion with the fact established by Louis, that the appearances in the head are the same in such cases as in the cases without severe head symptoms, must be referred to the circulation of deleterious matters (in this case, however, of another kind) with the blood. Yet how frequently, even now, are such symptoms considered to arise from inflammation of the brain, and the treatment directed accordingly.

5. In what relation do these nervous symptoms stand to the pericarditis? Cases have been recorded by Mr. Stanley, and Drs. Abercrombie, Latham, Rostan, Andral, Bright, and others, in which, during life, a variety of severe nervous symptoms existed, and, after death, the brain and spinal cord were found to all appearance healthy, and no other disease was observed to which the symptoms could be ascribed, except acute pericarditis. A number of these cases has been collected by Dr. George Burrows, in one of the Lumen lectures for 1843, and the account is published in the *London Medical Gazette* for May 26, 1843. In some of them there were "all the usual symptoms of inflammation of the brain and its membranes;" in two cases, symptoms of mania and dementia; in others, apoplectic and epileptic symptoms; in others, symptoms of tetanus and trismus, or of aggravated chorea and hysteria. In all, the pericardium was acutely inflamed; in a full half of them, with rheumatism, and in the rest, without rheumatism; and in all the fatal cases, the brain and spinal cord were substantially healthy. The generally-received explanation of such cases hitherto has been this,—that the nervous symptoms are sympathetic, the inflamed pericardium being a source of irritation, the influence of which is transmitted to the nervous centres, and in the cases attended with convulsive movements, reflected upon the motor nerves of various parts.

The case before us shows that a different explanation of some of these cases may be suggested, and supported, I think, with at least an equal amount of evidence.

(1.) There had been cramps in the legs, and occasional loss of memory, and double vision, before the pericarditis appeared; this disease, therefore, could not be the cause of the symptoms in question.

(2.) The coma and other recent nervous symptoms would all have been referred, without hesitation, to the renal disease, if no pericarditis had been found.

(3.) I have elsewhere (*Medico-Chirurgical Transactions*, vol. xxviii.) attempted to show that the mass of cases of non-rheumatic pericarditis is due to renal disease.

(4.) I believe it will be found that a large proportion of cases of non-rheumatic pericarditis is quite latent, in the ordinary acceptance of the term, and also that the mortality is much greater than among the cases of rheumatic pericarditis.

I therefore regard the coma and the pericarditis, in this case, as the common effects of the renal disease, and believe them to be altogether independent of each other. I further believe it to be probable that the pericarditis and the nervous symptoms stand in the same relation to each other in a certain proportion of the published cases referred to. One or two particulars may be pointed out, either confirmatory of this view or consistent with it.

(1.) In no one of the cases, as collected by Dr. Burrows, has the state of the kidneys been expressly mentioned after death, or the presence or absence of albumen in the urine been noted during life. In several of them, indeed, it is stated that there was no morbid appearance in any other organ than the pericardium, but all who are practically acquainted with the way in which bodies are inspected, and the appearances recorded, will know that such a statement affords hardly the least proof that the kidneys were even seen, much less that they were so examined that they might be pronounced healthy.

(2.) The mortality was twice as great in the non-rheumatic as in the rheumatic cases, in which respect the two classes resemble, respectively, cases of rheumatic and renal pericarditis.

(3.) All the cases with apoplectic symptoms occurred among those without rheumatism; and one of the patients is stated

to have had general dropsy. One of the rheumatic cases, however, ended in coma. Two of the three tetanic cases belonged to the non-rheumatic class.

From this comparison, therefore, between my own cases of "renal pericarditis" and those of non-rheumatic pericarditis, I think there is much probability in the supposition that the kidneys were diseased in some, at least, of the cases of the latter class.

I have already detailed one case of trifling convulsive movements in connexion with rheumatic pericarditis, and without renal disease, (case 9,) and I am disposed to consider the movements in that case (and therefore in many other and similar cases) as sympathetic of the pericarditis. In the same way more extensive convulsions, resembling those of chorea, or epilepsy, or tetanus, may be sympathetic, but in these cases it seems desirable that further evidence of the absence of other and sufficient causes, especially renal disease, should be adduced. This further evidence is still more needed in cases in which there is observed great or long-continued delirium, or coma, or genuine apoplectic symptoms. We are familiar with other examples of simply convulsive movements, and even extensive and violent ones, arising from reflected irritation, but we are scarcely equally familiar with cases in which well-marked apoplectic symptoms spring from the simple transmission of an irritating influence from some remote part, through the nerves to the brain. This is a kind of argument, however, upon which, in any case, I am not disposed to place much reliance; and in respect to the symptoms under consideration, numerous examples, both of epilepsy and of hysteria, show that coma may arise without either structural disease of the brain or any known alteration in the blood.

6. The epilepsy which this patient had earlier in life must of course have been independent of the renal disease, but it would probably operate as a predisposing cause of the fits which occurred during the last illness.

Heart.—1. Besides the recent pericarditis, there were decided traces of a previous attack—viz., extensive thickening and opacity of the serous covering of the heart, seen when the false membrane had been scraped off. The case, therefore, proves that a pretty severe attack of pericarditis may be cured without the formation of adhesions.

2. Various symptoms mentioned in the history may be referred to the pericarditis, although nothing occurred after the patient's admission to direct attention to the heart. The disease was ushered in by slight rigors: these were followed by some pain between the shoulders and in the left side, (the latter was relieved by pressure,) dyspnoea, a sense of weight in the chest, and inability to lie upon either side. After admission, the pulse was small and intermitted at times. There was more than the usual amount of dullness over the region of the heart; but the precise extent and direction of this dullness was not ascertained, or it would have revealed with certainty the existence of liquid effusion into the pericardium. The heart's sounds were not quite healthy, but there was no distinctly-developed murmur or friction sound. Dr. Ballard sought expressly for a friction sound on the 27th, and could hear none. The absence of this sound was doubtless due to the pretty copious serous effusion. Nothing remarkable was noticed in the character of the impulse. The case is one of those in which percussion was capable of aiding in the diagnosis much more than auscultation, and in which, indeed, percussion alone, of the various means of physical diagnosis, could be of much service.

3. The heart was enlarged to nearly double the average weight, and the enlargement affected the left ventricle almost exclusively. The left ventricle appeared not to be dilated, but the appearance was probably fallacious. From the small quantity of blood in the system, as well as from the compression of the heart by fluid in the pericardium, there would probably be habitually a less quantity than usual in the left ventricle. This would explain the small and intermitting pulse; the ventricle also would contract its dimensions in proportion to the paucity of blood which it received; and hence its cavity would appear to be smaller, and its walls relatively thicker, than they really were. This account is equally true of most cases of hypertrophy without dilatation, as well as of most, if not all, cases of "concentric hypertrophy."

4. The enlargement of the heart was not indicated by any sign during life. There was no increased impulse, partly, no doubt, owing to the pericardial effusion, and partly to the feeble action of the heart.

Causes. 1. *Of the renal disease.*—The patient was reported to be very temperate, and even abstemious, in respect to drink. In his occupation he was probably exposed a good deal to the various changes of the weather; and this seems to

have been the likeliest cause of the disease. Had the enlargement of the heart anything to do with the production of the disease of the kidney? This appears rather improbable, but it is also uncertain. We do not know which affection began first. The disease of the heart does not seem to have offered any great obstacle to the circulation. The absence of decided enlargement of the right ventricle seems to show that there could have been little habitual accumulation of blood in the systemic veins, and consequently little congestion of the kidneys from this cause.

2. *Of the hypertrophy of the heart.*—This might have been a result of the previous pericarditis; if not, I see no other obvious cause, unless it be the disease of the kidneys.

3. *Of the pericarditis.*—The main cause of this was probably the renal disease, but the immediate exciting cause was exposure to wet. By interfering with the action of the skin, and by still further impairing the function of the kidneys, we can understand how this cause might add to the already impure state of the blood, induced by the renal disease. Such a conclusion, if not warranted by this case singly, is the only one which seems deducible from the comparison of a larger number of cases. In many cases of renal disease, pericarditis comes on without any additional cause; but I have never seen pericarditis occur in a previously healthy subject, from mere exposure to cold and wet, unless rheumatism were at the same time produced. In the language of nosologists, the renal disease was the predisposing cause, and such cases illustrate the great relative importance of this class of causes, as compared with the exciting causes, and also throw light upon one, at least, of their modes of operating—viz., by inducing an impure state of the blood. The exciting cause, however, had a real influence, as is shown by the short time which elapsed between its application, and the first symptoms of the acute attack. The former attack of pericarditis may have arisen, likewise, from the renal disease. There is no mention of any attack of rheumatism.

The coma appears to have been the immediate cause of death. The whole duration of the acute attack was about ten days.

Treatment.—On the first day, before the state of the urine was known, and whilst the nature of the cerebral affection was considered doubtful, the patient was cupped over the nucha, and a brisk purgative ordered. As soon as the urine was known to be albuminous, I considered the cerebral symptoms to arise from Bright's disease, and I ordered elaterium, in quarter-grain doses, to be frequently repeated. This was prescribed with the view of producing copious watery evacuations, which I have found to relieve the stupor in various cases of a similar kind. None of the medicines, however, acted upon the bowels, and the patient died on the second day after admission.

ST. BARTHOLOMEW'S HOSPITAL.

MEDICAL CASES TREATED AT THIS HOSPITAL.

Reported by E. L. ORMEROD, M.B. Cambridge,

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ENCEPHALOID DISEASE OF THE STOMACH.

CASE 3.—John B—, aged sixty-four; March, 1846; Luke back-ward; under Dr. Roupell. A large, very fat man, formerly weighing seventeen stone, but now somewhat less; a looking-glass silverer; habitually intemperate; was admitted for weakness and tremors, affecting chiefly the upper extremities, so that he could not feed himself. This was his sole complaint, and thus he continued till within four days of his death, when he was suddenly taken with pain in the head, vomiting, thirst, and complete loss of appetite. He died, after a long painful agony of a day's duration, it is considered of fever, which he had taken in the ward. To the last he was free from pain in the stomach.

Body examined twenty-six hours after death.—Warm dry weather. No marks of decomposition externally; no particularly marked sugillations, and no smell of putrefaction. Limbs relaxing from their rigidity. Arachnoid white and opaque, with little white dots in the meshes of the pia mater. Substance of the brain soft, with numerous bloody points, and little vessels full of coagulated blood, drawing out like hairs on suction. The arteries about the base were thickened, and yellow in patches. The pleurae were extensively adherent; the lungs generally emphysematous, oedematous, and posteriorly rotten, readily tearing down under the fingers. Beyond the enormous deposit of fat about the heart, and the deep staining of the

lining membrane on the right side, there was little to notice in this organ. The peritoneal surface of the stomach was dusky, and injected near the pylorus; the mucous surface was red and rough, especially towards the pyloric end of the organ. The mucous membrane here, as in the upper part of the duodenum, was emphysematous; the sub-mucous cellular tissue of the stomach infiltrated with a creamy fluid, by which it was widely separated from the muscular coat, the whole of the coats together forming a thick membrane, traversed by fine striæ parallel to each other, at right angles to the axis of the stomach. The emphysematous condition of the mucous membrane tended much to obscure the particular local changes that it had undergone; but a small, white, fungous growth was attached near the pyloric end of the lesser curvature of the stomach, while a ring of the same substance, presenting an appearance very like that of psoriasis, lay near the same place. There was nothing to notice in the small intestines or mesenteric glands. The liver was large, indented by the pressure of surrounding parts, and, as viewed by the microscope, in a state of commencing fatty degeneration. A few cartilage-like bodies, small, with opaque spots and striæ, without any enveloping membrane, were scattered beneath the capsule and throughout the substance of the organ. A lobular mass of fat, partly crossed by fibres of the cremaster muscle, lay attached to the spermatic cord on each side, chiefly external to the inguinal ring.

This case is interesting, as presenting a rather unusual form of malignant disease of the stomach.* Rokitsansky speaks of encephaloid disease of this part as generally occurring in connexion with a high degree of vascular action in parts already suffering under the fibrous form of disease, the areolar being an intermediate stage in the development of the encephaloid from the fibrous. But the encephaloid being more common than the areolar, although a stage beyond it in this process, the difference is accounted for in the more frequent occurrence of encephaloid cancer as an original lesion, of which the above is an instance. The point, however, to be chiefly illustrated by the annexed cases, turns on the pathology rather than on any exact anatomical distinction of the lesions.

It is remarkable how a man could have gone on, not merely living without any symptoms of so formidable a disease in a part of so great importance and such lively sympathies as the stomach, but actually taxing this organ to its utmost; for his appetite was most voracious, and emaciation had very little reduced the truly enormous deposit of fat with which every part of his body was loaded. The explanation probably lies in the fact, that the diseased part offered no mechanical obstruction to the functions of the stomach being properly performed,—that he had so much less surface of stomach where-with to digest his food,—but that the part of his stomach which did execute its functions could do so unhindered by the disease of the pyloric part. The most striking illustration of this principle that we can recall is mentioned by Pemberton,† where a cancerous ulcer had advanced very much further than the disease mentioned above, even to erosion of the walls of the abdomen, “without any one symptom by which such a disease of the stomach could possibly have been suspected,” because “the mischief was so situated as not to interrupt the passage of the food.” The following case supplies an apt illustration, the converse of the above:—

SCIRRHUS OF THE PYLORUS.

CASE 4.—William D—, aged forty-five; March, 1845; Luke back-ward; under Dr. Roupell. A man, with no appearance of malignant disease, extremely emaciated. He had been suffering for nine months from vomiting, about three hours after every meal, this sometimes, though rarely, intermitting for three or four days,—from constipation and extreme progressive emaciation. The matters vomited were never mixed with blood, but generally dark-brown and pultaceous. He died after about six weeks' stay in the hospital, the only point of interest in his case, beyond the severe vomiting, over which medicine did not appear to exert any control, being the presence of a large quantity of urea in his urine.

Body examined thirteen hours after death.—Lungs generally emphysematous; the black pulmonary matter on the surface contrasting strongly with the pale-white colour of the rest of the organ. Within, they were oedematous, breaking down readily under the finger, but resisting traction well. A small pulmonary abscess existed near the apex of the left lung, close beneath the pleurae. Stomach more than four times the ordinary size; externally healthy; within, stained of a dirty purple, and coated with thick mucus, beneath which, the

* Rokitsansky Path. Anat., vol. ii. p. 202.

† Diseases of the Abdomen, p. 120.

mucous membrane appeared entire, but *mamelonnée* in an extreme degree—this towards the pylorus; at the cardiac end the coats were partially digested. The stomach contained a large quantity of the same kind of fluid as he had vomited during life. The pylorus was contracted—so as hardly to allow the passage of a common pencil—by means of a hard ring projecting all round, single on the side that lay uppermost, but on the side nearest the pancreas double, the two ridges leaving between them a cavity big enough to contain a hazel-nut. Perhaps the whole morbid growth was not more than an inch and a half in diameter, the pyloric orifice of the stomach lying in the middle of the thick ring. Some small, white, hard bodies were found in the gastro-splenic omentum; none elsewhere. The mesenteric glands were rather large, but grey, and of natural consistency. Except a little black dotting of the follicles of the colon, the intestines were generally healthy.

There can be little doubt that any other mechanical obstacle, acting to the same extent, would have produced analogous results by vomiting and progressive emaciation; for the scirrhus substance, in the present instance, had not undergone any change by ulceration on the surface; it was merely a hard annular mass, which, but for the little bodies in the gastro-splenic omentum, could hardly have been ascertained to be of a scirrhus nature, the existence of these little bodies being the only evidence that the pyloric disease was not purely local; yet this small mass of fibrous cancer had produced the severest symptoms, while in the former case a far greater extent of encephaloid cancer had existed, not only without a single symptom referable to the stomach, but with proof of an unusual degree of activity of the functions of that organ.

The form of the diseased parts is worth a little attention, for it would appear not to have been merely an accident that the scirrhus growth took the form of a double ring. In the notes respecting a patient in the same ward a few weeks previously, whose symptoms corresponded very closely with those of the last-described case, the changes of the stomach are described as consisting of general thickening about the pyloric orifice, the aperture being reduced to about the ordinary diameter of a drawing-pencil in one point. The thickened walls becoming gradually thinner from this point towards the cardiac end, were covered with a smooth mucous membrane, which continued for about an inch; and then, after crossing a somewhat raised edge, the mucous membrane regained its normal surface, and the walls of the stomach their usual thickness. Towards the duodenum, the stricture terminated quite suddenly, but about a quarter of an inch further on, another elevation of the same kind, but of a rather smaller size, was to be observed. On section, the parallel striæ at right angles to the axis of the stomach were very distinct; but in the absence of any other proof of the cancerous nature of the pyloric disease, we have not communicated any further details of the case, which, indeed, only presented the same amount of symptoms, with more local changes, than existed in the one which has just before been related.

These must be considered as cases cut off accidentally, as it were, before the full development of the cancerous mass. It will be interesting to compare them with a case in which the disease ran its way to destroy life by the actual amount of organic lesion, without reference to any particular seat of such lesion.

Such a case is the following, which, for actual extent of lesion, exceeds any other that my note-book contains, and having been already referred to, may be conveniently here reproduced in an abridged form.

CANCER OF THE STOMACH AND PERITONEUM.

CASE 5.—John B—, aged fifty-six, April 21, 1842; had suffered more or less pain and uneasiness in the right hypochondrium for six months; for the last three months has had vomiting after taking food, and for the few last weeks has been obliged to desist from his trade of shoe-making.

Till July 10th, when he died, he presented little to notice from day to day. The general conclusions may be summed up in a few words; that he had progressive emaciation, constant vomiting of almost all that he swallowed, food or medicine, but never of any blood. His appetite was most voracious; his bowels were obstinately constive. The treatment was solely directed to support his system.

The body, on examination, presented an appearance of the most extreme emaciation. The heart was of not more than one-third the usual size, and quite without fat. The black pulmonary matter beneath the pleura contrasted very strongly with numerous small white patches on the surface, and enter-

ing a little way into the substance of the lungs, which, with the exception of a few earthy concretions, were otherwise healthy. The stomach was reduced to a thickened mass, about the ordinary size of the colon. Internally, it had the appearance of a new ulcerated surface; the scirrhus degeneration implicating the whole circumference of the organ from the pylorus nearly to the cardiac extremity. Its walls were, on an average, half an inch thick throughout; in some points, full three-quarters of an inch in thickness. There was an extensive deposit of scirrhus tubercles in the omentum, and a few, as noticed on a previous occasion, were scattered about an old hernial sac.

Cases presenting more extensive lesions than the above might easily be found; but they would not all supply the illustration which is here required of the progress of cancer of the stomach, of which neither any particular local obstruction, nor any drain on the powers of the system by hæmorrhage, has hastened the fatal termination. We forbear to dwell on any other single morbid appearances which would require the narration of more cases to show that they were anything but accidental in the particular instance, but we confine our attention here to the illustration of the influence which the situation of the disease has on the production of the symptoms of cancer of the stomach. On this, as on all other questions relating to the subject, it is almost needless to refer the reader to the most elaborate systematic treatises of Dr. Walshe for all that is known of cancer.

ON THE TREATMENT OF

CHRONIC DISEASES OF THE SKIN.

By THOMAS HUNT, ESQ., M.R.C.S. Eng., Herne Bay.

ORDER VII.—TUBERCULA.

THIS order comprises nine genera, six of which—viz., *Phyma*, (boils,) *Verruca*, (warts,) *Molluscum*, (a very rare disease,) *Vitiligo*, *Elephantiasis*, and *Framboesia* (diseases of foreign climes)—require no further notice. The three remaining genera—namely, *Acne*, *Sycosis*, and *Lupus*, deserve a separate consideration.

ACNE.

Acne is a disease of the sebaceous glands, consisting of a process of sluggish inflammation in these organs, tending slowly to suppuration. It commences with clusters of small elevations, or pimples, with conoidal summits, which, having slowly completed their suppurative course, discharge their contents, die away, and give place to others. Willan speaks of four varieties—*Acne Simplex*, *Acne Punctata*, *Acne Indurata*, and *Acne Rosacea*. The first three more correctly describe the different stages of acne simplex than different species. The latter (acne rosacea) has a distinct character.

Acne Simplex commences with small elevations in the cutis, of a red colour, on an inflamed base, which slowly secrete a purulent matter. Clusters of these pimples, with conoidal acuminated summits, varying in colour, red, yellow, or black, are often seen disfiguring the face of young persons at the age of puberty. The disease is generally confined to the face, neck, and shoulders, and is most common on the forehead and chin. The eruption, if left to itself, gets better and worse, but generally lasts from two to seven years, commonly disappearing at mature age, but occasionally continuing for several years beyond. Nor has it always been found an easy task to arrest the progress of the unwelcome visitor. Lotions of a stimulating kind, such as a weak solution of the bichloride of mercury, appear serviceable for a time, but rarely prove of permanent benefit.

The perils attending the usual mode of administering arsenic have hitherto presented a sufficient objection to its use in a disease attended with no danger and little inconvenience. But a long experience of the absolute safety of decreasing doses, and of the power of the medicine over cutaneous affections generally, suggested to the writer, a short time ago, the propriety of testing its efficacy in acne simplex. The few opportunities of trial which have since presented themselves have inclined him to the opinion that acne may always be cut short by persevering in small doses for a few months, provided the system be otherwise in health. The following cases will afford a sample of the general results:—

CASE OF ACNE SIMPLEX ON THE FACE, CURED BY ARSENIC.

A. B—, a pretty servant-girl, aged nineteen, has been for the last three or four years disfigured by an eruption of acne simplex, in its various stages, on the forehead, chin, upper lips, and cheeks. Her general health is excellent. Arsenic was prescribed for her on the 30th of September, 1845.

October 21st, 1845.—She has taken five minims of the liquor potassæ arsenitis thrice a day with her meals, steadily, for three weeks, and her face is now quite clear of pimples, excepting one or two, which have not had time to run their usual course. No fresh elevations have appeared for a week. The conjunctiva is not affected.

CASE OF ACNE INDURATA ON THE SHOULDERS, CURED BY ARSENIC.

Miss N—, aged twenty-one, has an extensive eruption of solid elevations, surmounted by black points and pustules, answering to the appearance described by Willan as marking the variety called acne indurata, on the skin covering the deltoid muscle in each arm, and extending partially across the back. The pustules are occasionally sore, and irritated by the dress, and are always unsightly. The disease has existed nearly seven years. She is in good health. The face is clear, and the complexion healthy.

November 25th, 1844.—The eruption is copious on both shoulders. Five minims of the solution of arsenic were prescribed to be taken three times a day with the meals, with an occasional purgative, her bowels being constipated. This was persevered in for three months, without inconvenience on the one hand, or visible improvement on the other.

March 10th, 1845.—She has now taken the medicine for three months and a fortnight; and a great improvement is visible during the last fortnight. No new pustules have formed, and the old ones look indolent and fading. The conjunctiva is inflamed. The arsenic to be continued in reduced doses, and a lotion of bichloride of mercury applied sparingly.

May 6th.—She continues to improve. The pimples are small, and appear to partake more of the character of enlarged papillæ than of pustules.

July 2nd.—Quite well; the shoulders are as smooth as other parts of the surface.

The appearance of acne in young females has been supposed to indicate some abnormal condition of the uterine secretion. The experience of the writer has not tended to confirm this opinion. In both of the cases above detailed, the menstruation was perfect and regular throughout, and the first appearance of the discharge seemed to have no influence over the eruption.

ACNE ROSACEA.

Acne rosacea is an inveterate form of acne simplex, but it differs much from that disease in some particulars. Instead of appearing at the age of adolescence, it belongs rather to the decline of life, commencing at the middle period; and instead of spontaneously disappearing after a time, it usually gets worse and worse, unless checked by medical treatment, till death. The locality of acne rosacea is also peculiar. Instead of appearing in the forehead and chin, its seat and centre is almost invariably the point, or, more rarely, the alæ of the nose, from which it radiates laterally, gradually extending over the cheeks, and affecting the adjacent skin in all directions. The point of the nose first becomes redder than natural, especially after meals, or on exposure to cold or heat; the veins of the part become visible, then pustules form, and slowly progressing through their stages, leave the skin permanently thicker than natural, and puckered with small cicatrices. In its advanced stages, the disease sometimes disfigures the face to a frightful extent; and being, in a few cases, the penalty of dram-drinking, it becomes particularly afflictive to the temperate, in whom, however, it is at least as common. Like other forms of acne, it attacks both sexes, and occasionally occurs as a degeneration of acne indurata of long standing. But the subjects of acne simplex are more generally exempt from acne rosacea.

The treatment of acne rosacea has been hitherto unsatisfactory in its general results. Rayer says, the disease "almost always returns after medicines are abandoned, with a rapidity and regularity that induce despair."* This is strong language, and from a man of Rayer's experience, most discouraging. Indeed, so general is the impression that it is incurable, that patients rarely seek medical advice for this disease, and still more rarely do regular practitioners undertake the cure in a methodical or persevering manner. Certainly, among the numerous and ill-defined varieties of this disease there are two, the recovery of which cannot be reasonably expected. 1. The disease is in some cases hereditary, and, perhaps, likewise congenital. Early in life the nose is slightly affected by the disease, and by degrees becomes incurably hypertrophied and deformed. The writer has more than once known it complicated with an irritable condition of the rectum and with chronic hæmorrhoidal affections, the irritation oscillating from

one extremity of the intestinal tube to the other. These disorders can be alleviated by medical treatment, but there is something originally wrong, which probably can never be rectified. 2. The acne rosacea of the drunkard, connected frequently with visceral disease, is placed by the habits of the patient out of the control of medical art. With these two exceptions, the varieties of acne rosacea present nothing which justifies an unfavourable prognosis, much less despair.

The following "very instructive case," as Dr. Chambers described it, furnishes a proof, which cannot be impugned, of the therapeutic powers of arsenic in this disease.

CASE OF ACNE ROSACEA IN A MIDDLE-AGED LADY, CURED BY ARSENIC.

Mrs. N—, a lady of temperate habits, clear complexion, and good general health, had been complaining for some weeks of languor, lassitude, headache, hysterical globus, and chronic diarrhoea. These symptoms were treated variously, but with little success for a time. At length, on the right alæ of the nose a small number of acuminate pustules appeared, elevated upon an inflamed base, and having the genuine character of acne, but more closely crowded together than they usually are in that disease. These soon became covered with a purulent incrustation; other pustules appeared in the neighbourhood, until at length the whole alæ, with a contiguous portion of the cheek, became occupied by the disease, and presented an ugly and hypertrophied appearance. As a portion of the crust became separated, other pustules appeared underneath, and a second crust was formed, which, when detached, discovered other formations, on a larger base, and involving a deeper portion of the subcutaneous tissue. There was no pain or itching, and, except on approaching the fire, no sensation of heat. The crusts were surrounded by a small areola of a dull-red colour, rather inclined to a brown shade, but never exhibiting the livid colour of lupus, which disease it nevertheless, in some respects, resembled.

Dr. Chambers saw the case within two or three months of its commencement. He pronounced it acne rosacea, gave a guarded prognosis, and prescribed arsenic, of which the first dose was taken on the 3rd of January, 1844, and continued, on the plan detailed in the preceding cases, for three months, by which time the disease had entirely vanished, and the hypertrophied cellular tissue was reduced to its normal condition. Any doubt which might have been entertained concerning the agency of the arsenic in the cure would have been dissipated by the ultimate history of the case. The patient now left her home "for a week"—was actually absent five weeks, neglected her medicine, and returned home with another tuberculous incrustation, which, commencing on the original spot, had now spread more horizontally over the cheek, and seemed to take a more superficial hold of the integuments than the former attack.

May 10th.—The arsenic was now resumed, and taken steadily, till the middle of July. Before the end of May, however, the disease had again disappeared. The medicine was persisted in for two months subsequently, with a view to prevent a return; notwithstanding which precaution, the disease was only kept at bay for twelve months, not radically cured; for in the following July, (1845,) the old enemy reappeared, evidently, however, in a milder form than heretofore; for now the arsenic put him to flight in ten days, and was steadily persevered in for two months afterwards. At present, there appears no probability of a relapse. A considerable indentation, like a bad variolous scar, was left by the first attack: the later attacks left no scar.

The diarrhoea, headaches, and hysterical affections, retired as soon as the arsenic had hold of the system; and the patient has enjoyed excellent general health since the termination of the first course. The conjunctiva became affected, as usual, synchronously with the subsidence of diseased action, both local and constitutional. No external application was used, nor any potent internal medicine, after the first exhibition of the arsenic.

The reader's attention is particularly solicited to three observations suggested by this interesting case:—1. The decline of the disease, on three distinct occasions, under the steady use of arsenic alone, independent of external applications, changes in diet, or other circumstances of regimen; its repeated relapses after neglecting the medicine for a few weeks, and its (probably) final disappearance, after such a protracted course of reduced doses as seemed to destroy the very tendency to morbid action: these circumstances demonstrate the absolute control which this wonderful medicine exercises over tubercular diseases of the skin, and holds out a strong encouragement for its lengthened trial in cases of longer standing.

* Rayer's "Treatise on Diseases of the Skin," English translation, p. 476.

2. The morbid condition of the nervous system, and the extreme irritability of the intestinal canal, in circumstances which would generally be held interdictory of the use of arsenic, were, in this case, not less clearly relieved by the arsenic, than the cutaneous affection itself. 3. The resemblance of this case to lupus, both in the locality primarily affected, and in some similarity of general appearance and history not easily described, seems to suggest, if not establish, some relation between this disease and certain forms of acne rosacea; and if it throws no light on their cause and origin, it indicates a morbid condition of the general system, susceptible of successful treatment by a similar alternative plan. The writer has further the satisfaction to state that he has had an opportunity of carrying out this indication with the most entire success, in a case of lupus exedens, of many years' standing, the particulars of which will hereafter be presented to the reader.

The two varieties of acne which have now been discussed belong properly, or principally, to two distinct and distant periods of life, respectively—viz., acne simplex, to puberty; acne rosacea, to the meridian or decline of life. There is a third species, pertaining to the intermediate years, and seldom met with, either in the morning or the evening of human life. And whereas the principal seat of acne simplex is the forehead, and of acne rosacea, the nose, the variety now under review occupies only those parts of the face which in the male subject are covered by the beard. It is known by the name of

SYCOSIS, OR MENTAGRA.

This disease has all the characters of acne. It is described as confined to the male sex; but the affection is, in fact, more commonly met with in the female, being in the fair sex generally described as acne. It is usually more severe in men, for obvious reasons. The irritation constantly inflicted by the razor, and often mistaken for the original cause, the augmented development of the hair follicles in men, which become implicated in the disease, and the incrustation resulting from the adherence of the discharge to the beard, which becomes an incidental source of inflammation,—all these circumstances contribute so much to the severity of the disease, that it often becomes truly formidable, presenting a hideous mixture of pustules, tubercles, and incrustations. "Arrived at this stage," says Rayer, "sycosis is always an obstinate disease, the cure of which is never obtained but with great difficulty." Compared with this, it is mild in the female, but, nevertheless, very annoying and disfiguring. The description already given of the rise and progress of acne simplex applies accurately to sycosis, excepting that the latter disease is confined to the chin, cheeks, upper lip, and submaxillary region, and the resolution of the pustules is usually attended with a feeling of heat and tension in the parts they are to occupy. The writer has not been able to meet with any recorded case in which arsenic has been administered in this disease. Indeed, it is generally regarded as originating in external causes; the cure has therefore been attempted by local means alone, of which the most essential is the plucking out of every single hair of the beard in the affected parts. This is surely a mistake. The cause of sycosis is always constitutional, although its aggravations may be dependent upon local sources. Arsenic rightly administered will rectify the constitutional disorder; and if, at the same time, the local disease be treated with that attention to cleanliness and external management recommended by all writers on the skin, the disease will prove as tractable as the other varieties of acne. The following cases illustrate the sufficiency of arsenic alone when the disease occurs in the female:—

CASE OF SYCOSIS IN A LADY, COMPLICATED WITH NEURALGIA; BOTH AFFECTIONS CURED BY ARSENIC.

Miss S—, aged twenty-five, (or upwards), a brunette, of naturally clear complexion, had suffered from frequent attacks of neuralgia in the facial nerves. Early in the summer of 1844, she experienced a return of her old malady, which destroyed her rest, except when procured by opiates. The chin and lower parts of the face generally became affected with a sense of heat, tension, and pruritus, which sensations were in a day or two succeeded by an eruption of small red points, tending to suppuration, somewhat more rapidly than usually occurs in acne simplex, but yet presenting an appearance exactly similar to that disease, the dark points appearing here and there, and the sub-cutaneous integuments being very sore, and more or less involved in the inflammatory process. The forehead and the nose wholly escaped the disease.

June 21st, 1844.—The eruption has existed about three months, and has continued by successive crops to this time,

gradually getting more troublesome. The patient is weak and thin, and is suffering from extraneous causes of anxiety; but the general health is otherwise good, and there is no interruption of any natural function. She this day consulted the writer on account of the neuralgic affection. No external application was used, but the following medicine was prescribed—viz., Fowler's solution, one drachm; distilled water, seven drachms; mix. Forty minims to be taken thrice a day in the beverage usually taken at meals.

June 30th.—The pain has left her. She sleeps well, and is looking better. The eruption is fading, and the skin is paler and less occupied by red points. Slight conjunctivitis. The dose of arsenic was reduced to four, and afterwards to three minims of Fowler's solution.

August 1st.—The eruption has quite disappeared. She has had no relapse of the neuralgic pain, and is in perfect health.

CASE OF SYCOSIS IN A FEMALE, COMPLICATED WITH DYSPEPSIA; BOTH DISEASES YIELDING TO ARSENICAL TREATMENT.

Miss T—, aged twenty-seven. The eruption in this case was so exactly similar to the one just described, (except that it was confined to the point of the chin,) as to render further delineation unnecessary. The dyspepsia was treated with aperients and alkaline tonics for a fortnight, and a diluted solution of bichloride of mercury applied to the face, without any amendment becoming apparent in the eruption, and with but little improvement in the dyspeptic symptoms.

The arsenical treatment was commenced on the 11th of August, 1845, and in little more than a week the stomach had resumed its healthy tone, and the skin was nearly well; but she neglected the medicine, and before the following Christmas, both complaints returned, and are again yielding to arsenic.

Both of these patients were of mature age, and had been free from the cutaneous affection at the age of puberty. The skin of the forehead was sound, and the disease was somewhat more acute in its character than acne simplex. It commenced too early in life for acne rosacea; besides which, the nose escaped entirely. The disease was therefore mentagra, or, more probably, acne menti. In both cases, the disease, with its respective complications, yielded readily to arsenic. Not a doubt can be entertained of the constitutional origin of this disease; and calm reflection on the primary characters of sycosis in the male sex, will lead the observer not only to identify the disease with acne, but to perceive the necessity of prescribing an alternative course in connexion with local applications. The writer regrets that he has not as yet had an opportunity of giving this kind of treatment a trial in that aggravated form of the disease which is peculiar to men, but he cannot entertain a doubt as to the issue.

Herne Bay, May, 1846.

ILLUSTRATIONS OF INFLAMMATION, ULCERATION, & INDURATION OF THE CERVIX UTERI.

By J. HENRY BENNET, M.D.,

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Inflammation and ulceration of the uterine neck in a married lady without family, existing for many years unsuspected, and giving rise to severe bilious symptoms.

On November the 29th, 1845, I was consulted, at the request of a medical gentleman practising in the south of England, where she had been spending the autumn, by Mrs. H—, a married lady, twenty-nine years of age, respecting a slight leucorrhœal discharge, under which she had been labouring for some years. I was told by this lady, that it was only out of deference to the wishes of the gentleman alluded to, from whose advice she had derived great benefit, that she consulted me, as she was then in better health than she had been for a considerable time, and had so long been subject to a leucorrhœal discharge, that she did not attach much importance to it. On inquiry, I found, that although always of a delicate constitution, she had enjoyed good health until she married, at the age of twenty-one. Within a year or two after her marriage, menstruation, which had always been rather scanty, became still more so, and rather painful, and she also became subject to slight leucorrhœal discharge, not only before and after menstruation, but in the interval of the monthly periods. She gradually lost strength, experienced

nearly continual pain in the lower part of the back, and in the right side, and her digestion and general health became much impaired. In addition to the above symptoms, she was about this time attacked with intense bilious headach, attended by great pain in the right hypochondrium, and, occasionally, with bilious vomiting or diarrhoea. These attacks were most frequent in spring and in autumn. She had consulted several eminent physicians, and was nearly always under medical treatment, on several occasions for many months consecutively. By all her medical attendants she was considered to be labouring under disease of the liver, and she took blue pill and calomel in large quantities. The existence of uterine disease was never even suspected. When medicinal means had been tried with but little or no benefit, she was generally ordered to the sea-side, or to some watering place. The change of air and scene was often beneficial, but very soon after her return to town the bilious attacks nearly always again made their appearance. It was after experiencing great improvement from one of these excursions that I first saw her.

On minutely inquiring into the state of her health, I found that the amelioration which had taken place during her residence in Devonshire, consisted, principally, in the subsidence of the bilious symptoms, to which, alone, her attention had been hitherto directed. She had lost the sick headach under which she generally laboured; the pain in the hypochondrium was less; there had been no bilious vomiting or purging for some weeks, and the appetite and strength had improved. On the other hand, I found that there was still, as there had been for years, a slight yellow vaginal discharge; that there was constant pain in the back, attributed to weakness; that there was pain in the right inguinal region, below the hypochondrium, in the situation of the ovaries; and that after fatigue, and often without, there was a sensation of weight and fulness about the lower part of the body. These symptoms indicated, nearly to a certainty, the existence of an inflammatory affection of the cervix, and absolutely necessitated further investigation. On examining per vaginam, I found the cervix rather high than otherwise, voluminous, rather indurated, and extremely retroverted; so much so, that the os lay, as it were, on the posterior wall of the vagina. The os was open, soft, and velvety. On withdrawing the finger, I found it tinged with blood at the extremity. There was thus conclusive evidence of the existence of an ulcerated surface, as also of a state of the cervix indicating long-continued inflammatory action. The speculum revealed a chronically inflamed state of the vulva and vagina, which were of a dark-red colour, painful on pressure, and extremely congested. The cervix was so retroverted as to be brought with difficulty into view, even with the assistance of the bivalve speculum. It was voluminous, of a dark-red hue, resistant on pressure, and presented around the os an ulceration of the size of a shilling, which evidently penetrated into the open os. There was so much irritation and inflammation about the uterine system generally, that I thought it best to begin the treatment by the application of leeches to the cervix. I accordingly applied eight a few days afterwards.

The leeches bled most profusely, but their application was followed, nearly immediately, by one of the patient's ordinary bilious attacks, which she had felt coming on since the day I first examined her. The attack was evidently brought on by the mental distress which she could not help feeling at being obliged to submit to so disagreeable a mode of treatment. It was, however, much less violent than the preceding ones, no vomiting taking place, and the symptoms being confined to diarrhoea, headach, and nausea. The intensity of the attack was, no doubt, mitigated by the copious depletion from the uterine system which she had undergone. Such as it was, however, it obliged me to suspend entirely all uterine treatment for the time being. In the course of ten days, after the administration of a mild purgative or two, the bilious symptoms entirely subsided, leaving the patient much weaker and more poorly than when I first saw her. The tongue was white; she complained of cardialgia and regurgitation, &c., all old symptoms; the urine was loaded with lithates.

On examining my patient, December 10th, I found the vagina and cervix still much congested, inflamed, and painful, and I therefore again applied leeches, their application being again followed by a copious flow of blood, and great relief. This time no untoward symptom followed. Relief was already felt from the measures adopted, and confidence established. Astringent injections and tepid hip-baths were ordered. On the 17th, I found much less congestion of the uterine system, and touched the ulceration, which was more healthy in its appearance, with the pernitrate of mercury. A few

days afterwards, the menses appeared, only lasting two days, as usual, and very scanty. Their disappearance was followed by a return of the pelvic weight, which had disappeared since the previous application of leeches, by increased lumbar and hypogastric pain, by cephalalgia, and pain in the hypogastrium. On examining with the speculum, on the 23rd, I found such intense vaginal congestion, that I was induced to reapply leeches. Their use was attended with immediate relief. On the 31st, I found that the congestion of the vagina and cervix had much diminished, and I merely applied the pernitrate of mercury, insisting, at the same time, on the use of cold astringent vaginal injections, and tepid hip-baths night and morning. I had to contend with obstinate constipation, in a person who for years had taken opening medicine nearly every night. With a view to overcome this condition of the digestive system, I ordered brown bread to be eaten as an article of diet, and half a pint of cold water to be injected into the rectum every morning after breakfast, whether the bowels were moved or not. In case of inaction, and then only, I prescribed a mild purgative pill, to be taken at bed-time. No stimulants of any description; merely weak tea, and toast-and-water for beverage; fish and fowl to be taken on alternate days, once only in the twenty-four hours; rest in the horizontal posture; little or no exercise. I at first gave, internally, the citrate of iron, then the sesquioxide of iron; but finding they were not borne well by the stomach, I substituted a vegetable bitter, with small doses of the carbonate of soda, and subsequently the mineral acids.

Under this treatment, coupled with the local cauterization of the ulceration once a week, either with the pernitrate of mercury or the nitrate of silver, all uterine inflammation rapidly subsided. By the middle of January the vagina had assumed nearly its natural hue; the cervix was much less voluminous, and less congested; the ulceration was two-thirds healed; the lumbar and hypogastric pains had nearly disappeared; the bowels had begun to act naturally without medicine; and the rest was better, as also the appetite and the spirits. Family reasons requiring this lady's absence from town for about three weeks, she requested to be allowed to leave for that time, promising to remain very quiet, and to follow implicitly the rules laid down for her guidance. Although doubting the propriety of the cessation of the cauterization for so long a period, I consented, thinking that the injections might suffice to carry the cure to an end.

Three weeks later, on the 5th of February, I was summoned to see my patient, who had just returned to town in a very desponding state of mind. For the first week after her departure, she had continued to feel well. Her lumbar and hypogastric pains then returned; and on the menses appearing, (which they did shortly afterwards,) she was again seized with a very intense bilious attack, attended with severe vomiting. She had not recovered when I saw her, and was still suffering from headach, nausea, and pain in the hypochondrium. She felt convinced, she said, that the disease of the womb was worse. On using the speculum, I found the uterine system intensely congested, and the ulceration irritable, and rather larger than when I had last seen it. It was evident that the disease had relapsed for want of local treatment. I cauterized the ulceration freely, merely advising rest and persistence in the other measures which she had been following, thinking it probable that the cauterization alone would allay the irritability. The cauterization was followed, as it usually is, by increased pain for that day and the next, but on the third and following ones great relief was experienced.

From that epoch, under regular cauterization of the ulcerated surface, and constant attention to the rules of diet &c. above mentioned, the amelioration of the patient's state, both local and general, gradually progressed. The discharge, which had long been diminishing, gradually disappeared, except for a day or two after the cauterization; the cervix softened and lessened as the ulceration healed, and all trace of irritation or congestion disappeared from the vulva or vagina. As the uterine state improved, so did the general health. The urine became nearly free from the lithates with which it was at first loaded; the tongue assumed a healthy appearance; all dyspeptic symptoms disappeared; and the rest became good. Although drinking nothing but water, and living principally on fish, this patient gradually got fat. The ulceration was not, however, completely healed until the latter end of March; for in February, at the menstrual epoch, there was great uterine and vaginal congestion, with slight headach, but nothing further. In March, the uterine congestion alone was present at the menstrual epoch; no bilious symptoms manifested themselves.

Since the ulceration has cicatrized, more than a month has elapsed, and the cicatrix remains perfectly sound. The patient is perfectly free from all uterine symptoms, and is fatter and in better health than she has been for years. She has passed over the spring without any fresh bilious attack—a novel circumstance.

Remarks.—In the above case, the uterine disease was evidently the principal malady, and the cause of the bilious symptoms that for years concealed the uterine affection. It is singular to what an extent both the patient and her medical attendants were deceived by the liver symptoms. She was all along supposed to have only a "diseased liver," and was totally unconscious of the existence of uterine disease when I first saw her; and yet, as soon as I had pointed out the real meaning of the lumbar, hypogastric, and ovarian pains, and of the pelvic fulness and heaviness, she became so fully alive to the presence and meaning of these symptoms, and to their comparative intensity, that she could always tell me, by her own sensations, what was the state of the ulceration, even before I had used the speculum. Indeed, she soon became so fully convinced—as is usually the case—of the absolute necessity of resorting to the local treatment of the ulcer, that all natural repugnance was mastered, and the treatment submitted to cheerfully. The monthly coincidence between the uterine inflammatory congestion which followed the catamenia, and the appearance of the liver symptoms, shows, in the most conclusive manner, that the latter were merely the result of the former. It is worthy of remark, that this lady,—who had for years been living substantially, by the advice of her medical attendants, in order to gain strength,—as soon as the disease that was lurking in the system was cured, got fat in a few months on water, and a light diet of fish, poultry, and rice. When I ceased regular attendance, she had scarcely taken a grain of opening medicine for two months—a nearly phenomenal circumstance for her, the bowels acting regularly and easily.

Ulceration following parturition; preceded by inflammation of the mucous membrane of the cervix and vagina, recognised instrumentally; severe dyspeptic symptoms; peculiar irritability of the ulcer and of the genital mucous surface.

On Jan. 29th, 1846, Jane C—, aged 24, came under my care as a dispensary patient. Of delicate constitution, and spare habit of body, she has been weak and occasionally ailing since her childhood. The catamenia appeared at fifteen, and continued to occur regularly until she became pregnant, two months after her marriage, which took place at the age of twenty-two. The menses have always been difficult, lasting eight days, with considerable flow of blood, and continued pain. She often had leucorrhœal discharge when unmarried, with pain in the loins, cardialgia, and dyspeptic symptoms. She was confined, for the first time, about eight months ago; the labour was tedious, but she rallied rapidly. The lochial discharge was followed by a slight yellow leucorrhœal secretion, which gradually became more abundant after the first five or six weeks. She had no uneasy sensations, however, until congress took place, about five weeks after her confinement; it was extremely painful, and from that time she experienced pain in the loins and hypogastric region, accompanied by increased leucorrhœal discharge. Three months after delivery, finding these symptoms unabated, she applied to me at the dispensary, by the advice of a sister, then under my care for uterine disease.

On examination, I found the vulva, vagina, and mucous surface of the uterine neck, red, inflamed, and secreting rather abundantly muco-pus; but there was no ulceration or enlargement of the cervix, which was, on the contrary, more than usually small. As she was nursing, there had been no return of the menses. The general health was tolerably good. I advised her at once to submit to proper treatment, stating, that there was nothing seriously amiss with her, but that if the disease were neglected, it would inevitably become serious. This advice, however, she did not follow, for it was only three months afterwards that she again applied at the dispensary.

She then stated, that not having at once been able to obtain a letter, and hoping also that the symptoms would subside, she had kept deferring placing herself under treatment. Instead of diminishing, however, the pain in the lumbar and hypogastric regions, the leucorrhœal discharge and the dyspeptic symptoms had gradually increased. During the last three weeks she had rejected part of the food taken at every meal, and had experienced great pain in the epigastric region and chest; her rest had been disturbed, and she had felt altogether very unwell. She had experienced no bearing-down sensations.

On examination, digitally, I found a well-marked velvety surface around the os uteri, which was more open than natural; the speculum showed the vagina and vulva to be much inflamed; the cervix itself was ulcerated, presenting around the os a florid sore, of the size of a sixpence. The cervix was small, congested, but soft throughout its entire tissue. The ulcerated surface was acutely sensible when pressure was exercised upon it. The inflammation of the mucous surface of the uterine neck, and vagina, which I had recognised three months previously, not having been checked, had evidently terminated in ulceration. Treatment—cauterization with the nitrate of silver, injections with a weak solution of the sulphate of zinc. Internally, infusion of roses with small doses of sulphate of magnesia and tincture of hyoscyamus. Light diet.

Feb. 5th.—The vomiting has not much diminished; the pains in the loins and abdomen are as severe, and the leucorrhœal discharge is even more abundant. On examining, locally, I found that the inflammation of the vagina had increased so much that it was impossible to introduce the speculum. The cavity of the vagina was very hot, and throughout painful on being touched. The local treatment adopted (cauterization and astringent injections) had apparently increased the inflammation, owing to an unusually irritable state of the mucous surfaces. It was accordingly suspended. Tepid hip-baths, and cold-water vaginal injections night and morning, were substituted, and the patient was directed to introduce, night and morning, gradually, into the vagina, after using the injections, a ball of cotton, previously soaked in water, and tied to a piece of silk by one extremity, in order that it might be easily withdrawn. This permanent plugging of the vagina was resorted to with a view to prevent the inflamed surfaces of the vagina from coming into contact. The patient was ordered to take tepid hip-baths, to remain quiet, abstaining from all stimulants, and confining herself to a very light diet. The saline mixture was continued.

Under the above treatment, the local inflammatory symptoms rapidly gave way. By the 20th, the intensity of the vaginal and uterine irritability had subsided, as evidenced by the decrease in the leucorrhœal discharge, and in the lumbar and hypogastric pains. The gastric susceptibility simultaneously gave way, the vomiting ceasing; the appetite had never failed to any extent. The state of the vagina no longer interfering with the introduction of the speculum, that instrument was used. The mucous membrane of the vagina and cervix was still inflamed, but not to any great extent. The ulceration was the same as when I first saw her, neither larger nor smaller, but perhaps a little less irritable. I touched it freely with the pernitrate of mercury, and ordered the cold-water injections only to be persevered in, the plugging being laid aside. The rest of the treatment as before.

27th.—The cauterization of last week was attended with a little pain for the first day or two, as also with increased discharge, but this state of things soon gave way to great comparative ease. To-day the ulceration has lost all appearance of irritability, and the surrounding inflammatory congestion is much diminished. The vaginitis has also diminished; there is but little pain in the back or hypogastrium; the vomiting has ceased entirely. She feels much better. Same treatment.

March 17th.—There is still a good deal of redness and congestion of the vagina and cervix, but the ulceration is nearly healed. It can only be perceived just within the os, and immediately around, by opening its lips with the bivalve speculum. She has no pain in the back, and but a very slight, nearly transparent, leucorrhœal discharge. Cauterization with the pernitrate of mercury. Same treatment.

Although the ulceration was thus reduced to a mere excoriation within the os, which could not be perceived without careful examination, it did not heal for several weeks, the vagina remaining red and congested. On several occasions I tried astringent injections, but always found them bring on pain and irritation. I was therefore obliged to confine myself to the use of cold water, combined with that of cotton soaked in water, and introduced into the vagina. There was scarcely any discharge.

On the 14th of April, the redness and congestion of the vagina and cervix had nearly disappeared, and it was impossible to perceive any trace of ulceration within the os. Nevertheless, as the introduction of the uterine probe was followed by the issue of several drops of blood, I concluded that the ulceration within the os was not quite healed, and I introduced a small piece of nitrate of silver as far as it would reach.

On the 21st, I found that all trace of inflammatory or ulcerative disease had disappeared, with the exception of a slight abnormal redness of the vagina, unaccompanied, however, by any tenderness or any morbid secretion. The cervix was soft

and small; the os perfectly healed, and occupied by a drop of transparent mucus. The probe, on being passed into it, gave rise neither to pain nor to the issue of blood. She had no pain in the lumbar or hypogastric regions, and felt perfectly well. All dyspeptic symptoms had disappeared, with the exception of a slight sensation of fullness after meals. Appetite and rest good. On dismissing her, I advised her to use the cold-water vaginal injections for some months, night and morning.

Remarks.—The above case presents several interesting features. It illustrates in an admirable manner the probable origin of most of these ulcerative affections of the cervix uteri, as I was enabled to examine the patient both before and after the commencement of the ulcerative disease. When I first examined her, a few weeks after her confinement, there was merely evidence of a subacute state of inflammation of the mucous surface of the cervix and vagina. This having been neglected, ulceration set in,—the usual course of things, as I have elsewhere shown,—and on my second examination, three months later, there was this important complication to treat. It will be remarked, however, that the disease being very recent, although in a woman lately confined, it was limited to the mucous surface; there was no general induration, and, consequently, no prolapsus or bearing-down. The dyspeptic and gastric symptoms were very marked and distressing. Their intensity may be partly ascribed to the very peculiar and unusual irritability of the ulceration and of the vaginal mucous surface—irritability rendering impossible the use of those astringent remedies which are usually so efficacious in vaginitis. The nitrate of silver was evidently powerless to modify this irritable state of the ulcer, to effect which I had to employ a more powerful caustic—the pernitrate of mercury: this I often find to be the case. Throughout the treatment I was only able to employ cold water, as a topical remedy, to the vagina. In obstinate vaginitis, the plugging with cotton or lint soaked in water, or in an astringent lotion, is often a valuable means of treatment. The redness which remained when I dismissed the patient I scarcely consider morbid, as it was unaccompanied by sensibility or by any morbid secretion. It, however, indicates a state of congestion which necessarily requires the patient to persist in the use of precautionary measures. In this case the disease was attended to early, owing to the accidental circumstance of my treating a sister for a similar disease. In nineteen cases out of twenty, patients, when I first see them, have been suffering for years, and present the disease in a more aggravated form. This young woman was nursing during all the time she was treated, and the menses were consequently absent.

RARE CASE OF ABSCESS OF THE HEART,

AND ACCOUNT OF THE POST-MORTEM APPEARANCES; WITH REMARKS.

By E. J. CHANCE, Esq. F.R.C.S., Surgeon to the
Metropolitan Free Hospital.

On the evening of the 23rd of December, 1845, I was requested to attend next day, and make a post-mortem examination of the body of a youth who had died somewhat suddenly and unexpectedly, under a train of symptoms which in nowise expressed the nature of the cause. I accordingly went, and was then introduced to Mr. Ray, of Elizabeth-street, Eaton-square, the gentleman under whose care the case had been, and also to Mr. Meates, a neighbouring practitioner, who had seen the patient during life, in conjunction with Mr. Ray.

I am enabled, through the kindness of Mr. Ray, and my knowledge of the youth and of his friends, to furnish the following history of the case:—

R. P—, aged thirteen, a lively, but delicate lad, of a scrofulous diathesis, was apparently in perfect health on Sunday, Dec. 21st, 1845, and partook of a hearty dinner of roast pork, &c. After dinner, he complained of pain in the stomach and head; but this was considered by his friends trifling, and he was sent for a walk. He returned to tea at five o'clock, having been absent somewhat less than an hour. At tea-time it was supposed that his stomach-ach had left him, as he again made a hearty meal, toasting bread for himself, and thus marking his own desire for it. About eight o'clock in the evening, he retired to bed, where he had not long been, before he was heard to cry; and upon his sister going to him, he requested her to put a basin by his side, as he felt sick. No vomiting, however, occurred, until about two o'clock on the Monday morning, when his brother and sister were awakened by his cries, and went to his assistance. Full vomiting now ensued, consisting evidently of the food

partaken of on the previous day, and which, as the brother describes it, “appeared unchanged, or as if but just eaten.” After the vomiting had ceased, he laid himself down, without speaking, and covered himself up. The brother thought nothing of his not speaking to him, which he attributed to the fatigue of vomiting; and seeing, as he supposed, that the vomiting had ceased, and that there was a disposition to sleep, he (the brother) returned again to bed.

In the morning, the brother went to arouse him, to get ready to accompany him to business, but finding him, as he thought, exceedingly sleepy and fatigued, he came to the determination to let him remain at home that day. An hour or two after this, the sister went to him, when he still appeared in the same condition, or, as they describe it, “in a drowsy, half-unconscious state, disinclined to move or speak.” The sister now becoming somewhat alarmed, spoke to her landlady, who advised her to let the medical gentleman who was attending her child come up and see him. This was agreed to, and accordingly, about eleven o'clock in the morning, he was seen by Mr. Ray, of Elizabeth-street, Eaton-square.

Mr. Ray stated to me that he “found him in a low state, disinclined to speak; pallid and faint; pulse rapid and indistinct; tongue thickly coated in the middle by a brown dry mark, about as wide as the finger, on each side of which it was white, while the edges were red. He looked ‘pitifully, without speaking;’ but upon being pressed to give an answer, he said he was sick, and had pain in the stomach. Upon pressure being made on the right hypochondriac region, he flushed, as if it gave him pain. He looked like a boy that had been sick—viz., pallid and faint; and these symptoms I at first thought were merely the consequence of the violent vomiting: I, however, determined to see him again in an hour or two. I sent some medicine, but none could be got into his mouth, he kept it so firmly closed. On visiting him again, I found him sitting up, much in the same state. Attempts were now made to drench him with the medicine, and a little was got between the teeth, upon which, retching supervened, and about a table-spoonful of green bilious matter was ejected.”

Immediately after Mr. Ray left, he gradually became more and more insensible; so that upon Mr. Ray visiting him again at two o'clock in the afternoon, he found him “in a state of perfect coma, with contracted pupils, the mouth firmly closed, and resisting all attempts to open it, the pulse too rapid and fluttering to be counted, and with occasional convulsive movements of the arms and hands.”

On the Tuesday morning he was again seen by Mr. Ray, who states that he was in exactly the same condition as on the night before, only more convulsed; and that upon the left cheek (on the prominence of the malar bone) a distinct pustular eruption had made its appearance, as full and distinct as the eruption of small-pox, occupying a space of the size of a half-crown piece, and having an inflamed base; besides which there were also a few pustules on the hands. During the afternoon, he moaned much.

It was now determined that a consultation should be had with Sir James Clark, and an appointment was accordingly made for five o'clock, but at three o'clock previously he expired.

It is worthy of remark, that previous to the rapid and fatal attack that I have just described, no surmise whatever was entertained by his friends of there being anything the matter with him. He was as lively as usual on the Saturday, and, indeed, on the Sunday morning. He had no difficulty of breathing, nor was he at all subject to cough. He experienced no palpitation of the heart or hurried circulation that was ever complained of; he would run up and down the warehouse stairs more nimbly than any other boy on the premises; and but a few days before his death, he was engaged in running a race. He was naturally of a pallid complexion; he enjoyed a good appetite, but lived during the week irregularly, and principally upon bread and butter or cheese, with but little meat, owing to his providing his own dinner, as his place of business was in town, four miles from his sister's residence—a circumstance that I mention because it was at first supposed that the primary attack of vomiting arose from his having partaken of a hearty meal of roast pork, and thus overloaded his stomach with a species of food it was not accustomed to, and which kind of food, moreover, is known to disagree with many persons. It is also curious that there was no expression of pain in the face throughout the whole time: he appeared merely faint and pallid.

Post-mortem examination twenty hours after death.—Upon removing the calvarium, the veins and sinuses of the dura mater were found slightly distended with blood. The dura mater, the arachnoid, and the pia mater appeared quite healthy.

The vessels upon the convolutions were rather more congested than usual; and upon cutting into the substance of the brain, blood flowed freely from its minute vessels. The ventricles were empty. No inflamed part or point was detected anywhere,—although the cerebrum and cerebellum were both cut to pieces,—neither on their surface nor in their substance. The mouth was so firmly closed, that even with a large chisel, inserted between the teeth, it was impossible to wrench it open; the jaw was therefore sawn across, and the tongue, pharynx, trachea, and œsophagus, were removed below the thyroid cartilage. The tongue was thickly coated; but except this, every part was perfectly healthy, for there was not a trace of either redness or swelling on any portion. The trachea and larynx were both healthy. Upon opening the chest, we found the lungs light-coloured, and to all appearance perfectly healthy; no fluid in the chest. The pericardium was next opened, whereupon it was found to contain a turbid yellowish fluid resembling pus and water, or the fluid found in the stomach. (A gentleman present immediately exclaimed, "There must surely be an opening communicating with the stomach.") We collected about half an ounce. An examination was then instituted to ascertain if any communication existed between the pericardium and any other organ, but none was found to exist.

The vessels upon the heart were turgid and of large size, and the heart itself was studded all over with black and red spots of effused blood, varying in size from a mere point to a third of an inch in diameter. These spots were more numerous upon the left ventricle than anywhere else, and especially upon its upper and posterior part. The heart was also, to my judgment, a little smaller than usual.

The structure of the left ventricle had a particularly hard or knotted feel, resembling what I should suppose would be its feel if it were in a state of violent contraction. Upon the anterior surface of the apex of the left ventricle there was a highly-inflamed spot, as large as a shilling, covered with coagulated lymph, having a rough aspect, as if it had been attached to, and torn away from, another part, which, in fact, was the case, as will be seen hereafter. The surface beneath this spot was visibly elevated, presenting the appearance of an abscess in other parts of the body. The cavity of the right auricle and ventricle was occupied by a large fibrinous clot, which passed up into the pulmonary artery. Each part appeared healthy: the foramen ovale was sufficiently open to admit the little finger through it.

On cutting into the left ventricle, which was done by an incision from the apex to the base, directly through the prominent and inflamed spot, a very evident difference was found to exist in the texture of the swollen part—a difference that was evident to the eye of the bystander, from the resistance which it offered to the passage of the knife through it, as well as to the feeling of the examiner. A large and yellow fatty-looking clot occupied the cavity, and in the centre of the clot there was at least a drachm of black blood enclosed. Another clot passed up the aorta. The texture of the ventricle was very firm and dark-coloured, but immediately beneath the inflamed and swollen part there was an evident difference, it being a shade lighter in colour for a space a little larger than a nut. It also gave the sensation of greater firmness when touched with the point of the knife, a circumstance that was supposed to arise from induration from the subjacent inflammation. Upon cutting across this spot transversely, a slit, about half an inch wide, was discovered in the centre of the thickening, composing the edges of a cavity leading both ways. The interior was smooth, and the structure around it condensed, and of a lighter colour; a probe passed into the slit demonstrated the existence of a cavity of about half an inch in diameter, having an external opening in the centre of the inflamed spot at the apex of the ventricle, and which opening was covered up, or over merely, by the coagulated lymph upon the surface of the heart—i.e., the sides of the opening were not in contact and agglutinated, but from the edges of the opening, the lymph passed across, covering it up, so that the passage of the probe outwardly was prevented by the lymph, and by the lymph only, through which its point could be seen glistening. In the opposite direction the probe passed freely into the cavity of the ventricle, beneath one of the columnæ carneæ. The pericardium corresponding to the inflamed spot at the apex of the heart was violently inflamed, of a dark colour, thickened, and covered with a deposit corresponding in appearance and texture with the coagulated lymph upon the apex of the heart. The discoloration passed entirely through both the serous and the fibrous portions of the pericardium, and was visible on the outside. The intensely inflamed surface upon the pericardium was about as large as

a five-shilling piece, from and around which the inflammation gradually subsided. The serous portion of the pericardium covering the origins of the pulmonary artery and of the aorta were much inflamed, especially the latter, the vessels of which were so injected as to give it an uniform red appearance.

At the root of the lungs of the left side a single gland was found enlarged to the size of a nut, and containing half cheesy and half (in appearance) chalky matter.

As permission had been granted me to retain the heart as a preparation, I cut roughly across the root of the lungs, and removed the pericardium entirely from its attachment to the diaphragm. I mention this, because, having devoted between four and five hours to the examination, we nevertheless omitted to cut into the substance of the lungs, as we put them by at the time, in consequence of their healthy appearance, intending to examine them before closing the body. This, however, we forgot—a circumstance that I have now much to regret, as doubtless it would have been replete with interest, for upon examining the bronchi, in my preparation, after I got home, I found the mucous membrane intensely inflamed, and quite of a chocolate colour, with numerous vessels running in different directions. From the intensity of the inflammation, I have no doubt that it must have passed throughout all their ramifications. It must not, however, be forgotten, that the trachea, down as low as the thyroid cartilage, was not in the least inflamed.

Upon opening the abdomen, the general appearance of the peritonæum was natural, but we were astounded at the appearance of the mucous membrane of the stomach, duodenum, jejunum, and ilium, in all of which organs it was intensely inflamed. In the stomach, the whole of the interior was inflamed, with the exception of the pylorus, and about an inch in front of it. The most inflamed part was the anterior wall of the great extremity, the mucous membrane of which was much corrugated, and its parietes were thickened. So intense was the inflammation, that my first idea was that poison had been taken, and I put the stomach and its contents away for further examination. The stomach contained only some grumous fluid. The interior of the duodenum was intensely inflamed, especially the valvulæ conniventes. From the duodenum the inflammation passed down the jejunum and ileum, becoming less and less intense, and in smaller and smaller patches, the further we proceeded, until it entirely disappeared, a little before the bowel terminated in the cæcum. The cæcum and large intestines were healthy, save and except, here and there, very small spots of inflammation, and these almost confined to the descending colon. No solid matter whatever was found in any part of the intestinal canal. The liver was of a natural size, and the only morbid appearances were six or eight small tubercles (about as large as peas) on the anterior edge of the left lobe, which were in progress towards suppuration; and upon the upper surface of the right lobe there was a light streak, two or three inches long, and about an inch wide. Upon cutting into the liver, the alteration of colour passed into its substance for at least an inch in depth. The kidneys were healthy; bladder full, but healthy. On the right cheek, over the malar bone, the situation of the pustules spoken of, there were several discoloured spots, none of which, however, contained fluid of any kind.

Remarks.—The foregoing case appears to me extremely interesting in several points of view. In the first place, from the rarity of such an affection—i.e., abscess of the substance of the heart. If it be not, indeed, the only case upon record, I have not been able, in my own research, or upon inquiry among my medical friends, to discover any other. Mr. Owen, of the Royal College of Surgeons, informs me that he has seen superficial ulceration of the heart, but that he never saw or heard of a case before in which abscess existed.

2ndly.—It is deeply interesting, considered with respect to the few, trifling, and ambiguous symptoms which preceded death, and the disproportion existing between them and the importance of the organs affected by such extensive disease.

3rdly.—What was the cause of death? Was it the effect of the inflammation of the stomach and bowels alone? If so, how does it happen that no other symptoms exhibited themselves, and that during life no idea was entertained of such an affection? Or was it the direct influence of the abscess in the heart?

4thly.—What was the cause of the inflammation of the stomach and bowels—i.e., was it idiopathic or symptomatic?

And lastly.—In a medico-legal point of view, was it the effect of poison?

It is not my intention to enter minutely upon the consideration of each of these interesting points. I cannot, however, refrain from offering a few remarks upon some of them, and

in so doing, my object will be rather to endeavour to elicit some observations that may be instructing to myself, than any hope on my part of communicating such.

The only case that I am acquainted with, bearing any analogy to the present, is that of General Dick, who died suddenly on the 13th March, 1844, under circumstances that, eighteen months afterwards, excited suspicion, and led to an inquest. In this case it appears from the report, that at "eleven o'clock in the morning, on the 13th of March, he was in his usual health, and at half-past twelve on the same day he was dead. He partook of his breakfast at eight o'clock, read prayers aloud at ten, experiencing no difficulty in reading; had a cup of chocolate at a quarter past eleven; that, after this, he had giddiness and nausea, and, when he tried to read, the letters went round and round."—*Dr. Daniell's evidence.*

They had tried to give him some peppermint water, "but he did not swallow it; he was paler than usual, and appeared to be inclined for sleep, with his mouth a little open, and his eyes a little dim; that a little past twelve o'clock, a gentleman (Captain Henderson) called on him, and upon the servant announcing him, the general said, 'Very well, Cuff, I will go and see him.' That in a few minutes after this, the general's grandson called the servant, saying, 'The general has had a fit.' That upon the servant going, he found him 'on his hands and knees by the side of the bed.' That he lifted him up, and placed him in his lap, whereupon the general gave one long sigh, and expired."

The post-mortem examination in this case was conducted by Mr. T. Barrett, surgeon, Bath, and the stomach &c. by Mr. Herapath, as there were suspicions of his having been poisoned; but no trace of poison of any kind could be detected, though the stomach, the duodenum, the jejunum, and the ilium, exhibited patches of inflammation, "sufficient," says Mr. Barrett, "to cause death," and that "a nervous shock would only accelerate it." The heart was shrunk, but exhibited no disease.

Dr. Daniell, another witness, stated that he "almost entirely coincided with what Mr. Barrett had said, except that he had seen cases of spontaneous inflammation where there had been no previous disease, which had caused so great a shock to the nervous system as to produce syncope and death—death quite as sudden as that of General Dick. He had seen cases of the kind in his own practice, in aged persons, and in quite as good health as General Dick." The verdict in this case was, "Died from inflammation of stomach and bowels, but how produced there is no evidence to show."

The points of resemblance in these cases are great. In both, the following are nearly all the symptoms, in the passage from supposed good health to death—viz., nausea and vomiting, pallor, inclination to sleep, coma, and death. In both, the post-mortem examination displays extensive inflammation of the stomach, duodenum, jejunum, and ilium; in the one, it is true, alone, and therefore, being the sole cause of death, idiopathic, while in the other there is superadded inflammation, and abscess of the heart, &c., which in itself constitutes a great point of difference, and may have been the cause; nevertheless, the points of similarity are so many that it has appeared to me useful to place them in juxtaposition.

The most interesting point in the case of R. P.—is, the determination of the question as to whether the violent inflammation of the mucous membrane of the lungs and intestinal canal was idiopathic or symptomatic; in fact, to determine (as I put poison entirely out of the question) whether the introduction of pus into the blood had any share in its production. That pus was introduced into the circulation I feel assured, and, in all probability, in the following manner:—The abscess in the walls of the ventricle became matured, and burst into the pericardium, during which time, as the heart is not one of the most sensitive organs, (indeed, appears to be very little sensitive,) no disease was complained of. As soon, however, as the rupture of the external wall of the abscess took place, the inflammation spread itself upon the serous covering, and became propagated to the serous layer opposite to it, on the pericardium; and, as a consequence, a deposition of coagulable lymph took place, agglutinating the pericardium to the heart, and closing over the opening out of the abscess. The opening into the pericardium being closed, a fresh collection of pus, doubtless, took place, and formed for itself the opening into the ventricle beneath the *carneæ columnæ*; and thus at each impulse of the heart a portion of pus became mixed with the blood.

Many of the symptoms described by Mr. Arnott as resulting from the introduction of pus into the blood are similar to those experienced by R. P.—. Thus he speaks of the pulse as from 130 to 140 in a minute; sickness and violent vomiting, especially of bilious matter; when left to himself the patient

is apt to mutter incoherently, but becomes clear and collected when addressed; secondary inflammation of violent character; that the fatal issue frequently takes place under a rapidly developed attack of inflammation of the viscera of the chest; and that, whether this be observed or not, death is always preceded by symptoms of extreme exhaustion, a rapid, feeble pulse, dry brown or black tongue, teeth and lips covered with sordes, haggard expression, low delirium, &c. The similarity between these symptoms and those in the case I have narrated cannot fail to be observed, the only difference being in the different rapidity with which they progress. I would therefore ask—Is it not probable that the whole of the extensive inflammation in the stomach &c. in R. P.—was the effect of the pus circulated in the blood, and that the difference in the rapidity of the development of the inflammation, and of its termination, as contrasted with Mr. Arnott's statement, arose from the circumstance, that in Mr. Arnott's description the pus gets gradually into the blood by absorption, &c., whereas, in R. P.—'s case, it was collected together in an abscess, and then suddenly, and in sufficient quantity, distributed to every part of the body, to work its particular and direful effects?*

Since the above case was read to the Westminster Medical Society, I accidentally became aware that a preparation of "abscess in the left ventricle" existed in the Anatomical Museum at Fort Pitt, Chatham; and I am now, through the kindness of Staff-surgeon G. Williamson, Esq., M.D., able to append a short history of that case. I append it, in order that two undoubted cases of abscess in the substance of the heart, the preparations of which are in existence, may be recorded together, inasmuch as, from the rarity of the disease, it is believed by many persons never to have existed: and even Baillie, in his "Morbidity Anatomy," says,—"Authors have mentioned cases of abscesses and ulcers of the heart; but these I am persuaded are extremely rare:" thus proving that he himself had never seen such.

It will be noticed that the symptoms in the two cases are not at all alike; but this is easily accounted for by the fact, that in the one case the disease occurs uncomplicated in a young and otherwise healthy subject, and, moreover, the abscess has burst into the cavity of the ventricle, to which latter fact I attribute all his peculiar symptoms; whereas, in the other, the abscess has not burst, and is complicated with a broken-down constitution and other extensive disease of the heart itself. The case is as follows:—

"Private Alexander F—, aged thirty-six, 72nd Highlanders, had been long addicted to excess in the use of wine and ardent spirits, from the effects of which he had been often in the hospital within the last four years. Sometimes he was subject to attacks of syncope and dyspnoea, with obstinate constipation, for which occasional small bleedings and strong cathartics were used, with immediate relief and benefit. Latterly, he became much depressed in spirits, indulged more freely in intemperance, was constantly sighing, and his sleep became irregular and broken. On the 16th October, 1832, he was received into the hospital, and his right leg and foot became oedematous. On the night of the 30th, he retired to bed, not having complained of anything particular, and in a few hours afterwards he was found dead.

"On examination after death, the pericardium was found to contain six ounces of turbid serum, its serous surface being highly vascular, and coated with a thin layer of lymph. In the parietes of the left ventricle, near the origin of the aorta, there exists the sac of a small abscess, capable of containing a bean: there is no evidence of its having burst. The aortic valves are diseased, and there is hypertrophy and dilatation of the left ventricle. The right cavities were filled with a firm white mass of fibrin, while those of the left side were distended with a dark-coloured blood, partly coagulated, but chiefly fluid. The lungs were in a state of engorgement, and adhered throughout to the costal pleurae. The liver was much enlarged, of a blue, mottled appearance, and its structure granular. The spleen was also much enlarged.

"Dated December, 1842, Cape of Good Hope."

ON THE TREATMENT OF TETANUS BY ACONITE.

By HENRY LANG, Esq., London.

THERE is, in THE LANCET of May 2nd, a communication from William Newton, Esq., headed "Case of Tetanus, in which Aconite was administered; and Remarks;" that I cannot allow to pass over without notice, as it is one of those many instances in which a valuable therapeutic agent is condemned, because it has been wrongly administered.

* Read before the Westminster Medical Society, (Feb. 7th, 1846.) &c.

Any one, I think, on reading the heading of the paper to which I allude, would suppose that aconite had been administered alone, or, at all events, without admixture with other agents as powerful, or perhaps more so, than itself, and to each of which the fault of not curing Mr. Newton's patient may be attributed, as well as to the aconite. The prescription was as follows:—Solution of muriate of morphia, three drachms; tincture of aconite, forty drops; tincture of tobacco, forty drops; camphor mixture, enough to make a mixture. A drachm to be taken every hour. And after three subsequent visits, Mr. Newton having seen that the medicine was duly administered, could not discover that "any one of the ingredients had produced its usual therapeutic effects." How could he suppose for a moment that any *one* agent, in such a jumble of stimulants and narcotics, should produce its usual therapeutic effects? And if he supposed that by the admixture an effect would be produced different from the action of the individual medicines, how absurd are his remarks, "My chief reliance would have been, in compliance with evidence, on tobacco as a therapeutic agent, but the present case seemed to forbid its use!" Why, then, did he administer it? If he supposed that the action of the tobacco would be altered by admixture with the other ingredients, why should not the same take place with regard to aconite? And, if so, how can he say that this case of his appears "partly to negative, or at least to limit, the alleged virtues of aconite?" If he supposed that each agent would act independently of the other, he clearly did his patient an injury, because he says, "The present case seemed to forbid the use of tobacco!"

The communication tends to deter others from using a valuable medicine, which, when properly administered, might prove of great benefit. Mr. Newton should know, before he calls into question the action of a medicine, that it must be administered without admixture,—its effects on the healthy as well as the unhealthy subject carefully noted,—and every symptom, favourable or unfavourable, marked,—taking into consideration age, sex, constitution, climate, &c. Then, and then only, will his observations on the therapeutic effects of medicines be valuable.

Bedford-square, May, 1846.

REVIEWS.

Tussis convulsiva, illustrata passim observationibus ex epidemiis Salisburgensibus annorum 1816—1840, &c. Scripsit Dr. CAROLUS ABERLE.

Hooping-cough; illustrated by Observations on Epidemics of that Disease occurring at Salzburg from 1816 to 1840. By Dr. CHARLES ABERLE.

THIS work, written in the Latin language, is one of those elaborate dissertations for which the physicians of the German school are remarkable. Profoundly versed in literature and languages, they collect from all times, and from every land where knowledge has raised her temples, some offering to a favourite shrine. By thus bringing together scattered pieces of information, although they may elicit no new truth, yet they preserve old ones from oblivion, and by arranging them in new positions, render them useful. Besides which, their productions on any subject which they may investigate contain all we can desire to know of *ascertained* facts and *recorded* opinions. Hence they impart, in a moderate compass, the literature of disease to the practical physician, and render needless to him the thousand volumes through which the indefatigable Teuton has waded; though for him Nature has still her depths, unsounded by the most profound scholar, and to examine which, our only means are a patient and reverential perusal of her volume.

The sources of Dr. Aberle's interesting monograph are, however, both practical inquiry and extensive reading. He has examined a number of authors, the names alone of whose works occupy five pages at the end of his treatise; and, what appears to us of infinitely more consequence, he has observed seven epidemics of the disease in Salzburg, assisted by his father, the professor of anatomy in that city.

We may remark, *in limine*, that the use of the Latin language in a work of this kind is highly objectionable. Both the English and German tongues are so copious, not merely

in scientific terms, but in those energetic phrases which at once convey to the mind a definition or a description, that it is a proceeding more savouring of pedantry than of either erudition or good sense, to employ a language which existed when medicine was in its infancy, and science scarcely in existence. Dr. Aberle's *definition* of the disease is tolerably good, but rather prolix. This is almost necessarily the case in medical definitions; for even in well-marked diseases we have frequently to consider the whole of the symptoms, important and trivial, rather than any striking phenomenon, before we hazard our diagnosis. "Hooping-cough," says our author, "is a contagious and generally epidemic disease, attacking children in preference to adults, and rarely occurring twice. It is marked by a violent, paroxysmal, spasmodic cough, almost threatening the patient with suffocation. The paroxysm commences by several short, broken, coughing expirations, and to these succeeds a sudden, deep, and protracted inspiration, producing an acute and peculiar sound. During the paroxysm, there are several alternations of this long inspiration, with a number of the short expirations. After a short, but uncertain, period, the fit of coughing terminates, being frequently succeeded by nausea or actual sickness."

History.—The "genesis" of this disease is involved in the same obscurity with that of many others. Some writers believe it to be of modern origin, like small-pox and measles. Of these authorities, one party would place its cradle in Africa or the East Indies; whilst another would assign it a birth-place, about the sixth century, on the shores of the northern seas, from which locality they believe it to have spread into the southern regions of Europe with those hordes of barbarians whose countless multitudes gradually made spoil of the dismembered empire of Rome. Our author believes it "to be coeval with all those diseases resulting from the effects of the vicissitudes of climate on the human frame." He assigns an antiquity to it as venerable as belongs to sore throat and cold in the head. "It is true, that the ancients make no distinct mention of this disease; but it must be remembered how many disorders were frequently included under one general term. The ancient authors, too, whose works have descended to us, lived in a bland and genial atmosphere; and the disease, when it appears there at the present day, is much modified by the climate." Hippocrates, however, mentions coughs distinguished by their long duration, and by their suffocative character. (*De Epidem. Morb.*, liber vi. sect. 7.) In other places, he notices the chronic debilitating coughs of children, (coughs which exhaust and weary.) His forty-sixth aphorism—"Those who become curved with cough or asthma before puberty, will surely die"—does not mean hooping-cough, but plainly refers to disease of the spine, with curvature affecting the organs of respiration. The Arabian physicians frequently notice a cough having the peculiar symptoms of hooping-cough without giving it a distinctive appellation. Thus Mesul describes one, to subdue which he gave narcotics; and these having failed, he applied sinapisms and caustics to the head. Avicenna gives an account of violent epidemic coughs, sometimes attended with spitting of blood, and during the paroxysms of which, the patients became black in the face. And in the ancient chronicle of Celseus, mention occurs of an epidemic cough attacking children, which spread through all Germany in the year 1173; but no detailed account or accurate description of it is extant."

Epidemic spasmodic coughs, therefore, seem to have existed in all ages; and although "the best writers agree with that eminent medical historian, Curtius Sprengel, that the hooping-cough was first accurately noticed and described at the beginning of the fifteenth century," yet even a perfect silence on the part of medical writers respecting it, prior to this time, should no more exclude it from the list of then-existing diseases, than the non-description of a plant by Dioscorides should cause its rejection from his *Flora* of his age, and

should make us believe it a species lately arisen from some potent source of spontaneous generation. It is a strong argument in favour of the antiquity of the disease, that those writers who speak of it in the fifteenth century do not seem to consider it as anything new.

Description.—Dr. Aberle divides the disease into three stages—1st, the catarrhal; 2ndly, the convulsive; and 3rdly, the period of decrease, or of the secondary or after-cough. (*Stadium decrementi seu tussis secundariæ.*) After describing these, he notices fully the various complications occasionally present, and the anomalous courses which the disorder sometimes takes.

We cannot recognise three stages as at all distinctly perceptible. Generally speaking, we have the disease commencing with a severe catarrh, but the catarrhal phenomena are frequently prolonged throughout the whole attack; and even when the convulsive character of the cough has ceased, a chronic catarrh of a most troublesome character has remained.

The disease rarely occurs sporadically, and “even its contagious character seems to be much influenced by the peculiar constitution of the atmosphere.” The time when its contagious character is in its highest intensity, appears to be when the patient is recovering, or rather, between what our learned author denominates the “*stadium acmes*,” and the “*stadium decrementi*.” The period when it is no longer capable of being propagated has not been determined. The time of incubation he states to be from five to seven days.

Prognosis.—Our prognosis depends on many circumstances. One of the most important is the age of the patient. The time of teething seems peculiarly dangerous. We add a table, containing the proportion of deaths at various ages.

Number of Patients.	Age.	Deaths.
29 ...	under six months ...	3
29 ...	above six and under twelve months ...	9
34 ...	between first and second year ...	7
39 ...	between second and third year ...	2

Sex has also, apparently, some influence. Of thirty-one who died, only ten were males. The differences of temperament, the season of the year, and the complication of the disorder with severe bronchitis or other disease, must all be points for consideration in forming our diagnosis.

Treatment.—In the treatment of the disease our author belongs to the rational school. He believes in no specific remedy able at once to control the disease. Like measles and scarlatina, its character may be modified by medical skill, but its career cannot be wholly checked. “Still, to each stage belongs an appropriate course of treatment, and we must assiduously watch for any complications.”

In the first stage, the same treatment should be adopted as in bronchial catarrh. Emollients and diaphoretics should be resorted to, with attention to the diet and the secretions. Sometimes antiphlogistics may be called for, but we should avoid weakening too much the powers of the system, as a long continuance of an exhausting and violent cough, with copious secretion, is the probable future prospect of our patient. Nor do debilitating measures by any means diminish the frequency or violence of the subsequent convulsive paroxysms.

In the second stage,—the “*stadium convulsivum*” of our author,—we may find the employment of mild opiates and anti-spasmodics of essential service. “Nothing can be done to shorten the duration of the individual paroxysms.”

In the third stage, that of the after-cough, (“*nachhusten*,” “*tussis decrementi*,”) we have two indications to fulfil. First, to diminish the excessive secretion, and to allay the cough; and secondly, to restore the general tone of the system. The former requires the use of gentle astringents and tonic expectorants; the second, well-directed therapeutic measures. In accomplishing both, tannin seems to have produced the happiest effects in Dr. Aberle's practice. He gives it either alone or in combination with benzoic acid, in doses of one-sixth, one-

half, or three-quarters of a grain. Professor Fuchs, however, employed it with the best results, especially in a case complicated with epistaxis, in doses of from one to three grains every second hour.

Instead of following our author through his chapters on the diagnosis of the disease, on the microscopical appearances, and on its nature and seat, we shall conclude our brief and imperfect sketch of the work by citing a few of his remarks on the relative value of various medicines. Amongst narcotics he assigns the highest place to belladonna. In the convulsive stage, much benefit was derived from doses of one-twelfth to one-half a grain of the powdered root thrice in the day. The combination recommended by Kopp, of small doses of this drug with ipecacuanha and sulphur was found to be of service. Opium and its preparations were not equally valuable, unless in cases complicated with diarrhoea. He does not attach much value to the extract of hemlock, nor to its combination with tartarized antimony, as advised by Schlesinger. Extract of henbane seems to have done good in some mild cases, but it cannot be relied on. Hydrocyanic acid he entirely disapproves of, both from its dangerous powers, and the great uncertainty of its operation.

Amongst anti-spasmodics, assafoetida was found to be of most value. It must not, however, be employed whilst any marked symptoms of fever, or of bronchial congestion, are present. In extremely irritable subjects musk proved beneficial. Hufeland's artificial musk was found to produce no effect. Emetics from time to time may be administered with advantage in every stage of the disease, but doses, with an interval of some days between them, are of more utility, than deranging the stomach and debilitating the system by their frequent repetition.

Ammoniated tincture of cochineal, given in five-drop doses of the following preparation, mornings and evenings, was found apparently to diminish the time occupied by the disease, and to render the period of convalescence less tedious. This tincture is made with powdered cochineal, half an ounce, liquor of ammonia, half an ounce, rectified spirits of wine, seven ounces. Mix.

With the before-mentioned doses, Dr. Wachtl, of Vienna, cured nine cases in from three to eleven days! It must be remembered that these cases occurred in the summer months, when cure is generally more rapid. How far might the ammonia contribute towards the good effects of this mixture!

In conclusion, we can recommend this work as a valuable addition to medical literature.

Outlines of the Course of Qualitative Analysis followed in the Giessen Laboratory. By HENRY WILL, Ph.D., Professor Extraordinary in the University of Giessen. With a Preface by BARON LIEBIG. pp. 103. 8vo, with tables.

“In order to benefit by a course of practical instruction in chemical analysis, the student must necessarily obtain a preliminary acquaintance with the general principles and theories of the science.

“The present work is designed for use in the laboratory; consequently everything which does not immediately refer to the processes of analysis is very properly excluded. If we consider, as we ought, the main design of practical instruction in a chemical laboratory to be the exercise of reflection and judgment, in order to a profound understanding of the scientific basis upon which the separation of bodies from each other depends, it is obvious that a work adapted for laboratory use must differ from one designed for self-instruction. In books of the latter kind it must be assumed that the reader has no previous knowledge; they must therefore include a description of a multitude of things not absolutely relevant to their professed object. With some of these, the student ought to become acquainted by attendance on lectures, or by reading an elementary work on the science, such as the preparation of re-agents; with others, (apparatus and instruments,) he becomes familiar immediately upon his entering the laboratory. Those, therefore, must be considered the best books of this kind which most completely supersede the necessity for a teacher; and necessarily, on this ground, the great advantages

derived from oral instruction, and the excitement of the student's own powers of observation and reflection, are sacrificed to the mere mechanical course of operations, which leads securely to the detection of individual bodies.

"The want of an introduction to chemical analysis, adapted for the use of a laboratory, has given rise to the present work, which contains an accurate description of the course I have followed in my laboratory with great advantage for twenty-five years. It has been prepared at my request by Professor Will, who has been my assistant during a great part of this period. I hope and believe that it will be acceptable to the English public."

Such is Liebig's preface to this little book. The principle upon which analytical chemistry is based is the reduction of all known substances into some condition, manifesting special and characteristic phenomena. The recognition of these phenomena, when they exist, is obviously the first step towards such a knowledge of chemistry as is practical and personal, instead of that which is merely notional and on trust. The first seventy-nine pages of the work before us is devoted to the behaviour of bodies with re-agents; that is to say, the creation, by experiments, of the phenomena by means of which any given substances may be, in all cases and situations, certainly detected. The twenty-three subsequent pages describe the course of qualitative analysis—i.e., the method of proceeding with any compound mass or mixture, solid or fluid, in order to ensure the manifestation of the presence of every one of its constituent parts. Five tables follow, on which the whole course is set forth minutely, lucidly, and with a precision which appears to us to lead as certainly and safely to correct results as any process in arithmetic, or any other branch of mathematics. There is, however, this important difference between chemistry and a demonstrative science. In the former, the ultimate appeal for confirmation of a fact is to physical qualities, and for the most part, to sensible appearances. We judge respecting the nature of a substance from the shade of colour or particular texture of a precipitate, its solubility or insolubility in certain menstrua, or its behaviour at various degrees of heat. Without affecting the certainty of our conclusions when we have qualified ourselves to deduce them, this renders it almost indispensable to pursue the study of analytical chemistry under a practised teacher, it being barely possible to succeed by way of self-instruction. That the power to make an analysis should be enforced on the medical man by the examining bodies we do not assert, but that it is an accomplishment well worthy the time and labour of arguing, cannot be denied, and we hope the facilities now afforded for studying chemistry in this practical and useful direction will not be neglected by the profession.

Any commendation of ours after Liebig's preface to the work before us, would be superfluous; but it strikes us as being a most useful addition to chemical literature.

MEDICAL SOCIETY OF LONDON.

APRIL 27.—MR. DENDY, PRESIDENT.
STAMMERING.

MR. BISHOP presented the patient who was shown to the Society a few weeks since, affected with stammering of a severe character, and who had been under treatment since that time. The improvement in the powers of articulation was very marked and satisfactory. Mr. Bishop stated that, under ordinary circumstances, the young gentleman could read fluently, and could articulate any words he was required to do, but that under the excitement natural to his reading and speaking before the members of the Society, who were strangers to him, some allowance should be made if he did not articulate quite so readily and distinctly as usual.*

DR. GOLDING BIRD congratulated Mr. Bishop on the progress which his patient had made, and thought that it was a very satisfactory proof of the correctness of the acoustic principles contained in Mr. Bishop's paper. He mentioned a case, in further illustration of these principles, of the causes of aphonia. The patient was a gentleman who had very

nearly lost his voice from relaxation of the soft parts of the pharynx and fauces. Under the care of Mr. Bishop he had acquired a considerable volume of tone, but of a different pitch and quality, and he (Dr. Golding Bird) was gratified to find that so much good had resulted by the application of acoustic principles to the dissonance between the pitch of the glottis and soft parts, in relieving these cases of abnormal action of the vocal apparatus.

MR. BRANSBY COOPER thought that the position of the tongue and the action of the muscles had greater influence on the quantity of tone, than the relaxation of the soft parts, on the hypothesis of Mr. Bishop; and that the difficulty of articulation depended on the circumstance, that the attempt to speak resulted from its being made during the act of inspiration instead of expiration; and that the muscles of the epiglottis had a greater influence in the production of loud tones than the adjustment of the soft parts to the pitch of the glottis.

MR. BISHOP differed from Mr. Cooper, and stated that the actions of the glottis in the production of sound might be performed independently of the epiglottis.

DR. CROWNE inquired if there were any case in which affections of the glottis coming on suddenly did influence the intensity of the voice.

MR. BISHOP said that the epiglottis had been cut away without influencing the voice. In answer to another question, as to what muscles were concerned, and what influence they exercised on stammering, he said that these muscles depended on the parts called into action—that was, whether the defects occurred on the articulation of letters, or words beginning with or containing mutes, gutturals, liquids, &c. He considered that the treatment of these cases had been too long neglected by the profession, and the result was, that empirics or philologists occupied the ground which more properly belonged to medical men.

MR. HILTON was of opinion that the epiglottis and tongue had some influence on the tension of the inferior vocal chords, through their connexion with the arytenoid cartilages.

In answer to a question, Mr. Bishop replied that he employed no other mode of treatment in these cases than that fully explained in his papers.

CONTRACTION OF THE PREPUCE.

DR. GOLDING BIRD alluded to a case occasionally occurring in practice, but he believed not mentioned in any printed work. Last Friday week, among the out-patients at Guy's, was a little child, seven or eight weeks old, lying in a state apparently comatose. The mother stated that the child had been heavy and stupid ever since its birth, the last few days more particularly so. It fell into a lifeless state immediately after sucking from the bottle from which it was fed. The first suspicion on his mind was, that the child had taken an opiate, but this was denied by the mother, and he believed her. On opening the eyelids, the pupils were observed to act lazily, and they contracted feebly. No blow or any kind of injury had been received. If not the result of an opiate, on what did the symptoms depend? The head was not large enough to raise the suspicion of congenital hydrocephalus; nor had any symptom been presented of the acute form of that disease. On inquiring if the child passed water, the answer led to an examination of the prepuce, which was found to be elongated, and had an aperture only of the size of a pin-hole, like a puncture in the intestine. The urine was dribbling out; it was evident that the child had never completely emptied the bladder. Mr. Hilton slit up the prepuce, and all the symptoms were immediately relieved, and soon entirely removed. Dr. Bird referred to a case which he had related to the Society some years since,—and which was reported in *THE LANCET* at the time,—of a child who fell a victim to a malformation of this kind; and after death the bladder and ureter were found like those of a man who had long suffered from stricture.

MR. LINNECAR had lately attended a gentleman with gonorrhœa, who had only a pin-like opening in the prepuce, the meatus being, however, of the natural size. This gentleman was always three-quarters of an hour in evacuating his bladder. During the efforts of micturition, the prepuce filled up like an apple.

MR. HILTON had seen many cases similar to the one mentioned by Dr. Bird. The greatest benefit resulted from slitting up the prepuce. In this case the benefit was very remarkable, a partial paralysis of the left side, under which the little patient laboured, being quite removed in twenty-four hours.

MR. BRANSBY COOPER said, that it was a remark of the late Sir Astley Cooper, that it was a matter of great importance to

* We have heard this patient read in private, and he does not stammer in any degree.—REPORTER OF *THE LANCET*.

open the prepuce in these cases of obstructed micturition; for every case of cancer which had come under the notice of that distinguished surgeon, had been associated with the condition of prepuce alluded to. Sir Astley preferred circumcision of the prepuce to slitting it up. The fresh accumulations behind the prepuce set up inflammatory action, which being long continued, was liable to lead to the production of cancer.

BRITISH AND AMERICAN MEDICAL JOURNALS.

A LATE number of the *Dublin Hospital Gazette* contains an interesting lecture, by Dr. O'FERRALL, on

ABSCESS WITH FISTULA IN THE FEMALE BREAST TREATED BY A SIMPLE METHOD OF COMPRESSION.

The single superficial abscess is a matter of daily occurrence, and requiring but little management for its successful treatment. The cases to which Dr. O'Ferrall applies his remarks are very different, and are thus described by him:—

"The breast is enlarged, discoloured, and disfigured by a number of fistulous openings, discharging purulent matter. The magnitude of the part is different in different cases; but is sometimes such as to exceed two or three times that of the opposite breast. Its figure is irregular, presenting numerous prominences and depressions, giving to the organ an unsightly and mis-shapen appearance. The colour of the integuments is unequally distributed, patches of a reddish hue appearing irregularly mingled with the natural tint of the skin. A number of fistulous openings are visible on the surface, each discharging purulent matter. I have counted as many as fifteen distinct orifices in a case of this kind. The pus discharged is generally what is termed healthy—that is, uniform in colour and consistence. Occasionally a tinge of blood is mingled with the discharge, if the part has been subjected to much handling or pressure. The orifices near the nipple have, in some instances, yielded a milky fluid mingled with the pus."

The pain is generally very distressing. Pressure made in particular situations immediately causes an increased discharge, and a probe may be passed to a great depth, indicating the existence of sinuses in various directions. The treatment hitherto pursued has been,—1st, that recommended by Mr. Hey—namely, to lay open the different fistulous canals, a most painful and often a formidable operation; and 2ndly, that by pressure directly over the breast, or antero-posterior, as called by the author. He objects to this proceeding, on the ground that many of the sinuses become obstructed by the pressure thus made, and that new and more extensive burrowings take place. He adopts, and with apparent success, the following method instead:—

"Having carefully pressed out the matter from all the fistulae, direct your assistant to grasp the breast gently in both hands, and draw it forwards as far as possible without causing pain. A breast greatly enlarged, will, in this manner, admit of a remarkable degree of elongation. While the organ is held in this position, you are to pass a strap of brown soap plaster, an inch and a quarter broad, round the part nearest to the chest, beginning underneath, and making the straps cross each other on the chest. Other straps of plaster are to follow in succession, each covering a portion of the one preceding, until you reach the anterior part of the mamma, where a space is to be left for the discharge of the matter through the fistulous openings. You are next to apply small compresses over the situations where you had previously felt depressions corresponding to the depôts within; over these compresses a few more straps of plaster are to be applied.

"You now take a double-headed roller, and pass it from below upwards, so as to make it cross on the chest, and, passing under the arms, return over the shoulders to the breast again. This roller is not to be applied with any degree of force. It is a sling—a support to the elongated mamma, and, when properly adjusted, affords immediate comfort to the patient. When speaking of it in the hospital, I term it, in contradistinction to the antero-posterior mode, circular compression of the breast. The breast is compressed in the manner so often beneficial in the limbs."

COMPARATIVE PROPORTIONS OF NUTRIMENT IN ORGANIC ALIMENTS.

Messrs. SCHLOSSBERGER and KEMP, adopting the views of Liebig as to the distinction between the elements of food used for reproduction or growth, and those for respiration, have prepared a table, which exhibits the nutritive power of different alimentary substances, the test of this power being the quantity of nitrogen which those substances respectively contain. The proportion of this element contained in human milk dried at 212° Fahrenheit, being taken at 100, the degree of nutritive power of other alimentary substances may be expressed by the numbers placed next to them. We select a few of the principal.

"Vegetable.—Rice, 81; potatoes, 84; rye, 106; wheat, 119 to 144; maize, 100 to 125; oats, 138; white bread, 142; carrots, 150; brown bread, 166; peas, 239; haricot beans, 283; beans, 320.

"Animal.—Human milk, 100; cow's milk, 237; oyster, 305; yolk of egg, 305; cheese, 331 to 447; eel, boiled, 428; pork-ham, boiled, 807; salmon, boiled, 610; portable soup, 764; white of egg, 845; skate, boiled, 956; herring, boiled, 808; haddock, boiled, 816; pigeon, boiled, 827; mutton, boiled, 852; veal, boiled, 911; beef, boiled, 942.

"Purified muscular fibre from various animals.—Fibre of eel, 908; of salmon, 982; of herring, 914; of haddock, 988; of pigeon, 775; of lamb, 916; of sheep, 928; of calf, 993; of ox, 935; of sow, 893.

"Proximate principles of animals, calculated from the quantity of nitrogen, as determined by Mulder.—Pure proteine, 1006; pure albumen, 996; pure fibrine, 999; pure caseine, 1003; pure gelatine, 1128; pure chondrine, 910."

It should be observed, that this is a purely chemical way of considering the question. The facility with which these different substances submit themselves to the digestive process, dependent on various circumstances, must greatly modify the nutritive power.—*Edin. Med. and Surg. Journal.*

ON THE USE OF ERGOT OF RYE IN UTERINE HÆMORRHAGES.

At a late meeting of the Dublin Obstetrical Society, Dr. BEATTY read a communication on this subject.

"Having stated the beneficial effects of ergot given after hæmorrhage had set in, he alluded to the injury likely to be produced by the indiscriminate and premature administration of opium in these cases, and pointed out the different times at which ergot of rye and opium are to be given with advantage, the former in the early stage, when we want to induce uterine contraction; the latter in the last stage, when we wish to restore the exhausted vital powers and nervous energy. He recommended the employment of ergot in cases where there is reason (from experience in former deliveries) to expect hæmorrhage, so as to prevent the occurrence of this formidable accident. He prepares an infusion of one drachm of ergot in four ounces of boiling water; when the child's head has cleared the external orifice, he gives one-half of the dose, including the powder, and when the child is entirely expelled, the remainder is given. Dr. Beatty gave the details of several cases in which this practice was followed by complete success. The placenta was thrown off in all without any difficulty, and in none did hæmorrhage appear, although in former labours the greatest danger to life had been experienced.

"He alluded to the power possessed by the ergot of restraining after-pains, and mentioned some cases in which he had given the medicine with this view, and with the best effect.

"He concluded by bearing strong testimony to the value of this medicine in cases of very obstinate menorrhagia when given in doses of five grains three times a day; and he mentioned having witnessed on some occasions, when the medicine had been thus given, the production of severe cramp-like pain in the hips, and upper part of the thighs."—*Dublin Hospital Gazette.*

RECURRENCE OF MENSTRUATION AT AN ADVANCED AGE.

"MM. MURYNCK and KLUTSENS relate two cases in which menstruation recurred several years after it had ceased, and continued to a very advanced age. The subjects of both cases were nuns. In one, menstruation had ceased at the age of fifty-two, recurred at the age of sixty-two, and continued, when the case was recorded, at the age of seventy-three, with perfect regularity. What is curious, the patient was attacked

on the cessation of her menstrual discharge with gastralgia, which persisted, in spite of various remedies, until the recurrence of the discharge, when it left her, and her health became perfect. In the second case, the menstrual discharge ceased at the age of fifty-two also; it recurred at the age of sixty, and had continued up to the date of the report, when the patient was ninety years of age. This patient was attacked on the cessation of menstruation with violent colics, followed by tic douloureux, which resisted all treatment, but ceased on the recurrence of the menstrual discharge, and the patient, at the age of ninety, was in the enjoyment of health, with all her faculties perfect, and with the tastes and ideas belonging to youth."—*Idem*.

FRACTURE OF THE SACRUM IMPEDING DELIVERY.

The following is the outline of a case recorded in the *British and American Journal of Science*, by Dr. DAVID:—

"Madame C—, thirty years of age, about four months pregnant with her fourth child, was coming down stairs, when, her foot slipping, she fell, and bounded on several steps till she reached the bottom. She immediately felt excruciating pain in the region of the sacrum, and was obliged to be carried to her sofa. The pain continuing, her medical attendant was called in to see her. He bled her, and gave her an anodyne, &c. The pain continued for some weeks, but gradually subsided, and some three months after the accident she was able to attend her ordinary duties for a short time, but the pain returned, and continued with unabated violence till the full time of her pregnancy.

"The pains were very active, and, as far as could be ascertained, the os uteri was fully dilated; but the vagina was almost completely closed by a hard tumour, connected, apparently with the sacrum. She was exceedingly weak, emaciated to a great degree, and from the certainty that the child had been dead for some time, the propriety of performing craniotomy was suggested.

"This course would not be submitted to, and the patient died. The sacrum was found broken into four pieces; two of them projected out of its usual line, and all were joined by a firm callous band, which formed the projection into the vagina, and completely prevented a natural delivery."

CAPABILITY OF EFFUSED BLOOD FOR ORGANIZATION.

"Whatever doubt may still remain in the minds of some, whether Mr. HUNTER maintained the truth in his doctrine that the blood could be organized—that is, that the whole substance of a portion of blood, being at rest either within or without a vessel, may develop itself into tissue and become vascular, and grow and nourish itself, must be satisfied by the observations of Dr. ZWICKY on the metamorphoses of the thrombus, or clot of blood which forms in a vessel above a part at which it is tied. For observations, which, like these, stand on the boundary between physiology and pathology, no more space can be given than to state briefly the result; which is, that, to all microscopic appearance, the organization of the fibrine in an inflammatory condition, and of that in a clot of blood, is in all essential respects the same process, the presence of the blood corpuscles in the latter having no further influence on the process than that of somewhat retarding it. The whole process of the metamorphosis of the fibrine of the blood into fibro-cellular tissue, and of the formation of vessels in it, is satisfactorily traced; and thus the only additional evidence which was needed is supplied for the establishment of another of the long-doubted Hunterian doctrines."—*Page's Reports in the British and Foreign Review*.

TABLE OF FRENCH MEASURES.

The French line = $\frac{1}{12}$ of the English inch.

Measures of length.	English inches.
Metre	39.371
Decimetre	3.937
Centimetre	0.393
Millimetre	0.039
Measures of weight.	Grains Troy.
Gramme	15.438
Decigramme	1.543
Centigramme	0.154
Measures of capacity.	English pints.
Litre	1.760

A CHEAP SUBSTITUTE FOR A VAPOUR-BATH.

"Dr. SERRE (d'Alais) recommends the following means of inducing abundant transpiration:—Take a piece of quick-lime, about half the size of your fist, and wrap around it a wet cloth,

sufficiently wrung to prevent water running from it. A dry cloth is to be several times wrapped around this. Place one of these packets on each side the patient when in bed. An abundant humid heat is soon developed by the combination of the lime with the water, which quickly induces copious transpiration; the effect of the apparatus lasting for two hours at least. When sweating is fully established, we may withdraw the lime, which is now reduced to a powder, and is easily removed. In this way, neither copious drinks nor loading the bed with coverings is required."—*Medico-Chirurgical Review*.

ON INTERMENTS IN TOWNS.

(MR. MACKINNON'S BILL.)

To the Editor of THE LANCET.

SIR,—In THE LANCET of the 30th of August, 1845, you commenced an analysis of the supplementary report on "Interment in Towns," which you prefaced by an allusion to the Bill which Mr. Mackinnon introduced into Parliament, last session, on this subject; but which he was obliged to withdraw, owing to some opposition. You also regretted that public feeling was not sufficiently aroused to the importance of carrying a Bill of this nature through the House. It therefore occurred to me that it would be well to present petitions to Parliament from parties favourable to an alteration in the law on this subject, praying that Mr. Mackinnon's Bill, which he intends to re-introduce, may be taken into consideration at an early period, and that an Act may shortly be passed which will prohibit the present custom of interring in towns and populous districts. With this view, I have drawn up the following petition, which has lately been lying at the Town-hall here for other signatures:—

To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.

The humble petition of the undersigned inhabitants of the city of Worcester and its vicinity, sheweth—

That your petitioners consider there is a necessity for some legislative measures being passed, in reference to the subject of interment in towns and populous districts, inasmuch as they believe that the present system of burial in the midst of a crowded population, and within a space of ground totally inadequate to receive the remains of so large a number of the dead, is, in many instances, productive of injury to the public health, owing to the noxious emanations from the soil; while the frequent practice of re-opening graves, and the exposure of bodies in a state of decomposition, is repulsive to every feeling of decency and propriety.

That your petitioners conceive that abundant and conclusive evidence has been furnished, at various times, on this subject; and they desire hereby to add their testimony to the over-crowded condition of most of the places of burial in this city.

That while your petitioners highly approve of the public cemeteries, which are now being constructed in the neighbourhood of many towns, they are yet of opinion that the evils arising from intra-mural sepulture can be effectually remedied only by the interference of the legislature.

Your petitioners therefore pray your honourable House to take into consideration, at an early period, the Bill about to be introduced by Mr. Mackinnon on this subject; and they indulge a hope that an Act will shortly be passed, which will prohibit the present custom of interment in towns, which is a reflection on us as a Christian and civilized people, and is discountenanced by most other nations.

And your petitioners will ever pray.

This petition has been signed by nearly 400 of the inhabitants of this city, within the space of a few days. It has received the names of the Very Rev. the Dean, and several of the clergy, of the aldermen and magistrates, of members of the medical and legal professions, and of the respectable inhabitants generally; and it has also been signed by many of the working classes.

If I might presume to do so, I would suggest to medical men in other parts of the country the propriety of their inducing parties to sign similar petitions; for as intra-mural sepulture is undoubtedly one of the sources of atmospheric impurity, and its discontinuance of great importance in a hygienic point of view, it is clearly within the province of our profession to urge its importance on the public attention.

—I am, Sir, yours obediently,

JAMES ORWIN,
Surgeon to the Worcester
Ophthalmic Institution.

Bridge-street, Worcester, May, 1846.

THE LANCET.

LONDON, SATURDAY, MAY 16, 1846.

THE COMMITTEE of the NATIONAL ASSOCIATION of General Practitioners in MEDICINE, SURGERY, AND MIDWIFERY, have published another voluminous Report of their proceedings. In the last page,—where, apparently, it has been inserted for the purpose of attaining the object of the Committee—namely, that of preventing “misapprehension,”—the following extraordinary notification has been inserted in conspicuous type:—

“In order to guard against any misapprehension, the Committee desire distinctly to state that the proposed National Institute in Medicine, Surgery, and Midwifery, is NOT intended to merge the *three* branches of the Medical Profession into *one* Institution, or to form what has been termed a “One Faculty” of Medicine for the entire Profession, to the *disparagement* or *subversion* of the existing Colleges.”

What, then, is to be the NATIONAL INSTITUTE in “*Medicine, Surgery, and Midwifery*”? But, after all that *has* transpired, the subject is too pregnant with melancholy reflections, to allow of our offering upon such an announcement a single word of comment.

The truth of our statement respecting Mr. NEWPORT's note is denied in the letter addressed to us by that gentleman. The statement appears open to a misconstruction, which we will explain; but in order to do so, we must again detail the facts of the case. When Mr. KIERNAN thought the Council of the Royal Society were unjustly awarding the Royal medal in physiology away from him to Mr. NEWPORT, Dr. HALL, as we have said on a former occasion, was induced to form one of three to examine into the matter. Dr. HALL at that time gave into the hands of Mr. KIERNAN the letter in question; Mr. KIERNAN gave it to Mr. MAYO, who communicated it to the Council of the Royal Society, when the Council met, on being summoned by him, to reconsider the award of the medal. Mr. KIERNAN, it seems, was at this time a Fellow of the Royal Society. Afterwards, when Dr. HALL read the note appended to Mr. NEWPORT's paper, which we have already designated as false, knowing that the letter had then been before the Council, he said, as it now appears, that it “was forwarded by him through the medium of a Fellow of the Royal Society, and a member of the Council.” We, on the other hand, referring to the time previous to the publication of the note complained of, said that Dr. HALL did not send Mr. NEWPORT's letter to the Council. We think so still; and we further believe that both statements may be maintained with perfect candour and good faith. One statement refers to the time previous to the publication of the calumny in the transaction, the other, to the time subsequent to its publication.

But we would give Mr. NEWPORT every benefit which the doubt could occasion. He has mixed up the above fact with our conclusion; there exists no such connexion. If we had based our conclusion in any way upon that fact, we would not hesitate to do Mr. NEWPORT a justice at once prompt and full. But we have drawn no such conclusion. We have stated, again and again, that Dr. HALL's sending or not sending Mr. NEWPORT's letter to the Council, was of no consequence whatever. The important fact is, that the letter was seen by the Council, and by those who investigated Mr. NEWPORT's claim,

to the Royal medal. Mr. NEWPORT obstinately persists that the act of showing, or sending, this letter to the Council, constituted the misrepresentation, admitting that this was his sole ground for making and printing such a charge. We maintain, on the contrary,—and we are sure the minds of our readers will go with us while we do so,—that, Mr. NEWPORT's claims to originality being in question, and Dr. HALL being aware of this, he was bound to produce that letter to the parties conducting the investigation. If he had not done so, Mr. NEWPORT might, with something like a show of reason, have accused him of tacit injustice. So far from the production of that letter being improper, it was absolutely necessary. We have said already that holding a mirror to a man's face might as well be termed misrepresentation. Narcissus might as well have accused his own image of misrepresentation, as Mr. NEWPORT of being misrepresented by his own letter.

Even if we were to admit that, in detailing events which have extended over many years, and worn different aspects, and led to different views and expressions, we have committed an error, Mr. NEWPORT was guilty of a calumny, which, he should instantly retract. That note ought, on the lowest principles of justice, to be expunged by the Council. This is the most important matter to which the disputes relative to Mr. NEWPORT tend, and this we will insist upon again and again. The parties concerned may depend on it we will be “*thorough*” in our doings, whether for justice or against injustice.

If Mr. NEWPORT were as ingenious in investigation as he is in arguing away from the point, we really think he might do something in science not discreditable. We are bound to pronounce his letter a mere quibble, however skilfully it may seem framed to divert attention from the real merits of the case. It pounces upon one isolated statement, and the argument is conducted as if that were the turning point of the whole matter, instead of being, as we have shown it to be, entirely beside the matter.

Mr. NEWPORT says he will write no more. We would reply, in the language of a Secretary of the Royal Society, in his official communications—“Just as you please.” We shall continue to do our duty. Mr. NEWPORT appeals to posterity: this is sometimes a very noble, sometimes a very silly thing to do. We leave it to our readers to determine which it is in the present case.

We should have felt much more for Mr. NEWPORT had it not been for his disposition to insinuate and quibble. A just and noble cause requires neither. If Mr. NEWPORT should alter his mind and write again, let him answer this note of Dr. HALL, which we present again, not to posterity, but to contemporaries.

“It will be obvious and palpable to every one, that *the fact* “*of my having sent that letter renders that of my having made* “the ‘misrepresentation’ insinuated impossible.”

We have been drawn into this episode, and have suffered the matter to dilate far beyond its just dimensions. Our theme is the misdoing of the medical section of the Royal Society, not Mr. NEWPORT's moral perceptions. Which has done most for physiological science, Mr. NEWPORT or Dr. HALL? We are almost ashamed to put the question, and would not, but for the purpose of asking other questions. Who but the Royal Society is entrusted by the State with the adjudication of scientific rewards? Which, as far as the Royal Society is con-

cerned, has had the rewards, Mr. NEWPORT or Dr. HALL? The answers are against truth, against justice, and against the Society. Mr. NEWPORT has, in his day, had scientific honours unjustly put upon him; Dr. HALL has been unjustly deprived of them. The gleaner has fared better than the reaper. In Respiration, as we shall take occasion to show, and in the Nervous System, Mr. NEWPORT has followed at an humble distance from Dr. HALL, but the few ears of corn in the hand of the one have been over-treasured by the Royal Society, while the ample sheaf of the master has been thrown aside, as far as the Society is concerned. With which of them should the public sympathy rest?

RECENTLY we inserted in THE LANCET a paper on "the cause of stammering, and the means of cure," by Mr. BUTTERFIELD, a Cambridge master of arts. We then took occasion to observe, "that the treatment and cure of stammering belong to the profession of medicine." Of this we suppose there can be no doubt: we imagine that it will be conceded at once to be a disease, and, as such, falling within the province of the healing art. Yet, if we look around, it is evident enough that the treatment of this malady is, in a very great measure, in unprofessional hands, and carried on, too, as we shall show, in a most offensive manner. We inserted Mr. BUTTERFIELD's communication under protest, and, as might, perhaps, have been expected, we see he has since appeared in public with a new mode of treatment. His advertisements notify that "BUTTERFIELD's Alphabetic Speculum, made by WEISS and Son, for the prevention and cure of Stammering, may be had, with directions for use, price one guinea, on application to the inventor." Now, we maintain the principle of all this to be wrong, and indefensible. If Mr. BUTTERFIELD wishes to treat disease, whether one malady, or the entire range, let him educate himself as a medical man, and render himself professionally; but it is not common honesty to come in like a wolf over the wall, and take guineas from men who have invested a large amount of time and capital in acquiring diplomas. Stammering, it may be true, is a disease in which no great mischief will, perhaps, be inflicted by non-professional treatment; but, nevertheless, it vitiates the public mind to accustom people to see any malady treated unprofessionally. To witness one disorder given up tacitly by the profession in this way, affords the public a kind of warranty for seeking empirical aid in other ailments, where grievous mischief may be done. On the grounds, therefore, that it is unjust towards the profession, that it is in itself unprincipled, and that it is sure to prove indirectly injurious to the public health, we feel called upon to warn the profession against sanctioning the attempts of Mr. BUTTERFIELD, or any other person not professionally educated, to obtain practice in the treatment of stammering, or of any other malady whatsoever.

And we are the more bound to do this, because we see that medical men are actively engaged in obtaining practice for another unprofessional person, who professes to treat stammering. The word "treat," we may observe, is a misnomer in such cases. An educated man talks and writes of "treating" disease; but to vaunt himself as "curing" would be held to be in bad taste, and meet with no gentle rebuff from his brethren. But the professionally uneducated have no such qualms or fastidiousness; they seldom have anything to do with disease of any kind, except in the way of downright un-

mincing "cure." Nothing but perfect cure and unparalleled success is ever heard of in the practice of the empiric. CHARLES LAMB, in the country churchyard, seeing the virtues set forth upon every tombstone, wondered "where all the bad people could have been buried." So we wonder where all the bad cases of the quacks can get to. Certes, there must be such things. The person we allude to, as so improperly patronized by certain professional men, is a Mr. HUNT. He was formerly, we have been informed, a Dorsetshire farmer, who now makes an irruption upon London every season, coming in about the time of GRISI or CERITO, and disappearing about the same time with them, after a tolerably abundant harvest; for his practice is said to be flourishing, and his fees to be large. Mr. HUNT, like Mr. BUTTERFIELD, is from Cambridge, though we never heard of his degree; not being ourselves of Trinity, we have no great respect for the man who has entered the college walls, and left them with no other title than "late of Trinity." It may mean anything or nothing.

We proceed to give some of this person's testimonials. Those from individual members of the profession are bad enough, but what will our readers think of the following, from a medical journalist, who ought to be one of the conservators of the profession:—

"We recently saw a youth who had been operated upon without the slightest benefit, but who was subsequently cured of his stammering, in the course of two or three days, by Mr. Hunt, whom we have heard favourably spoken of on several occasions, and who, *we are glad to observe*, is patronized by several distinguished members of the profession."—*Medico-Chirurgical Review*.

The following certificates from members of the profession are equally bad in tone and purport,—the wonder is, how any medical men could be so lost to professional decency as to write them:—

CURE OF STAMMERING.—NO. XI.

"Infirmary, Bristol, Feb. 5, 1840.

"I have attentively followed Mr. Hunt's course of instruction to persons afflicted with hesitation of speech or stammering. His method is founded upon a profound study of the structure and functions of the organs of voice, and particularly of those of the tongue.

"It affords me pleasure to express my conviction that his method (founded upon sound physiology) ensures to the student a quick and easy means of correcting this troublesome and annoying imperfection.

"Mr. Hunt, 224, Regent-st."

"HENRY RILEY, M.D.

Here we have the unpleasant spectacle of a physician to one of the largest provincial hospitals, and lecturer on physiology at one of the largest provincial schools, writing himself down a pupil of an itinerant empiric.

CURE OF STAMMERING.—NO. IX.

"11, Lower Brook-st., Grosvenor-sq., March 16, 1838.

"I have the greatest pleasure in testifying, that having called upon Mr. Hunt, late of Trinity College, Cambridge, respecting the son of a friend of mine, (a London banker,) who stammered, Mr. Hunt referred me to a highly-connected member of parliament, (with whose family mine happen to have been many years acquainted,) who stuttered deplorably eleven years ago. He became a pupil of Mr. Hunt, and was quite cured, as he himself assured me, in eight days. Mr. Hunt next named a Herefordshire gentleman, who has been well known to me twenty-five years: his son was cured of stammering (as he informed me by letter) in 1831, he being then twelve years old, and had been afflicted with this defect of speech from his infancy. Thirdly, I saw Mr. Hunt give a lesson to a young gentleman, whose attempts to speak were distressing to witness. In half an hour, he spoke with as much ease and freedom as any youth of his age would do, in whom no impediment had ever existed. Mr. Hunt confidently expects to cure this little boy in eight lessons of an hour each. Lastly, as a medical man, I can certify that Mr. Hunt's sys-

tem is founded on an anatomical knowledge of the vocal organs. The young gentleman alluded to I have again seen, and he was cured in eight lessons. JAMES EYRE, M.D."

We could pen an article on this extraordinary letter. We hope our readers have a better estimate of Sir JAMES's high and extensive connexions than of his good grammar. Singular, by the way, very singular, that the Knight should have known the "London banker" and the "highly-connected member of parliament," and the "Herefordshire gentleman." Singular, too, that the last youth should have been cured in exactly the eight lessons, as per prognosis!

In such testimonials as these, there are always two parties involved in the puff. We hardly know which is the greatest puffer and charlatan, the writer of the puff, or the party who procures it to be written. We should like to have time to calculate minutely, first, how much a man writing such a testimonial thinks of benefiting those who suffer from the particular disease to be "cured," and then how much he thinks of the *éclat* of being paraded as an authority,—of being commended for a pointed epigrammatic sentence or two, and of gaining that portion of reputation (a large part, unfortunately) which depends upon mere publicity and notoriety. We should like to consider this problem at length; but we have no doubt many of our readers will do so, and arrive at the right conclusion. And such a lax state of ethical feeling has been suffered to grow up in the profession, that we have no doubt many well-disposed members will at first be inclined to say—"Surely there can be no harm in supporting Mr. HUNT if he really can do any good in the treatment of stammering." This must be answered by other questions. Is quackery, in the gross, a robbery of the profession, a public crime, and inimical to public safety; and is Mr. HUNT's practice a part of this detestable system? We would answer that it is, and upon this ground we would desire to destroy it. But we will further state our reasons for such a condemnation. Mr. HUNT is a non-medical person, engaged in the treatment of medical cases, rivalling, in fact, more regularly-educated medical men. Mr. HUNT also professes to cure stammering by the use of secret means, and this secret he communicates to no one save on a promise of secrecy. Here, then, are the two most unmistakable elements of quackery, and yet this thing is tolerated,—nay, patronized, by professional men. Members of the profession are so forgetful of the dignity of their calling as to give the promise of secrecy, at which a properly-constituted mind should revolt at once, and to pen eulogiums of the secret remedy at the self-same time. This empiric—for he can justly receive no other title—parades, among other names, those of Sir J. CLARK and Mr. LISTON, and he professes to have once made King's College the scene of his quack exhibitions, under the sanction of many of its medical professors. To parade a whole hospital staff is nothing for his ambitious spirit. Among other things it is common to see this person pronouncing high censure upon Dieffenbach and other eminent surgeons, for resorting to operative means. Operations may be wrong, but are medical men, by their testimonials, to elevate this empiric into a judge of surgery?

Some of the advertising quacks have particular habits. It is astonishing to observe the constant affection they manifest for a particular paper or journal, when the editors, from some accidental cause, notices them favourably. Mr. HUNT is fortunate in this respect; he has almost the run of a very

talented and most respectable literary journal. The manager of the journal in question would start at being placed in the same category with those editors, proprietors, and publishers of papers who advertise that "Manly Health," the "Silent Friend," and the restoring balms, may be had "at our office." The difference, however, is only in degree. Quackery is one and indivisible, whether in or out of the profession,—in its more modest or its more disgusting aspects.

A knowledge of the nervous system, of muscular action, and of the organs of voice and speech, are now so well understood, that stammering is no great mystery, and the principle of treatment is so well known that the idea of keeping it a secret is absurd. It is, indeed, a piece of the purest charlatanry, and as such should be scouted by the entire profession. After such men as Sir CHARLES BELL, MARSHALL HALL, MULLER, and ARNOTT, have given their best attention to the pathology of stammering, and its means of relief, shall we sink to the HUNTS, the mere vocal posture-masters, for its treatment? It cannot be said that, being a specialty, there are no qualified persons to send patients to. Among others in actual practice, it is well known that Mr. BISHOP has attended particularly to this subject; and the recent volume of the *Transactions* of the London Medical Society contains an excellent practical paper on the subject, from the pen of that gentleman. We mention this to take away an excuse for recommending Mr. HUNT, which some have urged; and so thoroughly impressed are we with the justice of our views, that we will give publicity to any particulars respecting improper professional recommendations of Mr. HUNT or any other unqualified person for the cure of patients suffering from stammering and defective speech. The matter in itself is trifling, but a great principle is involved.

MEDICAL FEES AT ASSURANCE OFFICES.

(REPLY OF MR. STOOKES.)

To the Editor of THE LANCET.

SIR,—Did none but medical men read THE LANCET, I would not reply to the letter of Widow Sutton and Sons, in the current number,* but leave it and my former letter (THE LANCET, p. 345) to be judged of by them, with the full conviction that a verdict would be given in my favour; but as thousands of non-medical men read it, I am compelled, in justice to the honour of my profession, and myself, to notice as briefly as I can the somewhat brusque letter of Widow Sutton and Sons.

Widow Sutton and Sons accuse me of "disseminating an assertion which we beg leave to pronounce wholly unfounded, and almost to deserve the character of being calumnious." This assertion is, that insurance companies do not hesitate to say to applicants for life assurance—the answers of your medical man are not satisfactory, and thus compromise the medical man with his patient. This statement of mine they again flatly contradict, in the name of their office and of all other offices of *respectability*, thus leaving it to be inferred that some offices do play such tricks. I have proof that some of my medical brethren do not think this assertion of mine false, for I hold in my hand a letter from a gentleman in London, with whom I am unacquainted, and who, seeing Widow Sutton and Sons' attack in THE LANCET, has written to me, and says that a patient of his was told by a company—"Your medical man has returned such answers as preclude the possibility of taking you." I call on my medical brethren either to publish the breaches of confidence they have met with, or to furnish me with proofs that my assertion is no slander.

In the *Times* of March 7th, is the report of a trial—Ashby and others v. Bates: at this trial, the Argus Assurance Company (a respectable company, I think?) were guilty of producing the letters of two medical men, these letters being obtained on the solemn assurance that their contents were to

* See THE LANCET for April 18th, p. 449.

be "strictly private, and that the names of the writers should not be given up, nor themselves brought into trouble or difficulty in any way." Well might Mr. Humfrey animadvert upon the use that had been made of confidential letters, written on request, and under such a pledge as had been stated. I do not cite this case because it is creditable to our profession, but to show how much confidence may be placed on the word and honour of the servants of insurance companies. If this case does not prove to the satisfaction of Widow Sutton and Sons, that sometimes, to serve an end, the pledges of the immaculate insurance companies are broken, I think it will convince the profession of the fact.

I am willing to concede that the answering of the questions put by the insurance company at the request, and with the cognizance, of a patient, may not, strictly speaking, be a breach of professional confidence; but would it not be so, in some instances, to comply with the request contained in the note which accompanies the queries, and which runs thus—"They (the company) will esteem it a favour if you will have the goodness to answer the questions printed on the other side of this letter, and to communicate, from your own knowledge, such further information respecting his constitution, health, and general manner of living, as may enable them to form an opinion on the safety of insuring his life"! For whose advantage is this information to be given? for that of the patient?—no; but for that of the insurance company; for by the reply, if unfavourable, the hopes of the applicant are blighted, and the company saved from undue risk. If the above was all that a medical man was desired to answer, I contend that he has, by so doing, fairly earned his fee from the company addressing him.

In the two succeeding paragraphs of their letter, Widow Sutton and Sons are modestly pleased to express their surprise that you should let an imputation on the honour of the profession pass. In that which I wrote, there is no imputation on the honour of the profession; but they wilfully or stupidly choose to misunderstand the meaning, and express themselves shocked at the immorality, of this sentence—"If insurance companies want true answers, they should adopt some method which would not compromise the medical man with his patient; and they should pay him." Clearly this means, they should pay for information if they want it, and they should endeavour to obtain it in such a manner, that the person whom they apply to may suffer as little detriment as possible, if his answers are unfavourable to the person wishing to insure. It does not bear the meaning Widow Sutton and Sons have put on it, that unpaid-for answers would be false; but there is little doubt they might be short, and not over satisfactory; for in the medical profession, and even perhaps in the high and moral atmosphere of an insurance office, unpaid-for services to the rich would be rendered unwillingly, though to the poor our profession every day give their best services, without hope or wish for fee or reward.

The next paragraph, if I understand it, is intended to convey a covert doubt of my respectability; I shall therefore pass it, as it is hardly necessary to defend that against the sneer of the agents to an insurance company. Widow Sutton and Sons then say they are willing to leave the main question on the ground taken by Mr. Stookes himself, which is, the parties seeking information for their benefit should pay for it; they agree to this, but argue that the person wishing to insure is the person benefited. I contend that the answers of the medical man benefit the company, inasmuch as if a good life is insured, they receive the profit, and if a bad one is refused, because of his answers, they are decidedly the only persons benefited by the knowledge conveyed to them by the medical man and therefore, by their own showing, should not refuse the fee.

My opponents wind up by likening the person wishing to insure, to an estate for sale, and to which he must give a good title, and argue he must pay his own lawyer. True; but that lawyer would not think himself bound to point out the flaw, if there was one, but would leave it to be discovered by his legal brother. Well, let the applicant for insurance be an estate, there will be no need to prove him freehold of inheritance, but only that the stability of the buildings, the state of cultivation, &c. &c., should be examined into. This the purchaser would be at liberty to do for himself, or if he wanted it done by one of more experience, he would pay him; and did he want the evidence of another authority, I fancy he would pay him also. So then, in future, let medical men say, "You can look at the estate, and your man of skill can do so; but if you want our warrant of condition also, you must pay us."

The length of this letter, I fear, will trespass on your space, but the subject is an important one, because it is of every-day occurrence, and it should be definitely settled whether medical

men should or should not give certificates, for the purpose of effecting life assurances, without a fee is paid by the insurance offices. If the profession think with me that the companies should pay, let them, one and all, resist the demand, and either the insurance companies must pay what I contend is a just debt, or they must shortly shut up shop. The profession have the power in their own hands, let them resist this injustice.—I am, Sir, yours, &c.

Newington, Liverpool, April 20, 1846.

ALEX. STOOKES.

THE ETIQUETTE OF THE PROFESSION.

WE have received a letter from Mr. Beecroft, who, in answer to Mr. Vaudrey's note in *THE LANCET* of May 2nd, observes that, "No mention had been made of calling in another medical man, or any dissatisfaction evinced at my treatment, when I proposed to consult with Mr. Vaudrey. He first understood distinctly from me, on the Saturday, (March 14th, my fourth visit,) that the child had hydrocephalus, and that it was in danger. Mr. Vaudrey was sent for on the Tuesday following to meet me, and when he came, he (the father) was from home; but on arriving at home in the evening, Mrs. — told him that 'Mr. Vaudrey said that the child had lumbago.' Miss —, who was present, also told me, that 'Mr. Vaudrey said that the patient had no more the water in the head than he or her mother had.' Thus it appears, by the above evidence, that the 'direct insult to the lady' was made by Mr. Vaudrey himself.

"It seems that Mr. Vaudrey has at last, after several weeks' consideration, arrived at the same diagnosis as myself; for I think all modern authors on the subject concur, that 'tubercular meningitis' (I presume Mr. Vaudrey means) is the most frequent cause of hydrocephalus; and as regards my medical treatment of the case, probably Mr. Vaudrey received more benefit from my explaining to him the treatment I was pursuing than he will acknowledge."

Mr. Beecroft then advocates the employment of purgatives in hydrocephalus, and gives his reasons for not ordering into a secluded apartment the patient, in the case alluded to by Mr. Vaudrey at page 506; but as this case has apparently little to do with the main point in discussion, we need not here enter into further details respecting it.

THE MEDALS OF THE ROYAL SOCIETY.

(LETTER FROM MR. NEWPORT.)

To the Editor of *THE LANCET*.

SIR,—I am not aware that I have given to you, or to any other person, just cause to assert that I am disposed "to cavil," or be "always accusing." My letters to your journal have been wrung from me, much against my inclination, by repeated unjust attacks in your leading articles, and I have much regretted to find that the writer of those articles, whoever he may be, instead of receiving my statements with that impartiality, candour, and courtesy which I had hoped was their due, has met them with flat and positive denial, on "authority," and that, too, in the very face of the reference I gave to Dr. Hall's own words, in page 749 of your own journal, for February 17th, 1838.

The statements which I made were, that Dr. Hall sent a letter of mine, dated July 23, 1832, to the Council of the Royal Society in November, 1836; and that, for reasons I have already given, I regarded the very act of sending that letter as "misrepresentation."

The writer of your leading articles has denied the truthfulness of my asserted fact, and has repudiated the justness of my appreciation.

But Dr. Marshall Hall's own printed words, at the page I have referred to, establish the truth of my assertion, and the justness of my conclusion. Dr. Hall there expressly states, that on seeing the note in my paper, "On the Temperature of Insects," he immediately addressed the Council of the Royal Society, and after quoting the note at length, he adds,—

"I beg to state, in reply, that on the 'recent occasion' alluded to, a letter addressed by Mr. Newport to me, and containing the following paragraph, (see *THE LANCET*, April 25th, 1846, page 470,) was forwarded by me, (these four words are actually printed in italics,) through the medium of a Fellow of the Royal Society and a member of the Council."

Dr. Hall then quotes the paragraph from my letter, and further remarks,—

"It will be obvious and palpable to every one, that the fact of my having sent that letter renders that of my having made the 'misrepresentation' insinuated impossible."

I have already stated that I regard the very act of sending that letter as "the misrepresentation."

These printed statements, by Dr. Hall, in *THE LANCET* of February 17th, 1838, excepting only the two words, "in reply," are verbatim copies of portions of his own autograph letter, addressed "To the Council of the Royal Society," and which, fortunately for me, is in the care of the assistant secretary of the Royal Society, and may be inspected by any of the Fellows, on application to that officer.

It will now be seen that the "authority" on which the writer of your leading articles has relied, in denying my facts, is utterly unworthy of credit; and never again can it be questioned that my letter to Dr. Hall was sent by Dr. Hall himself to the Council of the Royal Society in November, 1836, and also a paragraph of it (copied) in February, 1838.

This exposition of facts, more detailed than that which I had already given, together with the new accusations of "thrusting cavilling upon your readers," and of "always accusing," must entirely preclude me from entering into any further discussion in your journal.

No charges, made or threatened, of "low estimate," of "cowardice," of "inuendo," of "cavilling," or of "always accusing," shall again extort from me a reply, in return for which, to judge from the past, I might expect only further aspersion; nor shall any fear of injury make me shrink from the declaration, when I see fit, of what I know to be correct and just.

I will conclude these, the last remarks I intend to address to you, with your own words—"In all the common affairs of life there is the right of appeal against injustice. In science, there is no appeal, save to time and to posterity."

Your obedient servant,

Upper Southwick-street, Cambridge-terrace, GEORGE NEWPORT.
May, 1846.

THE MEDALS OF THE ROYAL SOCIETY.—DR. LEE'S DEMONSTRATIONS OF THE UTERINE NERVES.

(LETTER FROM DR. TODD.)

To the Editor of *THE LANCET*.

SIR,—After the exhibition of personal feeling which the last few weeks have witnessed, in connexion with the controversy respecting the nerves of the uterus, I am scarcely surprised at the extraordinary misconceptions which have been put forth by some one or other regarding my own opinions on this anatomical point.

In a late number of the *Literary Gazette*, I was shown the following paragraph:—"Dr. Todd now admits that Mr. Beck's dissections confirm those of Dr. Lee;" and in your last week's number of *THE LANCET*, you relate, "on authority," an incident which you say occurred on a recent occasion, when, on Dr. Lee's invitation, in his own house, and in company only with Dr. Lee, and my friend Mr. Simon, I was shown the Doctor's preparations.

I have already written to the editor of the *Literary Gazette*, to give the most unqualified contradiction to the paragraph which appeared in that journal.

With respect to the statement in *THE LANCET*, so far as it asserts that I made any admission in favour of Dr. Lee's peculiar views, it is altogether in error; and the charge against me, of not knowing a great nerve "known to Galen," affects me so little, that I do not think it worthy of contradiction.

I am, Sir, your obedient servant,

New-street, Spring-gardens, May, 1846.

R. B. TODD.

[We would tell Dr. Todd that no "personal feeling" has influenced us in what has transpired relative to the Royal Society. Dr. Todd might very appropriately have held a higher view of the matter than this. Personal injustice is bad enough, but it is not *persons*, so much as the sciences of anatomy and physiology, which have been wounded by the transactions in which he has borne so prominent a part; and certainly his dignity is not so pre-eminent, but that he might stoop to contradict the assertion that he did not know the hypogastric nerve when it was shown to him—if the assertion could, indeed, with truth, be contradicted!—ED. L.]

THE MEETING OF THE NATIONAL ASSOCIATION.

(NOTE FROM MR. DAVIS, OF HAMPSTEAD.)

To the Editor of *THE LANCET*.

SIR,—I think it a duty I owe the medical public, as well as myself, to correct your report of April 25, of what I said at the meeting of the National Association of General Practi-

tioners in Medicine, Surgery, and Midwifery, held at the Hanover-Square Rooms. It may be immaterial what I did say, but not so that which I did not say, being calculated to mislead. My friend, Mr. Downing, was a staff-surgeon, and refused to do medical duty; therefore I attended 210 (not one) patients for him, to prevent a court-martial. It was of surgeons only I spoke, and not of physicians. They never wronged me, or other old members of the College of Surgeons. We never were physicians. But if we had run their prescribed curriculum, and become fellows or licentiates of their body, as we did that of surgeons, and become members thereof, we should have been protected in our "rights, privileges, and immunities." They would have rendered unto Cæsar the things which were Cæsar's; and no minister of state, or wily surgeon "extraordinary," with the same diploma as ourselves, could have robbed us of our title to equal rank by an *ex post facto* law; but any new thing, misnamed a charter, would have honestly run thus—"From and after the date hereof, be it enacted," &c. &c., securing equal rank to those in possession, with the exception only of those who had rendered themselves unworthy of it. Verbum sat sapienti. Although it may be unimportant to those of my age and standing in the profession, what is done or left undone by the "powers that be," perhaps you may insert this, and oblige, your obedient servant,
Hampstead, May, 1846.

THOMAS DAVIS.

NON-QUALIFIED VISITING ASSISTANTS.

To the Editor of *THE LANCET*.

SIR,—As I wish you every success in your crusade against quackery, I trust you will kindly excuse my directing your attention to the most grievous intra-professional nuisance of this description in existence. To the best of my knowledge, it has not even been hinted at by any journal, hitherto, and the only reason I can give for the oversight is, that nine out of ten medical practitioners are daily countenancing the fraud. I allude to the employment of non-qualified visiting assistants.

A medical man, perhaps already in good private practice, is appointed surgeon to an Union at 100*l.* per annum, or any other sum he may engage to attend the poor for. He knows he cannot attend to his private patients and Union patients likewise; he therefore hires an assistant, who, for 25*l.* or 30*l.* a year, visits and prescribes for nine-tenths of the paupers, and, moreover, attends midwifery cases, although he may never have even seen a human uterus, much less have studied the minute and relative anatomy of the organ.

The poor people have no alternative; the Union surgeon must be employed, and other private practitioners are shut out from this source of information, unless they attend gratuitously. In this manner is the profession stocked with quacks, by the profession; your bonesetters, midwives, *et hoc genus omne*, may frequently be traced to this source. If a man can, without the qualification that appears to be so much insisted upon, visit and prescribe for one hundred paupers, why may he not do the same for a hundred noblemen or squires?

Yours, &c.

SCALPEL.

THE WATERS OF VERNET, (PYRENEES,)

AND THE MODE OF THEIR APPLICATION IN THE TREATMENT OF DISEASE.

In an establishment at Vernet, the waters from hot sulphurous springs are conveyed through open pipes, so as to maintain the temperature constantly at sixty degrees. A correspondent states, that both the equable temperature and the medicated atmosphere have been found beneficial to phthisical patients. His remarks on this subject are,—

"Every one knows that the hydro-sulphuric waters are most useful in all chronic affections of the lungs. The reputation of the Eaux Bonnes (Pyrenees) in all cases of this kind is very well known. But how are these waters generally employed? In baths—or they are more usually drunk. The waters of the Eaux Bonnes can only be administered in these modes, on account of their low temperature. If sulphurous waters are found so useful in all cases of chronic pulmonary affections, applied only to the skin, or introduced into the digestive tube, how efficacious ought they not to be when they are brought into immediate contact with the very organs affected—when, in a word, they penetrate into the remotest ramifications of the air-vessels. All medical practitioners have acknowledged the importance of immediate direct action, and very many of them have imagined ways in which pulmonary patients may be enabled to breathe a medicated air. In order

to remedy a capital inconvenience, I have contrived that my patients (at Vernet) should be subjected to the very atmosphere of sulphurous waters, in a place built specially for the purpose, in which the vapour, entering from below, escapes from above; this constant current also maintaining a temperature of about eighteen or twenty degrees centigrade, which may, however, be varied at pleasure, as well as the quantity of vapour in circulation.

According to my plan, the patients at first remain in it one hour, morning and evening; they soon accustom themselves to remain in it twelve hours a day without feeling inconvenience, and are able to employ themselves in their usual occupations.

I have at this moment several consumptive patients, who have been entirely cured within the space of two or three years, and who return hither to pass the worst days of the winter, from the fear of a relapse. Many of them, indeed, have quitted Pisa or Naples, in order to return and plunge themselves into vapours which had been of such great use to them, and the place of which cannot be supplied by the most beautiful climate in the world. I beg it to be particularly remarked, that I have treated here pulmonary cases, in which the existence of tubercles has been fully ascertained by the stethoscope—pulmonary diseases, accompanied by night-sweats—by colliquative diarrhoeas—in short, all the symptoms which accompany the last period of this cruel malady, whose name alone is considered to be a death-warrant."

April, 1846.

PREVENTION OF ILLEGAL PRACTICE BY REGISTRATION.

To the Editor of THE LANCET.

SIR,—Having several times, of late, observed in your periodical, remarks as to the utility of the register of deaths in preventing the practice of unqualified men, allow me to state, that if any good is to be derived from this quarter, it must be through the exertions of medical men, and particularly of the Apothecaries' Company. If medical men made one invariable rule of giving certificates to the friends of deceased persons, for the purpose of registration, such certificates would be *prima facie* evidence of their being qualified; or if unqualified persons gave such certificates, they would give the best proof of their having attended a patient; and with a little additional assistance from the registrar, the Apothecaries' Company might generally obtain sufficient evidence of their having made a charge for so doing, which I believe is all that is necessary to ensure a conviction.

Still our difficulty remains: who is to inform the Apothecaries' Company? If it is not made a part of the *duty* of the registrar, he will have the same delicacy on this point as medical men generally. The only plan of overcoming this appears to me to be, that the registrar-general should require every registrar to send him the name of any unqualified person whose certificate he might receive, and which he might forward to the Apothecaries' Company.

In order to carry out this plan efficiently, of course it would be necessary that every registrar of deaths should be furnished, by the Apothecaries' Company, with a correct list of its licentiates.—I am, Sir, your most obedient servant,

Camden Town, May, 1846.

JOSEPH CURTIS.

DEATH FROM IMPACTION OF A FRAGMENT OF FOOD WITHIN THE ARYTENOID CARTILAGES.

To the Editor of THE LANCET.

SIR,—I agree with Dr. Letheby on the great importance of minute examinations in all cases of suspicious sudden death, not only for the sake of justice, but, as the following case will show, for the sake of the suspected.

On the 22nd of March I was summoned to see a child: on arriving, it was dead. Externally, there was nothing seen to account for death. From the circumstance of two children of the parents having died previously at short intervals, in a similar and sudden manner, I considered it my duty to desire an inquest.

I opened the body, by direction of the coroner, (Mr. Wakley,) fifty-two hours after death, and examined all the organs, and the contents of the stomach chemically; but nothing was found to account for death,—nothing, indeed, remarkable, except the very anæmic condition throughout; in the brain, the cineritious and medullary portions were scarcely to be distinguished by colour.

Hearing it incidentally mentioned by the person in attendance that the mother's milk had been scanty, that the infant had been commonly fed on boiled French roll, and that

a cough had suddenly come on the Wednesday preceding, (the 22nd, the day of its death,) after its usual food, I thought I saw a clue to the mystery, and immediately opened the trachea in its whole extent.

Within the arytenoid cartilages there was a substance of a brown hue, enveloped by mucus, and below this substance, a quantity of thickened mucus. I compared the substance with the contents of the stomach, and found many identical substances. Mr. Girdwood was of the same opinion. I have no doubt, that on the Wednesday the substance had passed into the air-passages, causing the cough, and that, on the Sunday morning, from a change of position, it produced asphyxia.

It was very satisfactory to me to be able to assign a cause of death before the coroner, (a surgeon, as all coroners should be;) and it must have been very gratifying to the parents, on whom suspicion had rested in the minds of neighbours, who very naturally thought it strange that their three children had died under apparently similar circumstances within a short time.—I am, Sir, your very obedient servant,

Southwick-crescent, April, 1846.

J. M. MUSTARDE.

PRIVATE LUNATIC ASYLUMS.

To the Editor of THE LANCET.

SIR,—I venture to hope that the importance of the subject will be a sufficient apology for my troubling you with this communication.

In an unlicensed house in the outskirts of this city, an insane lady of rank was lately confined, in direct violation of the law; and in the same house, in the month of December last, under the very walls of a lunatic asylum, another patient, under similar circumstances, lost her life, having been allowed to go seven clear days without food.

I am, Sir, your obedient servant,

JUSTITIA.

Lincoln, April, 1846.

"Dr. Turner and Mr. Proctor attended Lincoln, on Friday last, as a special commission from her Majesty's Board of Lunacy Commissioners, to inquire into the circumstances of a person's being confined in an unlicensed house, contrary to the new law. Having called upon Mr. Graham, surgeon of the Asylum, the Commissioners proceeded to the house of a person named Houseley, near the Asylum, and found that the lunatic had been removed to Boulogne, in the custody of Houseley's wife. Evidence was afterwards taken at the Saracen's Head with regard to the affair, and Houseley was examined as to whose direction he had been acting under; and we are informed that his statement implicates a gentleman of the city who could not be ignorant of the law. We also are informed that the Commissioners were acquainted with the facts of a case where a female was similarly confined some short time since, who got under the delusion that it would displease the Almighty if she took food, (a not unfrequent delusion in cases of insanity,) and who for seven days prior to the last two or three days of her life, was allowed to go without food being administered, by which prostration was produced, and she died in consequence. This fact alone, taking it as one, establishes the propriety of the new law abolishing private confinement; for had the female been under the care of the officers of a regular establishment, she would not have been allowed to fast longer than a day at most. In this case, we are informed, a special commission of inquiry is to be issued. Having taken evidence in the first case to frame a report to the board, the Commissioners proceeded to the south of Lincolnshire, to examine a second case. These matters show the necessity of the watchful care of a public board like the one called into existence; for, as an illustrious writer observes, 'secrecy is the parent and guardian of abuse; publicity its irresistible enemy.'"—*Stamford Mercury*, April 24.

The correspondent who has forwarded us the above statement, assures us, that Mr. Proctor, the Commissioner in Lunacy, was heard to say—"If Mr. Wakley had been coroner for Lincoln instead of for Middlesex, your name, (meaning the owner of the unlicensed house,) and the medical attendants of the dead woman, would now have been notorious in every corner of England."

NEWS, REMARKS, AND CRITICISMS.

THE VESTIGES OF CREATION, AND PROGRESSIVE DEVELOPMENT. *Extract from a letter of a Correspondent.*—"Your readers are doubtless well acquainted with this profound work, and will remember the experiments of Mr. Weekes, of Sandwich, who has succeeded in 'developing' 'insect life,' by means of Daniel's constant battery, applied

during the space of a little more than two years. Mr. Weekes's words are—"I have only to add my belief, founded on considerable experience and much observation, that insect life was first developed in this division of my experiment some time in the month of July, 1844, about two years and two months from the commencement."

"We are happy to add that these philosophic labours have been not only completely confirmed, but altogether eclipsed, by those of Mr. Yeares, of the Gravel-pits, who has actually deduced from his laborious investigations the law of progressive 'development.'

"If the times be increased in arithmetic ratio, and the surface of the plates in the ratio of the squares, then the developmental nixus acts with the force of the cubes; and under due arrangements, that which was at first ended with 'insect life' becomes progressively 'developed' into the tom-tit, the wagtail, the magpie, and the jackdaw.

"Mr. Yeares has no doubt that, in a few secular periods, he will be enabled to 'develop' the eagle, the condor, and the dodo. In a *seculum seculorum* or two, it is even thought that we may re-develop' those species, which, for lack of constant batteries, have been allowed to become extinct.

"I expect your readers to be a little sceptical in regard to these latter hopes; for myself, I think it little more difficult to 'develop' the megatherium than 'insect life.' Endless time and a Childrenic battery would no doubt accomplish wonders."

CLAUSE PROPOSED TO BE INSERTED IN THE NEW MEDICAL BILL.—(From a Correspondent.)—And whereas it is deemed expedient that examples should be made, for the benefit of the junior members of the profession, be it further enacted, therefore, that if any person shall be convicted before any lawful tribunal, of having appended his name, or sanctioned the appending of his name, to any QUACK ADVERTISEMENT, which shall have a tendency to mislead the public, he shall, for the first offence, be adjudged guilty of a misdemeanor, and shall be reprimanded by the presiding authority, and bound, in good and sufficient sureties, for his future good behaviour; and if the same person be afterwards convicted of a like offence, he shall, to all intents and purposes, be debarred from the privilege of registration, according to the provisions of the Act in such cases made and provided.

AN INQUEST was recently held before Mr. SLYMAN, surgeon, coroner for Montgomeryshire, on the body of a man who was alleged to have been killed by a quack, named Rowlands, in that county, under treatment for a puncture of the palm, when the following specimen of epistolary-writing was produced by the coroner, who had received it, on the 23rd of the month, from the accused party. It may be added, that the jury did not consider that sufficient evidence, in proof of the administration of the pills by "Dr. Rowlands," could be produced at a criminal court, and they returned a verdict, with reference to the injury, of "accidental death."

"Respectful Doctor and Coroner,—Dear Sir, I am under necessity to let you know in time about Mr. Richard Morgan, the deceased, that I gave to his son only one scruple of rubarb and ten grains of calomel, and I have mead them with little musilage in twelve or fourteen pills, and tell his son to give two every three hours for three times; so them did not work that night (Tuesday night) the following morning his son came to me, and tell me that the pills did not work him, so I told him the case appears very tedious to me, and I gave him the glyster pipe, and an once o E salts, and further information for him to have his body in motion so soon as possible, and if that wont do, I advise him to have a doctor from Llanidloes. Now, respectfull sir, all that I humbly ask from you is to have fair play; because Mr. Price, at Llanidloes, mean to punish me if possible, from mean envy and malice. I hope that you will act wisely, as you have done once before, when Mr. Price did put me in Shereusbury Croniel. I am sick at present in plursey, if I shall live, I shall return thanke to you.—I am yourer humbl servent, DANIEL ROWLANDS."

THE HORRORS OF THE POOR LAW.—Bildeston, April 23.—A poor man living in this town, named Studd, who obtains a livelihood by making mops and hawking them round the country, is labouring under a grievous complaint, called the stone or gravel. The parish surgeon has treated the complaint in a very humane manner, but finding his efforts unavailing, recommended the Union House, that in case an operation should be found necessary, there would be more convenience, and the poor man would be better attended to

than he could possibly be at his own dwelling. Accordingly, upon such recommendation he was sent, last Monday, to the Board, at the Cosford Union House, and owing to the nature of the complaint, was provided with a spring cart. After waiting some time, to the surprise of every one, he was refused admittance, because his wife and four children were not present to go in with him. In vain did the poor man entreat them to allow him to go into the house, urging that the conveyance that brought him was gone, and that he was suffering excruciating pain, and was distant three miles from home. All was to no purpose: he was told it was *contrary to law*. In this state of suffering he was obliged to crawl home, a real object of pity to all who beheld him. Such are the blessings of a law (if law it be) which we were told by Lord John Russell was to make the poor man *independent*!—From the *Suffolk Chronicle*.

"* We do not wonder that the "blood" of our correspondent who has sent us the above "boils," and his "flesh burns with indignation."

THE HALSTEAD CASE. REMOVAL OF THE RELIEVING OFFICER.—OBSERVATIONS ON THE EMPLOYMENT OF MIDWIVES IN PARISH UNIONS.—The Poor-Law Commissioners forwarded to Halstead, on Friday, April 17, their report upon the two cases lately under investigation there. The report occupies ten sheets of foolscap, but the following is its most important portion:—

"The commissioners are much concerned that an officer of Mr. Swindells' acknowledged zeal and general good conduct should have so far lost sight of a duty distinctly imposed upon him by a clear and direct order of the commissioners; but if such orders are disobeyed, and especially if, as in one case at least, the result of the disobedience are serious, then the officer must submit to the consequences of that disobedience. Had the case of John Cranfield's wife been the only instance in which Mr. Swindells had neglected to fulfil his duty, the commissioners, looking to all the circumstances, might have contented themselves in the expression of their marked disapproval of his infringement of their rules, and with strictly admonishing him to avoid a similar infringement for the future; but having regard to the second and more serious case of Abigail Rout, in which the like neglect occurred, and finding it impossible to doubt that repeated applications were in vain made in that case, either to Mr. Swindells in person, or at his residence, bearing, moreover, in mind, that its fatal termination may be, and has been, attributed to the absence of the prompt assistance which Mr. Swindells could have supplied—the commissioners do not see how they can suffer Mr. Swindells to remain in the service of the Halstead union."

In addition, the following instructions with respect to midwives are issued:—"The commissioners have no objection to properly-qualified midwives being employed in ordinary cases of labour, under the superintendence of the medical officer, but the guardians ought to, and must, satisfy themselves upon this point. The commissioners notice, that although Mrs. Brown has had considerable experience, Mr. Sinclair, the medical officer of the Halstead union, has stated upon oath that he has frequently seen her intoxicated, and perfectly unfit to take charge of a labour; consequently, she must not be sanctioned by the Halstead board of guardians."

With reference to a remark we made in THE LANCET of April 4th, respecting the part taken by a medical gentleman in this Union, a correspondent signing himself, "An Essex Union Medical Officer," has addressed to us a letter, in which are the following observations:—

"I fear that such a comment, from so influential and respected an authority, is calculated, in no small degree, to add to the difficulties of the position of the Union medical officer, and to give a sanction to some of the oppressive enactments to which he is frequently called to submit. Believe me, Sir, there is nothing that some penurious Boards of Guardians would so much desire as to shuffle off the responsibility of giving orders in cases of emergency, and leaving them to the humane consideration of their medical officer. In this, I speak advisedly. I have had occasion more than once to urge upon the authorities of the Board with which I am connected, the necessity of medical aid in cases which were legitimate objects for such relief, (and recently, in one case, where there was reason to suspect placental presentation.) The refusal to grant such assistance has been accompanied by an appeal to my humanity, &c.; and one of the guardians, in the plenitude of his sagacity, has asserted, that a medical man is bound to give his attendance to any one that requires it, although he may not have

the most remote prospect of remuneration. 'Sic vos non vobis.' Such are the men with whom we act."

Petitions have been presented to the House of Lords, from the governors of many of the metropolitan and provincial hospitals, praying to be exempted from the operation of the Charitable Trusts Bill.

It is announced by Dr. Ogle, Professor of Clinematic Medicine at Oxford, to all students of medicine who propose to offer themselves as candidates for the degree of bachelor in that faculty, that the day appointed for the next examination is Tuesday, June 16th. Candidates are requested to transmit to the clinematic professor of medicine the usual certificates of their having complied with the requisitions of the statute, tit. vi., section 5, §§ 1, 3, on or before Monday, June 1st.

THE DOCTOR AND HIS RIVAL.—"A report having been circulated that Dr. Cullen refuses to visit patients without receiving a physician's fee, he now intimates that he regularly attends patients at the usual fees charged by country surgeons.—Advice gratis, at Dr. C's house, from 9 to 11, forenoon.

"Carlisle, 20th Nov. 1841."

"A report having been circulated that Mary Young refuses to cure Ring Worms and Whittles without a Physicking fee, she now intimates that she regularly cures at the old prices.—Advice gratis, on Sundays—Medicine charged double.

N.B.—A Servant with a moderate appetite wanted.

"Honey Bank, 20th November, 1841."

A correspondent from Liverpool has forwarded to us the following card:—"ELIZABETH HART, Chiropedist, 1, Daulby-street, London-road, Liverpool, respectfully informs those Ladies and Gentlemen who are troubled with Corns, Bunions, and defective Nails, that after long experience and very successful practice, E. H. attends to cure, without pain, the worst cases, on Tuesdays, Wednesdays, and Thursdays, from 10 o'clock in the Morning, until 4 o'clock in the Afternoon.—Families and Schools attended according to agreement.—Single attendance, 1l. 1s.—Annual subscribers, 2l. 2s.—Present payment expected.—ELIZABETH HART, 1, Daulby-street, London-road, Liverpool.

"8th Month, 1845."

And he asks,—Can it be doubted that if any professional man were to charge after this rate for such performance, he would be considered an extortioner! There are so many specialists now, that the wonder is how a professional man shall get anything to do!

EDITORIAL NOTICE.—*Keating's Cough Lozenges.*—Mr. Keating had the politeness to forward to our office, several weeks ago, a packet of these lozenges; but as we didn't happen to have a cough upon us, we were not able to offer any opinion upon their adaptation to the purpose for which they were prepared. *Luckily* (!), however, about a week since, a severe cold and accompanying cough placed us in a position to test the merits of "Keating's Lozenges." As to recommending those of our readers who may be subject to catarrhal affections to adopt the same remedy, we don't see that they have any claim upon us for such a recommendation, without payment of the usual medical fee. All we can say is, if any of them who labour under obstinate cough will forward the fee to our office, we shall at once prescribe for them "Keating's Lozenges."—*Post Magazine.*

DEATH FROM ST. VITUS'S DANCE UNDER QUACK TREATMENT.—The *Hertford Mercury* states, that on the 21st of April, an inquest was held at Hertford on the body of Robert Ratty, aged seventeen. The deceased had suffered for a short time from chorea, or St. Vitus's dance, and was attended by Isaac Chamberlain, a butcher, who was, some years since, tried for the manslaughter of a female patient, whom he had subjected to a lingering death, under the pretence of curing a cancer in her breast, which he literally burnt and cut away, and for which he was sentenced to one year's imprisonment. Undeterred by this punishment, Chamberlain has since continued to quack such of the inhabitants as are silly enough to place themselves under his care. The mother of the deceased, in her evidence at the inquest, stated,—"I know that Chamberlain was imprisoned for manslaughter, but I understood that he was a regular doctor after he came out of confinement, and that he had attended the hospitals. I was glad to get any one who would come. * * * I asked Chamberlain whether he could cure my son? He said, 'I don't know, but

I think I can.' He brought some mistletoe to make tea of; he told me to boil it down in three pints of water till it was reduced to a quart. Chamberlain said he might drink that if he was thirsty. I put in as much of the mistletoe as I could hold in both my hands. Chamberlain came on Monday morning, after my son's death, but I did not see him. He said the powder would *compose him, and it did so.*" A verdict of—"Died by the visitation of God," was recorded.

DEATH THROUGH USING PATENT MEDICINE.—Mr. W. Baker held an inquest, recently, at the Horseshoes, Buckle-street, Whitechapel, on the body of Caroline Julia Hurst, aged three years, the daughter of a watchmaker, and who, for several weeks, had been ill with whooping-cough. About a week since, the mother, hearing of the efficacy of a patent medicine, prepared by a chemist of Whitechapel, called "Brodie's Whooping-Cough Drops," procured a little, which she administered according to the directions given with it, but the deceased got gradually worse, and expired on Saturday night, from effusion on the brain, which may have resulted from disease, or from the effects of the drops, which are very strongly narcotic. The coroner said, that as there was a difficulty as to the precise cause of death, he should recommend the chemist, for the future, to discontinue the sale of the medicine; for if another death should occur from the effects of the nostrum, he should direct the jury to return a verdict of manslaughter. The jury coincided in the sentiments expressed by the coroner.

A NURSE DISEASED BY A SYPHILITIC INFANT.—**ACTION FOR DAMAGES.**—*Assistant-Barrister's Court, Cork, April 1846.*—A case of interest to the medical profession, involving this question, came on in this court. It had been previously before the same barrister, (Mr. Baldwin, Q.C.) but was "dismissed without prejudice," a medical gentleman deposing that the disease was not contagious. It was now brought forward, strengthened by testimony to show that the opinion of that witness was fallacious.

The case was a special action for 9l. 4s. 7d. damages, under the following circumstances:—In September, 1844, the plaintiff's wife received a child from the defendant to nurse, at a yearly sum of 4l. The child had a sore on its mouth, but no particular attention was paid to it. In a few days the plaintiff's wife became diseased, and she diseased her husband; in fact, all the family became ill. The plaintiff's wife, ascertaining the nature of the disease, returned the child to its parents. The nurse, who was pregnant, was subsequently delivered; the child then born was also diseased, and in some time after died; and the nurse, to get cured, had to go into the hospital of the Cork Union Workhouse, but she was still labouring under the disease. For this injury the action was brought.

Evidence was given to prove the contract, and a quack doctor was called to show that he was to receive 30s. from the father of the diseased child, for the purpose of curing it of the sores on the body. This fellow called himself a "herbalist." The brother of the plaintiff deposed to the good health of the plaintiff and wife previous to getting the child to nurse, and that the child had sores on the mouth, body, and penis.

Dr. O'Connor, physician to the Cork Union Workhouse, said that the plaintiff's wife was six weeks under his care, labouring under syphilis in a secondary degree; and that a child would convey the disease to the nurse. A child might be born apparently free from that disease, and subsequently break out and communicate it. That is the opinion of Sir Astley Cooper, Mr. Colles of Dublin, and the most eminent of the faculty.

Court—Is there any dispute about that now?

Witness—None whatever.

Court—Have you read the treatise of Ricord, the eminent French physician, on that subject?

Witness—I have not. I have read a review of the work, and though Ricord laid it down that secondary symptoms could not communicate the disease in a primary form, he never held that the secondary disease was not contagious in a similar degree.

Court—Have you seen the child?

Witness—No; the mother only, and she is not well yet.

Dr. Bull, surgeon to the Cork South Infirmary, had seen the plaintiff's wife about a week since; she was then labouring under the disease in a secondary form; he had met with numerous cases where the disease had been communicated by children to nurses.

Dr. Ahern had attended plaintiff and his wife previously to September, 1844; they were in good health and free from disease; saw the child alluded to; it was diseased; plaintiff and wife became diseased, and are so still. Had no hesitation in

stating that it was the child which communicated the disease to plaintiff's wife, for this reason—that her breasts were affected, while every other portion of her body indicated no disease.

Mr. Scannell then raised a legal question as to the guilty knowledge of the defendant in giving the diseased child to nurse, contending that it was necessary to prove that before the action could be sustained.

To meet this, the Court inquired of the medical gentlemen whether it was possible that the mother of the child was not aware of the disease?

Dr. Bull replied that it might be so, but the chances were that she knew it. He himself had observed the disease one hundred times in nurses who had got foundlings to nurse, and they were astonished when they ascertained the nature of the disease. It was of an insidious character, and lurking in the system. He had also seen cases of secondary where there had been no primary disease observed.

Court—How was the child affected?

Dr. Ahern—Both secondarily and primarily.

Court—How was the plaintiff's wife affected?

Dr. Ahern—In a secondary form.

Dr. Bull—That is invariably the case when the disease is communicated by a child to a nurse.

Court—As there is some difficulty in the case, I shall take time to consider it. If I grant a decree, it shall be for the whole amount, as I look on these poor people to have been injured for life.—*Dub. Med. Press, April 22.*

A POOR-LAW TRAGEDY.—Bildeston, May 8th.—“Last Monday morning, a poor woman, named Bumstead, was found dead in her bed. It appears that she had been in a bad state of health for some time. Her husband, under these circumstances, was obliged to apply for relief, and received an order for the union-house. The woman was considered unfit for removal. The ties of Nature being disregarded, the man, with the greater part of his family, went into the house, leaving one little girl to take care of its mother. Some time on the Sunday night, the poor child awoke, and said, ‘Why, mother, you have kicked all the clothes off!’ being unconscious that its mother was then a corpse! About five o’clock in the morning, the fact was ascertained, and that she had been so several hours, with every appearance that a struggle had taken place. A question might be asked, how far it was right to leave the poor woman under the care of a little girl; but this ground must be trod upon gently, as, in a recent case of cruelty, a guardian, not a hundred miles from this place, observed, that, however true it might be, it had no right to be published.”—Extracted from the *Suffolk Chronicle Newspaper*.—The correspondent of THE LANCET, who provided this extract, asks—“Ought not a coroner’s inquest to have been held in this case?” Undoubtedly.—Ed. L.

CLAIMS OF PROFESSIONAL SENIORITY.—*To the Editor.*—Sir: Amongst your various communications to correspondents, and the very trite and valuable remarks emanating each week from your own pen, one thing demands criticism, as it undoubtedly tends to foster the want of unanimity so much complained of among medical men—I allude to the uncourteous manner and haughty tone sometimes assumed by so-styled “established” medical men, towards the junior members of their profession. This cannot be due to “professional etiquette,” since it does not obtain in any other learned profession; nor is anything like it seen, to such an extent, in professions not styled “learned,” nor even among tradesmen. *Cæteris paribus*; in what but in years is the man of fifty or sixty superior to the man of thirty? The result of daily practice, in two districts near to me, certainly does not show a real superiority. Then in what does it consist? The behaviour towards juniors of which I complain, is a great bar to that good fellowship which ought to exist in a profession like ours, already sufficiently encumbered by other drawbacks. I am, Sir, your obedient servant,

Bath, April, 1846.

A SUBSCRIBER FOR SEVENTEEN YEARS.

MEETING OF LONDONDERRY PHYSICIANS.—On Thursday week, a meeting of the medical officers of the County Infirmary, dispensaries, and workhouses in the county of Londonderry, was held in Dungiven, Francis Rogan, Esq., M.D., in the chair, and Dr. Babington, secretary. After the business of the day had terminated, the party dined together, and it was agreed that the officers of medical charities within the county should in future meet annually, either at Dungiven or some other central place; the next meeting to take place on the first Thursday in May, 1847, and each member to invite a medical friend.

BOOKS RECEIVED FOR REVIEW.

Elements of the Theory and Practice of Medicine, designed for the Use of Students and Junior Practitioners. By George Gregory, M.D., Fellow of the College of Physicians, London, &c., &c. Sixth edition. London, 1846: Renshaw; Churchill.—Edinburgh: Maclachlan and Co.—Dublin: Fannin and Co. 8vo, pp. 792.

Chelius' System of Surgery, translated. Part XI.

Elements of Pathological Anatomy, illustrated by coloured engravings and woodcuts. By Samuel D. Gross, M.D., Professor of Surgery, Louisville, Kentucky. Second edition, 1845. Philadelphia: Barrington; Haswell.—Louisville: Haswell. Large 8vo, pp. 813.

Outlines of the Nerves, with short descriptions. By John Neill, M.D., Demonstrator of Anatomy in the University of Pennsylvania, &c. Philadelphia, 1845: Barrington; Haswell. Large 8vo, pp. 30, with plates.

Outlines of the Arteries, with short descriptions. By John Neill, A.M., M.D., &c. Philadelphia: Barrington; Haswell, 1845. Large 8vo, pp. 30, with coloured plates.

On the Treatment of Strictures of the Urethra by Mechanical Dilatation, &c. By James Briggs, Senior Surgeon to the Lock Hospital. London: Longman and Co., 1845. 8vo, pp. 63.

The “Open Surgery” Question Considered. By W. J. Preston, Surgeon and Apothecary. London: Odell, 1846. Pamphlet.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, May 8th, 1846:—J. Ward, J. D. Blake, C. C. Hailey, F. Libery, E. C. Thorp, D. Evans, R. R. Crucefix, N. J. Hobart, R. Allen, T. C. Jones, J. Syme, J. S. Smith.

APOTHECARIES' HALL, LONDON.

Names of Gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, May 7, 1846:—Richard Sandford, the Isle, Salop; Edward Lowdell; George Johnston Langsford, Gibraltar; John Rowe, Penzance, Cornwall; John Griffith Morris, Hereford; William Burns Beatson; William Frederick Cleveland, Lowestoft.

CORRESPONDENTS.

M.R.C.S. and L.A.C.—No obstacles would be thrown by the Society of Apothecaries in the way of an arrangement by which the apprentice might be placed in a position to gain the highest available amount of knowledge during his apprenticeship.

The length of *Mr. Storks'* paper precluded its insertion this week. It shall be published in the next LANCET.

Mr. Faulks may be assured that we shall continue to expose quacks and quackery in all their Protean forms. Want of space has compelled us to postpone the publication of *Mr. Faulks'* letter.

T. B. C. should consult a respectable surgeon. It is a case that requires some attention, and for the defect mentioned, a slight operation may be requisite for its radical cure; but we again repeat, that he would best consult his own peace of mind by referring, without delay, to a medical practitioner of respectability.

A Subscriber.—The possession of the continental degree confers no privilege in England. It is not likely, in the case mentioned, that there would be any interference on the part of the College of Physicians. The law on the subject is in a state of profound confusion.

An Old Subscriber.—The degrees mentioned are, we believe, of about equal value; but both are far inferior to others, which can be obtained at some of the universities.

Mr. Cochran.—The emollient teething sticks were noticed as an advertised remedy, accompanied by the usual puffing certificates from medical practitioners. They fell, therefore, within the category of condemned proceedings. As one of that class we were obliged to consider the advertisement, and we cannot recal or alter our former notice.

Mr. J. B. B., (Lambeth,) is advised, before taking any public notice of the subject, to ascertain from the patient and her friends, in writing, whether they requested Mr. D. to remain in charge of the patient, to the exclusion of the practitioner whose attendance had been previously engaged.

W. H. could not do better than apply, as a student, for information on the subject, to Dr. Davis, 17, Russell-place, Fitzroy-square.

A Militia Medical Officer.—Nothing has been done relative to the matter; but Mr. Wakley will inquire on the subject of the Secretary at War.

Mr. Morgan's communication shall receive speedy attention.

Communications have been received from—Mr. Procter, (York;) Mr. Curtis, (Camden Town;) Dr. Ormerod; Mr. Newport; Dr. Todd; Dr. J. A. Wilson, (Dover-street;) Mr. S. S. Faulks, (Bath;) Dr. M'Cormack, (Buncrana, Donegal;) The Editor of the *Gazette Medico-Chirurgicale*, (Paris;) Mrs. Cochraue; A Subscriber; Mr. Jones; M.R.C.S. and L.A.C.; Q.; Dr. Brush, (Scots Greys, Dublin;) Mr. Yates, (Nottingham;) Mr. G. Johnson, (Berwick;) and H. G.

CLINICAL LECTURES

ON THE

PRINCIPAL FORMS OF INSANITY,

DELIVERED IN THE MIDDLESEX LUNATIC-ASYLUM
AT HANWELL.

BY JOHN CONOLLY, M.D.,

PHYSICIAN TO THE ASYLUM.

LECTURE XVII.

Description of chronic forms of insanity continued; delusions; hysterical insanity; various impairments of the mental faculties; imbecility supervening in young persons.

AMONG the various examples of delusions which are presented in our wards, we have very few cases in which a delusive notion is entertained of the composition or form of the body being altered. We have no "maids turned bottles," or men imagining themselves to be teapots, or declaring that their legs are made of butter or of glass. But we have patients who assert that some extraordinary change has been effected in the interior of the body, and that serpents, or an evil spirit, are within them; or that the intestines are contracted or closed up; or that the uterus is impregnated, and has continued in that state for years. In some of these cases, it is possible that local disease exists, but in most of them the delusion seems to originate in some morbid condition of the nerves; but whether at their origin, or in their course, or extremities, I believe no pathologist can easily determine. An analogous condition of the nerves is the probable cause of that extreme sensitiveness of the surface to the presence of any kind of dirt or impurity, which leads some patients to pass the greater part of the day in washing and dressing. Modifications of the senses of sight, hearing, taste, and smell, are not at all uncommon. When patients mistake those about them for those absent, persisting in calling them by the names of those absent persons, and exhibiting towards them, even for years, the sentiments of affection or aversion, which those for whom they mistake them would inspire, it is difficult to know whether there is some ocular illusion; or the state is rather allied to somnambulism, in which, although the eyes are open, their "sense is shut," and the object supposed to be seen is merely that presented by the imagination. M. A.—, and S. M.—, in female ward No. 10, and M. P.—, in No. 8, generally address visitors, as well as myself, as if we were well known to them, and well acquainted with all their domestic affairs; and they do not seem to perceive that the asylum is not a town, and that the buildings are not separate houses. E. D.—, in female ward No. 10, talks to us as if we were other individuals, whom she names, although she knows all the affairs of the asylum pretty well. On the appointment of new officers or attendants, she always declares that they are persons known to her, and gives them names. M. P.—, in female ward No. 8, often gives me confidential directions respecting a certain conduct to be observed towards persons with whose affairs, as well as her own, she supposes me to be fully acquainted. J. M.—, in male ward No. 7, and the old man, R. C.—, in male ward No. 12, and J. T.—, in the tailors' shop, imagine me to be somebody known to them before; each gives me a particular name, evidently associated in his mind with some one formerly known to him.

Delusive impressions as to sound are very troublesome to many patients; they hear voices, and hold conversations and arguments; and they fancy their relatives are imprisoned, or that persons are allowed to persecute them. J. S.—, in male ward No. 9, told us this morning that he was threatened by treason-speeches from the walls, and accused of crimes which he had never committed. In a letter which he gave me, written to one of his former friends, he says,—"There is nobody but God and myself can tell what I have suffered. Deaths oft. Deep affliction, pain, and sorrow, have been my lot. My life has been threatened by persons unknown." Delusions of this kind are very frequent, and they sometimes lead to danger; for the patient imagines himself followed by his enemies in the streets; or associates the voices with real persons; or thinks himself commanded by a superior power to murder his wife or his children; or supposes his own life to be sought by the government. J. H.—, in male ward No. 11, was lately sent here, in consequence of being found loitering frequently near the house of one of the secretaries of state; he says he had no intention of doing any mischief; but he thinks that the present government, in legislating for May-

No. 1186.

nooth, have adopted all the views published by him in a newspaper some years ago; and that he is entitled to a recompense. They sometimes believe that magnetic wires traverse their apartment, and that various means are employed to make them insane. Dr. Haslam published a remarkable account, many years ago, of a gentleman who believed himself to be practised upon by machinery, and many enemies concealed somewhere about London Wall, of which and whom the patient had made sketches; and about nine years ago, I saw an advertisement in a newspaper, setting forth, in the manner of an affidavit, the persecutions undergone by the advertiser, a physician, in consequence of being followed all over the continent "by a person of high stature," whose attendance occasioned him difficulty of breathing, inflammation in the chest, and irritation and congestion in the head, against all which he made a solemn protest. The belief entertained by some patients, that the attendants mix poison with their food, seems to arise from a disordered sense of taste or of smell; and I have known them so impressed with a belief that human flesh was given to them, as to suffer great torment.

Many patients may be seen talking earnestly, as if to some listener. J. C.—, a poor man who has since become totally deaf, after an attack of apoplexy, was before often to be seen walking up and down the airing-court, stopping now and then, and appearing by his gestures to be giving commands to imaginary soldiers. Sometimes he would quarrel with himself, strike his own head with his hand, and say, "John C.—, John C.—, how can you be such a fool?" J. W.—, an elderly patient, in male ward No. 11, but usually employed as a kitchen-helper, holds energetic conversations with persons supposed to be by his side, and sometimes suspends his knife-cleaning for a few moments, as if to put a positive end to the argument, by addressing a very decisive observation to the wall. He is often so much in earnest, that one would suppose two or three persons were engaged in the dispute. J. A.—, a German patient, whom you must have seen employed as a gardener in front of the asylum, will lean upon his hoe for half an hour together, telling long and marvellous stories, in the natural voice of one who addresses a listener. Those patients who are subject to recurrent attacks of insanity, sometimes only manifest this peculiarity when the attack returns. S. A.—, in female ward No. 5, whose case was referred to in the preceding lecture, and whose paroxysm has now advanced to its height, was, we saw, sitting this morning on a bench, holding an argument with one or more imaginary interlocutors, and expressing herself with much vivacity and considerable action.

Some years ago I visited an elderly lady in the country, whose senses of sight and hearing were simultaneously affected. A table-cloth was suspended in the doorway, for the purpose, she informed me, of keeping out the number of spirits which came into her room and hovered about her. She said she had for a long time been visited by them, but had seldom mentioned it, "because it looked so much like insanity." Their communications had formerly been of a pleasant nature; but latterly they had become more gloomy. Formerly, they told her that she should again see the deceased members of her family; but now, their number was increased by the addition of several black spirits from India, sent over the sea because it was apprehended that they would spoil the crops. She thought it a pity that, instead of being sent over the sea to this small island, they had not been sent into it. She said she saw them going continually into the windows of all the houses, and that they were most numerous when there were black clouds in the sky. It was impossible for her to read or work much, being chiefly employed in keeping the spirits off with a short stick. At night, she was obliged to tie up her mouth with the utmost care, to prevent them from getting into it and suffocating her. She had tried muslin, at first, to keep them out, but they got through it, and she now used a table-cloth for the purpose. No question which was put to her seemed to arouse any suspicion in her mind that all this was considered to be a delusion; she talked of it as a disease, feared it might be infectious, and spoke of having a room in some unfrequented house. The memory of this lady was unimpaired, and she spoke rationally on other subjects.

Although there is an apparent explanation of some delusions of the kinds now mentioned, in the morbid condition of the nerves of sense, many delusions neither admit of this nor of any other probable explanation. We may conjecture that they arise in the mind, and for a certain time, or permanently, prevail, in consequence of a defective innervation of some part of the brain, analogous to what is observed in certain partial impairments of sensation; the mind perceiving half

a subject only in one case, as the eyes see half an object only in the other. The delusions disappear and return, just as such ocular affections do; sometimes they suddenly disappear, and come again, and sometimes they gradually give way. Instances have already been mentioned, in the preceding lectures, of delusions apparently dependent on plethora, and on debility, disappearing under the use of appropriate remedies.

But how utterly inexplicable are the delusions of T. O—, in male ward No. 7, and of the two sisters A—, in female ward No. 3. T. O—, who is remarkable for his red face, his affected pomposity of gait, and his noisy talking, is by trade a tailor; but asserts himself to be a divine person. If offended, he thunders forth expressions of indignation, and revenges himself by consigning the whole world to destruction without appeal; but he not unfrequently closes his anathema by a polite request for a newspaper. His usual occupation is that of making pincushions, in which he is a large dealer, and he lays out his profits in beer and tobacco. He refuses to go to the chapel of the asylum, alleging that it is useless for him to pray to himself; but he has not the slightest objection to ringing the chapel-bell for prayers. Some years ago he used to have violent quarrels with another patient, whose delusions resembled his own. He is now suffering from an illness which threatens to be fatal to him; he is dropsical, feeble, can scarcely eat or sleep, and laments that it is impossible for him ever to die.

The insane usually pay little regard to the delusions of their neighbours, or are only amused by them. But the two sisters A—, whom you saw sitting close together in the airing-court of the female ward No. 3, have each a delusion, and each believes in the other's delusion as well as in her own. The eldest, who is also the mildest of the two, and is generally silent, considers herself to be the Almighty. The younger one is more vehement, talks with fervour and agitation, and calls herself the Son. They live wholly with one another, speak to no other persons, sit with their heads covered up by cloth capes, so as to look like nuns, and are always side by side, and quite close to one another, in the airing-court or in their bedroom, where there is one large bed for the accommodation of them both. At one time they used to walk together, but they have become inactive. If spoken to, the younger one begins to move her head about and clear her voice, and soon breaks out into angry remonstrances. When she pauses for breath, the elder one interposes a few words, calculated to suggest fresh topics, or sometimes takes up the speech herself, and sometimes both declaim together. At one time I wished to try the effect of separation on these wild fanatical women, and each seemed only to pine in silence. An accidental meeting of them was so affectingly expressive of their mutual attachment, that it was impossible any longer to deny them the solace of one another's society, apparently the only comfort left to them. Although both are feeble, and one of them suffers much from a cough, they will take no medicine or advice, and think the very mention of such human means very presumptuous.

Among the chronic forms of insanity, none are more various in character, or require more patience in their management, than those associated with hysteria. They are generally in patients of very wayward temper, and the faculties of the brain seem to be so partially and so alternately active in them, as to make their character differ extremely from day to day. Thus feelings of veneration and conscientiousness will one day prevail, and the patient's conversation will turn on religious topics and on her own unworthiness. The next day finds her manifesting gaiety and a love of melody; and various affections and propensities have their days of ascendancy, with various impulses and delusions. A general state of excitement, which finds relief in screaming, is not uncommon in these patients. S. T—, in the female infirmary, shows this propensity very often, and when she was accustomed to be put in restraint, she would scream for many hours together; and she used to account for not being hoarse or fatigued after these exertions, by saying, that "the screams came to her, she did not go to them;" which odd expression probably involved a physiological truth. But she now struggles against this screaming impulse; sometimes rising suddenly up and exclaiming, "We wont have that screaming; we cannot have such a noise here." She then always assures us that the screams are "not hers;" meaning that she does not scream voluntarily.

Much more troublesome symptoms occasionally appear in some of our hysterical patients—in M. N—, for instance, in female ward No. 1; in S. W—, in female ward No. 6; in R. P—, in the female infirmary; and in E. W—, in female

ward No. 1. The patient is observed to be in particularly high spirits, walks about singing and laughing, or becomes fretful, and scolds or abuses those near her, or refuses to speak. A violent convulsive attack follows, during which the patient appears to be deprived of consciousness and will, and impelled by mere nervous impulse to throw herself about, to dash herself on the floor, to beat the ground violently with her feet and hands, to strike, kick, or bite those within reach, or to run violently against them. Perhaps she will tear portions of her dress, and tie them, or a string, tightly round her neck, and this so suddenly as almost to effect the purpose of strangulation, although closely watched; or the patient will spring up to the window and try to throw herself out; or rush to the door and leap down into a deep area; or endeavour to get up a chimney; and of all this the patient seems afterward to retain little or no recollection. Occasionally, when this state has passed away, and after an interval of depression and inactivity, the manners and language of the patient become energetic and impassioned; and in one case, no longer in the asylum, the various shades of madness succeeded each other with a rapidity which no actress ever yet portrayed. The look of suspicion, the laugh of delirious gladness, the appearance of childish confidence, the violence of passion, the wild song of sudden joy, the most terrible words and looks of anger and revenge, were sometimes all exhibited within one hour, and were succeeded by screams, cries, and tones of despair, which would have filled any audience with horror.

There will always be some cases of this kind among the chronic and incurable patients; and, without very discreet management, they will become frequent and very hurtful disturbers of any asylum, and centres of discontent in every ward. If treated with any degree of harshness, or even with neglect, they resent it strongly, and have usually so much intellect left as to be able to influence the feelings and conduct of the other patients. They require to be treated with firmness, but also with indulgence, carried to a very great extent. In asylums set apart for incurable patients, they would probably become quite as unmanageable as they are now found to be in workhouses. But to whatever description of incurable or chronic cases our attention is directed, we shall find that their tranquillity depends on their management, and shall see the error of mistaking this tranquillity for a sign that all the management is unnecessary by which it has in reality been produced. The continually maniacal, those liable to recurrent attacks, the hysterical, and those affected by morbid delusions and impulses, all become habitually quiet or habitually turbulent, according to the treatment they continually receive. When we walked through the female ward No. 3, to-day, about the dinner hour, you noticed a singular-looking stout woman, oddly dressed, who was very busy laying the cloth and putting out the knives and forks. Although fond of being useful, her temper is extremely difficult to manage, and her irritability and violence, when opposed, are extreme. Her peculiarities are endless: she will not wear a cap, or have her dress made after any customary fashion, and she has habituated herself to speaking in so unnatural a tone of voice as to be scarcely intelligible. She puts all verbs and noun-substantives in the plural number, and makes all adjectives end in y. She calls those of the patients whom she does not like, "horribly critters;" and her friendly salutation is, "gay mornings to you my loves." Her extravagant grimaces when at chapel make it seldom possible to allow her to attend; and she repeats the Belief and prayers rather loudly, saying, "I believes in Gods, the Fathers Almighties," &c.; "Our Fathers which arts in Heavens,"—"gives us this days our daily bread-splots," &c.; meaning by bread-splots, bread and butter. Her malady is said to have been occasioned by drinking; and notwithstanding her great and numerous oddities, she is very observant, extremely attentive if any patient or nurse is sick, and appreciates the characters of the officers and servants very correctly. It is impossible to force this patient to any proceeding which is against her will, and she will defy the efforts of numerous attendants; but if patience is exercised, and a favourable opportunity waited for, persuasion will overcome all obstacles. Something of the same kind exists in the character of a large proportion of our chronic patients; and they are prevented from being violent and dangerous by constant attention to their peculiarities, and by abstaining from all violent methods of treatment.

F. H—, a patient in female ward No. 10, was formerly much in restraints, and at one time almost constantly. She was then generally violent, and had fits of screaming and swearing, lasting for days, with a disposition to break windows or to attack the nurses. A tendency to these attacks may now be distinctly observed from time to time; but the attack

advances no farther than a disposition to complain in rather strong language of anything that offends her, and she is usually good-humoured and industrious. It is unnecessary for me to multiply examples of this kind, some of which may be more appropriately cited in illustration of the treatment of chronic insanity.

The mind has suffered various degrees of impairment in all the chronic cases, and you may have observed one singular form of impairment in several of our patients, with whom one idea seems ever to prevail, and to occupy the whole mind, being either expressed in one set of words, or in some particular and uniform action, every day, and every hour of the day, for years. E. B.—, in female ward No. 10, addresses me every day with the question, "When am I to go home, Mr. Conolly?"—the words and the tone not having varied for four years. One of the male epileptic patients asks every day if there is any cooper's work to be done? If you go to the gate of the female ward No. 13, you will certainly find two patients standing there, ready to come out as you go in. One of them, M. S.—, always repeats the words, "I want to go to Chelsea;" and if asked why she stands at the gate all the day, says it is because she expects to go to Chelsea. She has done this constantly for nearly twelve months. The other patient, C. N.—, seizes hold of your arm very firmly, accompanies you about the ward, struggles to leave the ward with you, and is only detached by force, always saying, in a very quiet voice, "Please, sir, to let me go out with you." She will repeat these efforts and this question twenty times a day, and I have now known her to do so for six years, without any alteration of manner or of words. In approaching the asylum, you have probably noticed an elderly female patient, rather smartly dressed, walking in the front grounds. Every day this harmless woman accosts me in one form of words,—*"Pa Conolly, please to give me a ticket to pass the gate this very day, for I can stay here no longer."* With this patient, the fixed character of the mind seems to have caused the idea of time to be lost. She has a son, seventeen years of age, of whom she often speaks as her little boy Billy; and when he comes to see her she does not recognise him, because he is no longer a little boy. This infirmity is delicately sketched by Sir Walter Scott, in the character of Dominie Sampson, who expects to find in Henry Bertram, after long absence, the little boy to whom he taught grammar. Another patient, S. P.—, in female ward No. 10, exhibits this peculiarity in short notes written to me at intervals, during four successive years, not with ink, but worked with needle and thread on fragments of linen or paper, to this effect—"Thank the king for my liberty and Mr. Pontin on Sunday.—S. A. P." Of these, I have received at least fifty, varying very little in expression, and they are usually given with a verbal injunction to "dine with the king to-morrow." In A. C.—, in female ward No. 3, the sentiment of self-esteem seems to be ever active, to the exclusion of every other: she sits for hours in one attitude; her head drawn back; her eyes directed to the light, and her eyelids motionless.

All these, and many other peculiarities, seen in old cases, are, perhaps, only illustrations of what may be termed imbecility of mind, or certainly of some impairment of its equal strength, activity, and elasticity. Where such marked peculiarity is not observable, the impairment of the mental power, when the acute symptoms have subsided, is generally first noticeable in an excessive prolixity. There is no confusion, no particular irrationality, no incoherence; but the patient talks on without ever coming nearer to an end: he begins the moment you see him, and he talks until you have fairly shut the door upon him. The next step is to incoherent talking,—the outward manifestation of that incoherence of the thoughts which forms a very distinct stage of chronic insanity. This state, in which the ideas and language appear to have no connexion, or are such as only to show a succession without showing the connecting links, may succeed to any form of mania or melancholia. It is quite distinct from the wild incoherence often observed in recent cases, which is only a state of temporary confusion. Incoherence has also its varieties in chronic cases, as in some there is a want of uniformity of subject in the successive sentences, whilst in others, the different parts of each sentence have no discoverable relation to each other. The cases of M. A.—, in female ward No. 10, and of E. D.—, in female ward No. 9, present examples of the first degree, and that of J. S.—, in male ward No. 5, may be referred to as a striking instance of the second. The fluent talking of the latter patient affords so lively an example of this peculiarity as to make any description superfluous to those who have listened to him. In female ward No. 2, there is an elderly woman, S. F.—, in whom incoherence of mind and language are very conspicuously mixed up with delusions as to persons,

places, and events. When the nurse of the ward lately had a week's leave of absence, this poor woman became convinced that she had been put into the boiler, and narrowly watched for her exit whenever any water was drawn from it. J. B.—, in male ward No. 3, whose case has already been spoken of as illustrative of delusions, is singularly incoherent. He said to me to-day, speaking of himself, that his "functions were perfect, and that it was a case of reduced volition altogether;" and then went on to talk, very tranquilly, of "five per cent. Rufus heraldry, and a mistake at the Board of Green Cloth, and of three or four thousand men being destroyed by a galvanic tabernacle." One doubts, in some of these cases, if the patients use the words which they wish to employ, or are really conscious of those which they utter. The following is one of many letters written by him:—

"Hanwell Secret State Prison papers.—To Lord Mayor Magnay, City of London, Great Britain; care of Lord Mayor Gibbs, Guildhall, City of London, Great Britain; from Chief (Secret) Honorary Alderman of Brighton palace, J. B. blood royal Britannia family. To be delivered by Herald's officer John Norman.

"Hanwell (Secret State Prison) National History Gaseous Battery &c. Literature Composing Machine Station of the Officers of Herald's College oathed to the Non Freemen pledge namely all persons without the letters A.V.W.X.Y.Z. in the surname or title prefer to being confined to the City (State Prison system of Julius Caesar) life than adapt their family names to the oath letters quoted

"3rd April 1845

"To Lord Mayor Magnay of the City of London Great Britain Director of the orders of the Prime Minister with reference to the treatment of the British and Foreign Non Freemen.

"Case of Star process trial

"Instituted by Queen Dowager Adelaide and guaranteed for the practice of Involunt Heraldry by Prime Minister Lord Melbourne Prime Minister Sir Robert Peel and probably Prime Minister the Duke of Wellington

"I J.B. sworn Theoretical King of Heraldry (Sole) British and Foreign sworn by order of Queen Charlotte an adult at four years of age being a descendant of Queen Regnant Burton nick-named Britannia by the Roman Invaders &c. do apprise your Lordship the Mayor of the City of London Great Britain my property my body and the bodies of my wife and three children and probably a dead child were put under Involunt Heraldry process the twenty-first of June eighteen hundred and thirty-seven the secret process served by Cocking Table Decorator to Queen Adelaide on a claim of Her Majesty it was my duty to restore the Alexandrian Library destroyed by the Royal Marines of Queen Regnant Burton the Royal Marines being commonly known as the Moors Her Majesty's claim in the Library is to be restored by Heraldry deduction which I have attempted now eight years nearly three years and five months as a Common felon State Prisoner the County Justices not permitting other accommodation although they seized my body (through Mr. McWilliam) for the purpose The discipline being Mesmeric and accommodation Confinement Poor Law my strength fails me considerably and I shall feel obliged if you apply to the Prime Minister to render me Queen Regnant Treatment as my future condition

"J. B.—.

"Master Manufacturer Machinist
Chief Honorary Alderman of
Brighton Palace"

Patients even in a state of confirmed incoherence are generally capable of answering a direct and simple question: they will reply rationally, and deliver a few coherent and rational sentences, from which they run off into inconceivable oddities of expression or of narrative. D. V.—, in female ward No. 10, who is always incoherent, will mention her age when asked, and the number of her children; and then go on to say that she was born "a youzedd—a bird at sea—and takes care of her children by sun-reading and burnifying." A. S.—, in female ward No. 9, and A. R.—, in female ward No. 14, will answer questions respecting their health quite well; and yet both go on immediately and invariably to complete incoherence of talk. J. R.—, in male ward No. 8, sits calmly engaged in calculations, which he performs correctly; and when you speak to him, he, with equal calmness, explains what he considers to be the meaning or result of his calculations, and utters such confused theological sentences as no sane man, however ingenious, could invent. A part of his explanation of a sum in addition, this morning, was—"The foundation of the tiger is All Saints' University. All Saints

is the universal animal language—also of Adam and Eve.” But he more frequently gives religious reasons for his arithmetic, associating the numbers with scriptural characters.

The patient’s mind, in these chronic forms of incoherence, is always permanently enfeebled; and yet its state is different from that to which the term imbecility is usually applied. Imbecility, in relation to the insane, includes various degrees of impairment—sometimes shown in loss of memory, sometimes in a difficulty of replying, or in a slow performance of all mental and muscular actions, or in a defective attention to surrounding objects, and in indecision. It may come on soon after the maniacal state has been observed, without any intervening incoherence; but it commonly only supervenes after a long attack, or rather after several attacks: it also supervenes on melancholia; and although it has not received much separate attention, it is a very serious result, yet often admitting of improvement.

In many such cases, there has existed some congenital defect, very little observed in early life, but which becomes declared as youth advances. This is especially the case when girls are the subject of the infirmity. Not being called upon for much intellectual exertion, their great deficiency is for a long time scarcely suspected. They have capacity enough to become skilful in needlework; they go through the routine of school lessons creditably, and sometimes show some skill in drawing, and become accomplished mechanical musicians. But when they arrive at an age in which the affections are expected to be active, and the judgment capable of exercise, they manifest an indifference to their relatives, or an indolence, or apathy, or evident want of power to think and act for themselves. They pursue their occupations in an irregular and desultory manner, neglect exercise, acquire odd, nervous habits, become negligent in dress and behaviour, are capricious and irritable, and are found to require constant superintendence. In male subjects, the defect is probably earlier suspected; they exhibit a partial cleverness as boys, but with some waywardness or other peculiarity; and as they grow up, they are remarkable for obstinacy. When they reach adult age, the inequality or disproportion in the mental faculties becomes very perceptible. They can make certain acquisitions of knowledge, even to a considerable extent, and utterly fail in attempts of a different kind; they are perhaps expert calculators, or have a retentive verbal memory, or become proficient in the practical part of music, but seldom acquire accurate scientific information, and cannot apply continuously to anything. If the circumstances of the individual place him above the necessity of regular exertion, he is only looked upon as eccentric, and he perhaps evinces a shrewd apprehension of the advantages of property, and the value of money. If exposed to misfortune or any agitating circumstances, the mind generally becomes deranged. If placed in various professional situations, such young men leave one pursuit for another, and for a time appearing only unsettled, are at length found to feel no interest in any pursuit. If at college, they will go on making classical acquisitions, but show an utter indifference to engaging in any occupation or profession for which their education was intended to prepare them. Moroseness, irregularity of habits, indolence, and negligence, become more and more perceptible; they are easily alienated from their friends, and form unaccountable attachments to strangers. They quit the university in disgust, repudiate divinity, medicine, and law, prove unfit for holding commissions in the army or navy, become suspicious, entertain delusions, and it is seen that they are entirely of unsound mind. Although they have an evident distrust of themselves, and are timid and irresolute, and have often a suspicion of their own morbid state, or a dread of insanity, they are jealous of interference, impatient of being watched or advised, fiercely resist attempts to control them, and sometimes become dangerous to those relatives who exert the most anxious care for their protection. I become acquainted with many such cases in a year, and they constitute a proportion of the cases in every asylum: their treatment is important, for their ultimate character and fate entirely depend upon it.

There are several cases in which a degree of imbecility of mind is always shown when the bodily strength of young persons is impaired. The brain falls into a condition of debility without insanity. To a certain extent, varieties of cerebral energy constantly accompany the variations of bodily health; and the object of all care, both as regards the sane and insane, and all the gradations between them, is to regulate both body and mind in such a way as to ensure to each individual the extent of cerebral power of which his organization is capable. Any debilitating cause may bring on a temporary or permanent imbecility in young persons of delicate constitution and

feeble organization; neglect of exercise, or over exertion, or too low a diet. When the health improves in consequence of the removal of such causes, the mind becomes stronger, and the patient talks, writes, and acts rationally. In young women in a very feeble state of health, the faculties are so languidly exerted as to require continual urging, which, at the same time, they scarcely bear with impunity. The patient can resolve upon nothing, can scarcely read a page of a book with attention, writes a few lines of a letter sensibly, and the rest foolishly, repeating the words, or re-writing the lines. The following note, addressed to me by a lady whose mind was in this state, illustrates this peculiarity very unexpectedly, and shows also the tendency in such a state of mind to the rising up of various delusions:—

“My dear Sir,—Hearing from Mrs. —, how kindly you express yourself to her for my welfare, I profit by her permission to write to thank you for your kindness in so doing. I am sure it does credit to your benevolence to be so kind to one who can, at least at present, so little remunerate you: but a kindness rendered, is a thing to be remembered; and I take the opportunity of saying how glad I shall be if at any future time I can return it. Perhaps you have heard that I spent the winter of thirty-nine at —, with a lady named —. I was under the care also of a doctor, named Dr. —, whom I have no doubt you are acquainted with. He was very kind to me, and visited me daily for some time. He is a ghost exhumed, as it is called, and is no other than King Charles the First: they say he is also Milton, the famous poet of that time; and he is also possessed of a higher name than that, being in one of his bodies Samuel Rogers, the poet of Italy, and the gentlest and best of creatures. Yes, I had the honour and the pleasure divine of sitting at the feet of my Saviour in one of his mildest and most endearing forms; and, I say it without shame, I felt as though I reposed in his protecting embrace. Surely, my dear sir, such was an approach to heaven different from what generally falls to our lot here. I would add more, but I am tired, and must only subscribe myself, &c. &c. &c.”

In all these cases, there is a constant progress downward. Good days occur, in which the patient’s energies seem almost restored; but the unfavourable progress may generally be observed from year to year, and at length from month to month. In the remissions, among other proofs of the temporary restoration of mental power, the delusions, which have commonly sprung up in the weaker state, become fainter or disappear; but they re-appear when the mental weakness becomes again more manifest. The delusions hang on the slightest circumstances; as the name of the patient, for instance, or his features, or an accidental introduction, which often give rise to the delusion in his mind that he is of great descent, or that he is entitled to large possessions, or that he is about to be married. In the general weakness of the brain, there soon appears a want of regulating power over the impressions made by the senses, or over the ideas conveyed by the application of the attention, or over the various propensities and sentiments. Certain portions of the brain and nervous system seem to acquire undue or fitful energy, and to delude the judgment. The sensations become morbid, and either excessive or depraved. Particular studies or undertakings are unreasonably pursued, and wild opinions or theories cherished. Religious excitement or depression often follows; or the fear of poverty or of poison; or foolish attachments and unreasonable antipathies. This form of malady may exist, therefore, in persons of very opposite character; in the virtuous and conscientious, or in the vicious and shameless. It is sometimes the explanation of affections carried to a foolish excess, and sometimes of resentments carried to severity or cruelty.

Such a state of the brain may ensue on a bodily illness, especially after an attack of fever, in convalescence from which, before the strength was regained, I have known various delusions prevail for a time; and the same debility of the brain, accidentally produced, and temporarily existing, or more permanently, which is unequal to combat with delusions, may permit the undue licence of the propensities, or the irregular exercise of the affections. And not only has youthful waywardness often this origin, but the peculiar foibles which too often damage the character in more advanced life may flow from the same source; the temper is uncontrolled, the passions are unbridled, and the resulting eccentricities are humiliating or disgraceful.

“The conscientious physician is just as guilty of the death of his patient, as the still-born infant of the death of its mother.”—*Thomas.*

ST. BARTHOLOMEW'S HOSPITAL.

SURGICAL CASES TREATED AT THIS HOSPITAL.

Reported by HOLMES COOTE, Esq.,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, SURGEON TO THE NORTH LONDON OPHTHALMIC INSTITUTION, AND FORMERLY HOUSE-SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

STRANGULATED FEMORAL HERNIA, OF FOUR DAYS' DURATION; MORTIFICATION OF THE INTESTINE; OPERATION; DEATH FROM PERITONITIS; VARIETY IN THE COURSE OF THE OBTURATOR ARTERY.

CASE 9.—Hannah C—, aged sixty-seven, a respectable married woman, had been subject to rupture in the right groin for the last eight years. She never wore a truss, but could always replace the parts with ease. On Saturday, the 10th of January, 1846, the rupture came down, and she was unable to return it. The day following, she fell ill and sick, and had no motion of the bowels. Upon Monday, a surgeon was called in, who ineffectually applied the taxis. Early on Tuesday morning, she came to the hospital.

Tuesday, Jan. 13th.—There is an irregular and a painful tumour, covered by inflamed integuments, the size of a pigeon's egg, in the right groin; she is unable to keep anything upon the stomach, and has had no motion since Saturday; the pulse is quiet, and the tongue clean; when not disturbed by sickness, she seems free from pain, and dozes. As she was not in a state to take medicine by the mouth, an enema was administered, which brought away a small quantity of fecal matter.

Mr. Lawrence saw the patient ten hours after admission, and determined upon operating immediately, observing, that the external redness was most probably indicative of more serious mischief within the hernial sac.

An incision, about three inches in length, was made over the tumour. From this, a second incision proceeded from the middle point at right angles, and the two flaps of integument were dissected off. The superficial parts, which were agglutinated together and infiltrated with pus, covered a smooth, elastic, and dark-coloured tumour, divided into two cavities; the superior and smaller cavity contained some dark-coloured and offensive-smelling fluid; the inferior and larger one contained a small quantity of fluid, and a knuckle of small intestine, in great part sphacelated. A wavy line of demarcation separated the dead from the living parts. The edge of the knife was directed inwards, and the stricture divided in several places; the intestinal tube was opened by incision, and the parts were allowed to remain in the wound; no fecal matter flowed out. The patient was conveyed to bed, and a bread-and-water poultice was applied.

14th.—No evacuation has come from the wound; an enema administered per anum brought away a small quantity of fecal matter; abdomen distended, but not painful upon pressure; she rejects everything from the stomach, but passed a good night, and says she is easy. Upon Mr. Lawrence introducing a director from the wound into the bowel, about an ounce of fecal matter flowed out. A female catheter was then introduced, but without effect. The opening in the bowel was enlarged, and the stricture further divided; still no evacuation. Pulse 100, and steady. Bread-and-water poultice. Broth diet.

15th.—No evacuation either from the wound or the rectum; abdomen more distended; tongue moist, but slightly coated along the centre; pulse 108, and feeble; she can keep nothing upon the stomach, and passes the greater part of the day in a dozing, half-conscious state. Mr. Lawrence introduced a gum-elastic catheter full six inches into the intestinal tube: about four ounces of fecal matter slowly flowed out.

16th.—No evacuation; abdomen more distended; general pains over the limbs; pulse 100, and feeble; skin cold and clammy. Died 10 P.M.

Examination of the body, sixteen hours after death.—The peritoneal sac contained a considerable quantity of straw-coloured fluid, mixed with yellow flakes; the intestines, red and vascular, were glued together by recently-effused lymph; the small intestines, much dilated, became of a deeper red colour as they approached the cæcum; the protrusion consisted of a portion of ileum, the whole cylinder of which had mortified; the colon was contracted. The catheter had passed fairly into the upper portion of the intestinal tube; the constipation therefore resulted from the cessation of peristaltic action, in consequence of peritonitis.

The operation had liberated the protruded intestine: Gimbernat's and Hey's ligaments had been divided to a small extent in several places. The obturator artery, given off by a common trunk with the epigastric, wound round the upper and inner margin of the femoral ring, close to the inner margin of Gimbernat's ligament, but uninjured by the knife.

The diagnosis of femoral hernia is not always easy. When small, and covered by inflamed and thickened integuments, perhaps infiltrated with pus, these protrusions lose their elastic feel, and closely resemble a mass of inflamed glands. The case is rendered yet more obscure, if the femoral glands have been accidentally enlarged prior to the rupture. The existence of a tumour of doubtful character, in the inguinal or femoral regions, combined with permanent constipation and incessant vomiting, is a circumstance which, after the prompt and effectual trial of ordinary remedies, imperatively demands the performance of an operation. "I have now," says Mr. Hey, "at the time of writing this, (1809,) performed the operation forty times; and have often had occasion to lament that I had performed it too late, but never that I had performed it too soon."* The prejudice which people in indifferent circumstances often entertain against public hospitals, leads them to place themselves in the hands of incompetent persons, who give us the opportunity of witnessing the effects of procrastination, and of the injudicious application of the taxis. In the case here related, a portion of small intestine had been protruded and strangulated, with well-marked symptoms; it had subsequently mortified, and inflammation had spread over the whole abdominal cavity, without the trial of one single efficient remedy. After the patient had been examined surgically, and the nature of the case had been understood, four and twenty hours were suffered to elapse between the failure of the taxis and the removal of the patient to an hospital. "In all the instances," says Mr. Lawrence, "where I have seen the operation, there has never been room to pass more than the edge of the nail under the stricture, and frequently even this has been impracticable."† How much must every hour's delay add to the peril of the patient!

The inflammatory redness of the integuments over the swelling cannot fairly be referred to any undue violence exerted in the efforts made at reduction; it was regarded at the time as a manifestation of much more serious mischief in the deeper parts, and dissection confirmed the accuracy of this opinion: the division of an irregular hernial sac exposed a mortified cylinder of intestine, surrounded by a dark-coloured and fetid fluid.

Although the division of the stricture was no longer needed, as far as the intestine was concerned, it became still an important point to make a free opening for the escape of fecal matter by the artificial anus. The edge of the knife was directed inwards, and Gimbernat's and Hey's ligaments were divided in several situations.

In thus avoiding one long division of the stricture, Mr. Lawrence had in his mind the occasional irregular course which the obturator artery is known to take along the inner margin of the femoral ring. Post-mortem examination proved how necessary was such caution. "M. J. Cloquet examined the origin of the obturator artery in 500 subjects, half male and half female. He found it to arise—first, from the internal iliac in 348—191 males, 157 females; secondly, from the epigastric or crural in 152—53 males, 94 females. In the latter case, it may go on the outer side of the sac to the obturator foramen, or it may pursue its course along the inner margin."‡ When the artery winds round the inner margin of the neck of the sac, there is danger of hæmorrhage, in whatever situation the stricture is divided.

A free opening into the bowel is generally followed by a profuse discharge of the contents, pent up above the constricted portion. No such event followed in this case, whence it became obvious, either that there existed a second stricture higher up, or that, from peritoneal inflammation, peristaltic action had ceased. The free passage of the elastic tube into the canal rendered the latter supposition the more probable; and its confirmation by post-mortem examination affords an illustration of the insidious nature of this disease, which—the cause of the fatal termination in so many instances—differs constantly in the symptoms which characterize its progress, and in the traces which it leaves behind.

CHARING-CROSS HOSPITAL.

FRACTURE OF THE DESCENDING RAMUS OF THE PUBIS, NEAR ITS JUNCTION WITH THE ISCHIIUM.

JOHN C—, aged thirty-seven, admitted into the Charing-Cross Hospital, on the 12th March, 1846, under the care of Mr. Hancock, suffering from the effects of a severe fall, of the distance of fourteen feet. At the time of the accident he was

* Hey's Surgical Observations, p. 130. (1819.)

† Lawrence on Ruptures, sect. II., Strang. Femoral Hernia, p. 500. Fifth edition.

‡ Ibid, p. 481.

standing on a ladder, engaged in painting. His body inclining to the left, caused the ladder, which was resting on the ledge of a shop front, to slip to the right, so that he fell almost entirely upon the tuber ischii of the left side. He complained of pain in the left buttock, which was extensively bruised; but in other respects his symptoms were only such as would arise from a severe shock. Had passed his water since the accident without inconvenience. Mr. Hancock saw him shortly after his admission, and ordered him some aperient medicine, and a hot bath at 100°, and subsequently to apply the fracture-liniment.

March 22nd.—He got out of bed this morning, for the first time since the accident, and endeavoured to dress himself; but although entirely free from pain in the buttock, he was unable to raise his left foot from the ground, and in attempting to do so, he said he felt something move in the perineum. This induced Mr. Westley, the house-surgeon, to examine him carefully, when a crepitus was distinctly felt close to, but rather higher than, the junction between the rami of the ischium and pubis of the left side; and this was confirmed by Mr. Hancock, who examined him subsequently. The following were his symptoms:—Shape and position of the limb natural; exact correspondence in the length of the affected limb with its fellow; the limb, resting on the bed in the straight position, could not be raised beyond about an inch, and then only with great pain, neither could it be abducted beyond a certain distance, (twenty-three inches, measured from heel to heel.) When the patient lay straight in his bed, he could bend his knee, and afterwards approximate the thigh to his body, the foot being in this way entirely raised from the bed. He could also perform adduction; and as the limb passed the median line, so was the power of raising the straightened limb increased, and performed with diminished pain. He could not assume the sitting posture without supporting himself upon his hands. Ordered to be placed upon Earle's bedstead, with his shoulders raised, and legs over the double-inclined plane. His knees to be bound together by a flannel bandage, approximating the limb of the injured side to the opposite one, to prevent abduction, and to relax the abductor muscles.

The above accident is (observed Mr. Hancock, in his clinical lecture) by no means of frequent occurrence, and it presents certain points of interest worthy of notice. From the receipt of the injury to the 22nd of March, a period of ten days, the patient always referred his suffering to the left nates and lower parts of his back, and never to the seat of fracture; but this may be explained by the bruising of his buttock having been so severe that he was prevented moving the left leg at all; for it was not until the effects of the confusion had subsided, that upon endeavouring to get up, his attention was directed to the unusual sensation in his perineum; neither did he experience the slightest injury to his urethra or bladder; indeed, from the first, he passed his water without difficulty, and with about the usual frequency. Although deductions drawn from a single instance cannot constitute a general law, still there are facts in the above case which may prove of importance in forming a correct diagnosis of this particular accident. Such, for instance, are the inability of raising the limb from the bed, whilst lying thereon in the straight position, but the ability of bending the leg upon the thigh, and subsequently the thigh upon the pelvis; the limit of abduction, and the absence of pain upon motion when the limb is adducted; and also the inability of assuming the sitting posture without supporting himself upon his hands. It should likewise be observed, that, examining the patient for this accident, the limb should first be abducted, to put the adductor and gracilis muscles upon the stretch, and the thigh afterwards rotated on its axis; as when the rotation or circumduction was employed, whilst the limb was adducted, no crepitus could be distinguished, but when adopted after previous abduction, the crepitus was distinctly and immediately made evident.

April 25th.—Has gone on without a bad symptom up to this date. He was removed from the Earle's bed on the 20th of April, and has now entirely recovered the use of his limb.

CASE OF ULCER, ACCOMPANIED WITH VARICOSE VEINS, OF THE LEG, TREATED WITH CAJEPUT OIL.

John C—, aged 32, admitted an in-patient, under the care of Mr. Hancock, 5th March, 1845, with ulcer on the right leg. States that he has had a sore on the right tibia since 1831; he had it first in Jamaica, where he was in the habit of drinking largely of rum. Has had varicose veins of the leg for three years. When admitted the ulcer was two inches long by one inch wide, and the surface of the sore without any appearance of granulation; above the wound was a

considerable swelling, caused by enlarged varicose veins. He suffered so much pain that he could not put his heel to the ground. Ordered, cajeput oil, twenty-four minims; syrup, two drachms; distilled water, eight ounces. Mix. An ounce three times a day. Sore to be dressed with water-dressing, and patient to remain in bed.

March 9th.—Swelling has disappeared; sore granulating; veins much diminished in size; quite free from pain; passes more urine than usual. Says, that although he has frequently rested the limb before, he never observed such a diminution in the size of the vessels.

20th.—Has gone on improving up to this date; the ulcer is now very nearly healed. The veins have resumed the natural size, and the swelling above the ulcer, caused by the collection of varicose veins, has entirely subsided.

Discharged cured.

UNIVERSITY COLLEGE HOSPITAL.

CONTRIBUTIONS TO CLINICAL MEDICINE.

BY JOHN TAYLOR, M.D.,

PROFESSOR OF CLINICAL MEDICINE IN UNIVERSITY COLLEGE, AND
PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL, LONDON.

LATENT PERICARDITIS, WITH PLEURO-PNEUMONIA.

CASE 32.—A man, aged twenty-eight, of intemperate habits, after being intoxicated, and lying in his wet clothes, was seized with pain in the side and vomiting; admitted on the fifth day; pain in both sides of the chest; dulness on percussion; crepitation and bronchial respiration; cough; dyspnoea, and rusty expectoration; death on the tenth day; morbid appearances, with remarks; old adhesions of the right pleura; effusion of soft lymph and serum on both pleura; hepatization of the lower lobe of the left lung, and to a less extent of the right lung; no tubercles; signs of pleuro-pneumonia; double pleurisy, with effusion, yet no tubercles; soft lymph and serum in the pericardium; slight enlargement of the heart; the effused serum gelatinized; pericarditis latent; importance of percussion; characters of the pulse; diagnostic value of; cause of enlargement of the heart; liver enlarged; kidneys much enlarged and diseased; nature of the disease uncertain.—Causes: of the diseases of the liver and kidneys; of the pericarditis and pneumonia.—Treatment: tendency to syncope in pericarditis; hence incautious venesection dangerous; local often preferable to general bleeding.

JAMES C—, aged twenty-eight, admitted Aug. 16th 1841; a shoemaker, stout, accustomed to hard work; is in the habit of drinking freely, chiefly of porter, with spirits occasionally; has had several attacks, similar, he says, to the present; has been losing flesh for the last few months. On the 11th inst., he was intoxicated, got wet, and in order to relieve a pain which he had in the head, he laid upon his bed with his wet clothes on. This was followed by pain in the side. (It is not stated which side, nor on what day the pain commenced.) On the 13th and 14th, he brought up a matter streaked with blood; he says it came from the stomach by vomiting, and was mixed with food which he had taken. After vomiting, he felt easier for a time, but the pain soon returned.

On admission, he complained of pain in both sides of the chest during inspiration, with pain in the stomach. These had been especially severe in the night preceding his admission. He had a cough, very violent now and then, and much soreness in the stomach; sickness; great weakness in walking; pulse 100 to 105; tongue furred; appetite good; bowels moderately open. He was seen by the house-physician, Dr. R. Quain, and ordered, venesection to eight ounces; four grains of calomel immediately, and a draught three times a day, containing—Epsom salts, half a drachm; dilute sulphuric acid, twelve minims; water, an ounce and a half. After the bleeding it was necessary to give half a drachm of aromatic spirit of ammonia in camphor mixture.

August 17th.—I saw the patient: the motion of the ribs on the left side was more free than on the right; the sound on percussion was duller behind over the left side than the right; there was bronchial respiration mixed with decided crepitation over the middle third of the left lung, posteriorly; less respiratory murmur also under the right clavicle than the left. Ordered, to take half a grain of tartarized antimony, in an ounce of water, every eight hours, and three grains of calomel between each dose of the antimony.

18th.—Expectoration rusty; respiration strongly bronchial over the left side behind; tongue very much furred; bowels constipated; has had no sleep; was very sick after the medi-

cine this morning. Ordered, to take the tartar emetic every three hours; a blister to be applied to the right side of the chest.

19th.—Bronchial respiration on the left side, mixed with crepitation; dullness on percussion on the right side also. Increase the dose of tartar emetic to three-quarters of a grain. To be cupped below the left scapula to six ounces.

20th.—Expectoration rusty and very tenacious; had slept little, on account of the cough; has great pain in the right side; great thirst; bowels open; the medicine causes sickness. Dr. R. Quain ordered eight leeches to be applied to the right side.

21st.—Has had extreme dyspnoea the whole night, and died at eight o'clock this morning.

Inspection of the body, eight hours after death.—*Chest:* Some fluid in each pleura.—*Right side:* Old adhesions of the pleuræ behind, and also to the diaphragm, and between the lobes of the lung; recent adhesions in front; the lower part of the lung was dark-coloured and hepatized; the apex and anterior margin crepitated freely; there were no tubercles.—*Left side:* Extensive adhesions of the pleuræ, but less firm than those on the right side; and the upper part of the lung was dark-coloured, solid, (hepatized,) and broke down readily under the pressure of the fingers; the rest still crepitated, and contained a frothy mucus: weight of the left lung, thirty-nine ounces avoirdupois; right lung, twenty-two ounces and a half.—*Heart:* The pericardium contained about twelve ounces of a serous fluid, which, after removal, separated into a coagulum and a watery portion; the whole surface of the pericardium, both over the heart and elsewhere, was covered with a layer of soft lymph, of considerable thickness: on removing this the membrane beneath it was seen to be unusually vascular. The heart was enlarged; the walls of the left ventricle more thickened; the aortic valves healthy; the mitral slightly thickened and opaque; the left auricle healthy; the right ventricle thickened; the tricuspid valve a little thickened and opaque. Weight of heart, twelve ounces and three-quarters avoirdupois.—*Abdomen:* The liver was of large size; the cut surface dark-coloured; gall-bladder filled with bile; weight, sixty-six ounces and a half.—*Kidneys:* the kidneys were larger than usual, and the left one was lobulated. On the cut surface, the distinction between the cortical and the medullary portions was less obvious than usual. Weight of the right, six ounces and three-quarters; and of the left about one drachm less.—*Spleen:* Of small size; otherwise healthy; weight, four ounces and a half. The colon, especially its transverse portion, was very much contracted. The intestines were not laid open.

SUMMARY OF THE CASE, WITH REMARKS.

Symptoms, diagnosis, and morbid appearances.—The history of this case is very imperfect; for at the time it occurred, I was prevented from examining the patient further than was thought necessary to guide the treatment.

Lungs.—1. The case was considered and treated as one of pleuro-pneumonia affecting the left side chiefly, but not exclusively, and this opinion was confirmed by the post-mortem inspection. 2. There was dullness on percussion, bronchial respiration, and crepitation, at first confined to the left side. The dullness afterwards extended to the right side. There was cough, some dyspnoea, and rusty expectoration. 3. The pleurisy was more acute on the right side, hence the more severe pain (although it is not noticed in the history of the case) on this side, the comparative immobility of the ribs, and the greater feebleness of the respiratory murmur under the right clavicle, notwithstanding the more extensive disease of the left lung. The pain which was complained of in the abdomen probably arose from the inflammation in the lungs or pleuræ. We have before had occasion to notice this extension of the pain beyond the limits of the chest. There was no friction sound. 4. There were no tubercles in the lungs, although there was double pleurisy, with effusion. The case, therefore, forms an exception to the law laid down by M. Louis, that double pleurisy, with effusion, is always accompanied with tubercles, or gangrene of the lung. 5. The old adhesions of the right pleura correspond with the patient's statement, that he had had several similar attacks previously.

Heart.—1. The inflammation of the pericardium was universal and intense. The fluid found in it was received into a basin, and after a few minutes was found to have assumed the appearance of a mass of jelly. After standing for a longer time, this again separated into a colourless coagulum, and a serous portion. It would seem as if the liquor sanguinis of the blood had been effused unchanged. The fact of its remaining fluid until it had been removed from the body, and exposed to the air, is worthy of being noticed.

2. The pericarditis was, in the usual sense of the expression, entirely latent. There was nothing stated by the patient which was at all calculated to direct attention to the heart. There was pain in the left side, but (although this is not mentioned in the report) it was far back on the lateral surface, and was therefore ascribed to the pleuro-pneumonia which had been already discovered there. The useful rule of examining the heart in all cases was omitted, and therefore no physical investigation of its condition was made. In this respect the case resembles that last recorded, and in both, the careful percussion of the cardiac region must at once have led to the discovery of the serous effusion. The patient generally laid upon his back, inclined towards the right side, and was supported nearly in the erect position by pillows. One symptom occurred which is not mentioned in the history—viz., an excessive smallness, and a thread-like character of the pulse. This was so little to be expected from the patient's robust figure, and from the only disease which had been discovered—viz., pleuro-pneumonia,—that it particularly fixed my attention, yet, my mind being pre-occupied, it did not lead me to examine the heart. This smallness of pulse I suppose to be due to the mechanical compression of the left ventricle, and the consequent obstacle offered to the free entrance of blood into its cavity, as well as perhaps to the free contraction of the muscular fibres. The pulse was similarly, but not equally affected in the last case, (No. 31.) I have observed the same thing in other cases of pericarditis; and in the course of whatever disease it occurs, it ought always to lead us to make a careful examination of the heart. In respect to its diagnostic value, however, I may remark, that I have observed cases of pericarditis with serous effusion, in which this smallness of pulse was not present, and also, that the same kind of pulse is of frequent occurrence in various organic diseases of the heart without any pericarditis, as well as in other diseases not implicating the heart at all, except functionally.

3. There was a moderate amount of enlargement of the heart, which, it is probable, was of older date. The heart may be enlarged, indeed, from pericarditis alone, and in consequence of the accumulation of blood in its tissue; but the pressure of serum in the pericardium tends to lessen the volume of the organ.

Liver.—The liver was obviously enlarged, since it weighed sixty-six ounces and a half; but the description is too imperfect to enable us to say what was the nature of the disease giving rise to the enlargement.

Kidneys.—The kidneys were most obviously diseased, being nearly double the ordinary weight; the left one was lobulated, and rather smaller than the right, instead of being the larger, as it is in the healthy state. The urine was unfortunately not tested, and we have therefore no means of determining the precise nature of the renal disease.

Causes.—1. The disease of the kidneys and liver was probably caused by the patient's habitual intemperance, and aided, perhaps, by the usual concomitants of intemperance, such as undue exposure to cold, with other privations.

2. *Of the pericarditis and pneumonia.*—These were immediately excited by exposure to cold and wet, the patient being probably more susceptible of the evil effects of cold, owing to his intoxication at the time of exposure. For the reasons given in the remarks on the last case (No. 31) I am, however, of opinion, that the more influential, although less obvious, cause of these inflammations was the disease of the kidneys. It is impossible to say whether the inflammation of the pericardium or that of the lungs and pleuræ began first, or, consequently, whether the disease extended from one of these parts to the other. From the observations of other cases, however, it seems to me that each of these inflammations owed its existence to the same primary cause, and, consequently, that they were independent of each other. The case affords an additional illustration of the tendency of pericarditis to be complicated with inflammation of the lungs and pleuræ.

Treatment.—The patient was treated for the pleuro-pneumonia, and as actively as the weak condition of the pulse would permit. He was bled to eight ounces from the arm, and afterwards cupped below the left scapula. More blood was not taken from the arm, in consequence of the disposition to syncope, and the feebleness of the pulse. For the same reason it was found necessary to administer some ammonia at this time. Notwithstanding the presence of intense inflammation, and in an apparently strong man, a single rash bleeding would probably at once have destroyed the patient. This inability to bear depletion is not of unfrequent occurrence in pericarditis, especially when there is serous effusion, and should teach us to employ venesection with great caution, and with especial reference to the condition of the pulse in this disease. For

the same reason, local depletion will very often be found safer, and, at the same time, not less efficacious, than general bleeding in pericarditis. Leeches, and afterwards a blister, were applied to the right side, on account of the sharp pain. In addition, calomel was given at short intervals, with a view to affect the mouth, and tartar emetic, at first in doses of one half, and afterwards, of three-quarters, of a grain, every few hours.

The patient died on the tenth day of the disease, and on the fifth after his admission.

CASE 33.—*Pleuro-pneumonia of the left side; copious effusion of serum and soft lymph into the pericardium; pericarditis latent. Causes: No rheumatism; consequences of the compression of the heart by serous effusion into the pericardium.*

In the month of May, 1841, I had an opportunity of learning some particulars of a case resembling, in several respects, the one I have just recorded. At one of the clinical lectures of M. Boulland, at the Hôpital La Charité, in Paris, the body of a female was brought into the room to be inspected there, whilst the professor proceeded to detail the history of the case. The case had been considered to be one of simple pleuro-pneumonia of the left side. On opening the body, the anticipated disease was found, and in addition, and altogether unexpectedly, a copious effusion of turbid serum into the pericardium, together with a thick coating of soft lymph upon the whole of its serous surface. M. Boulland stated that no complaint had been made of any uneasiness about the heart, that this organ had not been examined for some time before death, and that he supposed the pericarditis had supervened in this interval, and so had escaped detection. I had ample opportunities of observing the accuracy and skill of M. Boulland in the physical diagnosis of diseases of the heart generally, and I have therefore no doubt that the error, or more properly the omission, in the diagnosis in this instance, arose solely from the omission to examine the condition of the heart.

The causes of the disease in this case are unknown to me. There had been no rheumatism. I do not know what was the condition of the kidneys or other viscera. M. Boulland's statement implies that the pericarditis had appeared after the pleuro-pneumonia. If so, the inflammation might have spread from the one organ to the other. There is no proof, however, that the one affection began sooner than the other, and from the great intensity of the pericarditis, it seems to me more probable that both inflammations derived their origin from some common cause.

The heart was found small and flabby, and contained but little blood in any of its cavities. These appearances were probably the consequences of the mechanical compression of the heart, by the abundant effusion of serum into the pericardium.

CASE 34.—*Acute and extensive endo-pericarditis in a child aged ten; no rheumatism; no general symptoms beyond feverishness and general indisposition; some enlargement of the heart; its causes.*

THE absence of the usual general symptoms, and the consequent latent cause of the disease, may entitle the following case to a place here, notwithstanding the imperfection of the history which is in my possession.

In January, 1838, Dr. Elliotson exhibited to his class at University College Hospital, a specimen of recent inflammation of the heart, respecting which he stated the following particulars. The heart had been given to Dr. Elliotson by a medical friend of his. The patient from whom it had been taken, was a child ten years of age. There had been some feverishness and general indisposition, but no other symptoms of local disease. The heart had been accidentally examined, and then a "loud preternatural sound" had been heard. I noted the following appearances in the heart:—Its size was about equal to the closed hand of an adult female; the whole of the serous membrane covering the heart, and as much of that upon the loose pericardium as had been preserved, was coated with soft lymph, from one to two lines in thickness, and having a spongy and somewhat granular surface; this coating was easily removed by the forceps, and there was no redness of the serous membrane beneath; the ventricles contained some colourless coagula, but not large enough to fill their cavities; there was no colouring matter whatever in the contents of the ventricles; the cavities of the heart bore their natural proportion to each other, and to the whole volume of the organ; the inner surface of the left ventricle exhibited some green discoloration in parts, whilst other parts had a light-red

or pinkish hue. On the ventricular surface of the aortic valves there were some small colourless vegetations placed along the free border of each division of the valve, and not along the curved line which marks the termination of the fibrous element of the valve; they were more firmly adherent to the subjacent serous membrane than was the lymph to the pericardium; similar vegetations, but larger and equally adherent, were observed all round the margins of the mitral valves, on their auricular aspect; there were slight spots of lymph loosely adherent, here and there, to the inner surface of the left auricle, and also to the lining membrane of the aorta, at its commencement; none of the valves were puffy or swollen; the right cavities of the heart were healthy.

In this case, the endocarditis was probably recent, as well as the pericarditis, and both were extensive. The volume of the heart was increased, and for this there appeared no obvious cause but the probable engorgement of its tissue, and dilatation of its cavities by the recent inflammations. It is to be presumed that there had been no rheumatism, since none is mentioned. The early age of the subject deserves to be remarked. It is not stated under what circumstances the disease appeared; whether the patient had recently suffered from any eruptive fever; nor whether the kidneys were examined or not. The disease was completely latent, in the usual sense of the expression. This feature in the history both of pericarditis and of endocarditis is now so completely established, that the further illustration of it seems to be almost superfluous. Very many instances have been related to me, in which physicians, possessed of competent skill, have found the signs of intense recent pericarditis after death, in cases in which, during life, nothing had happened to lead them to entertain the smallest suspicion of the existence of any such disease.

NEWCASTLE-ON-TYNE INFIRMARY.

CASES TREATED BY DR. WHITE, PHYSICIAN TO THE INFIRMARY.

Reported by Mr. Charles J. GIBB, House-pupil.

PULMONIC MURMUR NOT HITHERTO DESCRIBED.

CASE 1.—James D.—, aged forty-four, a smith, of *nervo-sanguineous* temperament, having a distressed and anxious countenance, not, however, of the phthisical appearance, was admitted Dec. 12th, 1844, complaining of a dull pain of the lower part of the right chest, aggravated by respiration; dry, harsh, cough, with slight mucous expectoration, which was accompanied by hæmoptysis a few days ago; dyspnoea on any exertion; heat of chest, and the ordinary sympathetic febrile derangements that arise on an organ being not acutely inflamed. Decubitus on left side; nothing observable on an ocular examination of the chest; it is everywhere naturally resonant on percussion, except at the lateral part of the right side, where the sound emitted is slightly flatter than from the corresponding part of the other chest; the respiration throughout the left chest is puerile, that from the inferior lobe of the right lung is much diminished, and accompanied in front by a sub-crepitant râle; but below the axilla, and at the back of the lobe, it is almost entirely masked by a continued murmuring sound, which issues from the lung, and is independent of the respiration; Dr. White terms it the continuous pulmonic murmur, and observed it before the patient said he had had hæmoptysis. The heart's heat is natural, but quickened, and the dull sound afforded by percussion over the liver and spleen does not extend beyond their normal limits. Says his family have not been afflicted by any hereditary diseases, that his habits are pretty regular and sober; and that until within the last two months, since which the present symptoms have been more or less severe, he had had no sickness, and can only account for this by supposing he had caught cold. To have eight ounces of blood taken from the side by cupping; to take two grains each of blue pill and aloes, with four of extract of henbane, and one of ipecacuanha, in two pills every night, and to have an ounce of the acetate-of-ammonia mixture, with twenty drops of antimonial wine, every three hours.

14th.—Felt relieved after the cupping; chest, on examination, much the same. To continue the medicines; to be bled to faintness; and to have copious libations of warm tea to produce perspiration.

19th.—Much better; all the symptoms greatly abated; a little blood in sputa; respiration at lower part of right chest very weak yet, with slightly prolonged expiration; continuous murmur scarcely so loud. To go on with the same remedies, and have a blister to his side.

25th.—Improving very fast; slight uneasiness of side only; no more hæmoptysis, and cough almost gone; scarcely any of the dulness on percussion remaining; respiration weak yet; crepitation gone, and murmur nearly so. To have a mixture, with mucilage, ipecacuanha wine, and compound tincture of camphor, thrice a day, and a teaspoonful of castor-oil every night, and to omit the other medicines.

Jan. 1st, 1845.—Has been making too free, and is worse in every respect. To have the medicines as ordered on admission; also twelve leeches to the side, and a brisk purge.

4th.—Felt himself so much relieved that he went home.

Feb. 19th.—Re-admitted. Has been exceedingly ill ever since he left the hospital, and now appears to be irreparably debilitated; complains of excessive dyspnoea; cough, with very slight expectoration, and hectic fever; no hæmoptysis latterly; the right chest was found an inch greater in circumference than the left, and universally dull on percussion, but particularly so from the fourth rib downwards, where it was almost completely devoid of resonance; the left was likewise very dull at its most inferior part; there was a loud, rough, grating friction-sound at the lower part of the right chest, and a slighter one on the left side; the respiration was inaudible at the inferior lobe of the right lung, but on ascending, it was gradually heard, mixed with a low soft crepitus, and was loud and bronchial at the apex; at the base of the left lung it was indistinct, but at other parts loudly bronchial or puerile, and accompanied by the subcrepitus of an engorged and œdematous lung; there was no trace of the continuous murmur. Here, then, it was evident that the right pleural sac was especially at the lower part of the chest, where there was, perhaps, slight fluid effusion, thickened by inflammatory deposit, and the right lung nearly altogether disabled, whilst the left side of the chest was also a little affected, but not so much so as to interfere with its lung doing almost the double work. His skin and kidneys were induced to act freely; counter-irritants were applied to his chest, and by degrees he began to recover; the dulness had sensibly diminished, and the respiration within the lungs had become freer by the latter end of March, when he was given the iodide of potassium, his secretions being still very carefully attended to. Towards the decline of April, the friction sounds continued to be heard, and although the dulness of the right chest was very marked, the respiration had become audible in almost every part, whilst that in the left was laboured and much less resonant. His health had improved in like proportion, and he was sent out, with injunctions to be very careful. He is now able to work; some dulness, however, still remains, although the respiration has become pretty equally free in all parts of the lungs.

CASE 2.—Andrew W—, aged thirty, a moulder, an incapacitated debauchee, of the sanguine temperament, admitted March 6, 1845, complaining of general pains, particularly of the back, with weakness of limbs; also of dyspnoea, cough, and slight palpitation, with universal languor, and a low febrile state of the system. Was in the hospital four months ago for primary syphilis, previous to which he had been very intemperate, and he has now some secondary blotches on his skin; present symptoms have existed for two weeks, and have lately become worse; had hæmoptysis a few days ago, to some extent, but countenance does not betoken phthisical disease. Pulse slightly jerking; no apparent affection of heart; no very appreciable difference of the resonance of chests on percussion; if anything, the lower part of the right is less clear than the corresponding situation in the left; the respiration is weak, and slightly double at the posterior parts of both chests, especially of the right, where there is likewise the continuous murmur; whilst in front it is puerile in the left, and indistinct at the lower part of the right. To take a purge directly; an ounce of the diaphoretic mixture, with fifteen drops of antimonial wine, every three hours; and two grains of calomel, with eight of Dover's powder, every night.

12th.—Better; much less febrile disturbance; and symptoms generally relieved; chest continues in much the same state.

16th.—No more hæmoptysis; cough and dyspnoea almost gone; sputa consist of a thin mucus; pains very troublesome in his limbs and back; mouth not affected; respiration becoming natural in all parts of chest. To go on with medicines.

20th.—Improving fast; the pains are almost his sole complaint; respiration is still rather weak at back of lungs, but the continuous murmur has gradually subsided. To omit medicines, and drink daily a pint of the compound decoction of sarsaparilla, containing fifteen grains of the iodide of potassium, and take ten grains of Dover's powder, with one of blue pill, every night.

Continued in the hospital for a month longer, when the

syphilitic blotches and pains were cured by pursuing the last treatment.

CASE 3.—George H—, aged thirty, a stout, healthy-looking seaman, of the bilious-lymphatic temperament, admitted August 21st, 1845, with slight cough and mucous expectoration, which has been of late very often intermixed with blood; dyspnoea on exertion; dull pain under the left nipple on inspiration; flying pains about chest and back, and febrile exacerbations. Was never ill until two or three months ago, when he was exposed to long-continued cold and wet, since which he has been unwell, although not very severely so until within the last few weeks, when hæmoptysis &c. commenced. Chest everywhere natural on percussion, except at the lower part of the front of the left chest, where there is a little dulness, with diminished respiratory sound, and slight increase of the expiratory; a little subcrepitus, and a very evident continuous murmur; heart's action natural. To have ten leeches to chest; an ounce of the acetate of ammonia mixture, with fifteen grains of the nitrate of potass and fifteen drops of antimonial wine every three hours, and four grains each of blue pill and Dover's powder every night, with a purgative infusion every other morning; and low diet.

25th.—Much easier; pectoral and febrile symptoms considerably relieved; respiration heard more distinctly at affected part of chest; continuous murmur the same. To persist.

30th.—Improving rapidly; pain of side almost gone; respiration nearly healthy; crepitation gone, and murmur also much diminished. To have a blister to side, and continue.

September 7th.—No pain, cough, or dyspnoea; complains only of debility and occasional flushings; continuous murmur scarcely to be heard; and dulness of chest has disappeared.

13th.—Chest healthy in every respect; has some neuralgic pains of chest and back, with flatulence. To omit former medicines, and have two aloes and assafœtida pills night and morning, with good diet.

20th.—Was ordered sulphate of quinine thrice a day; and sent out a few days after, complaining only of weakness.

Remarks.—It will be perceived, that in these cases the symptoms indicated some chronic affections of the lungs; they had existed in each for some time, and although they were not of that violent character to which a case of pure pneumonia gives rise, they were nevertheless of an inflammatory type. The hæmoptysis, the almost certain mark of phthisis where the existence of heart disease or amenorrhœa are not present to account for it, was here to be considered to originate from other causes than any of them; for the examination of the chest contradicted, and none of the other circumstances encouraged, any such views. The diminution of the vesicular respiration, with the prolonged expiration and slight dulness at the affected parts of the lungs, showed that there was some degree of solidification of their tissues, which, in all probability, was from an engorged and highly-congested condition of the lung, (whether or not accompanied by apoplexy is uncertain,) as the small, soft, muco-crepitating râle that was heard differs greatly from the harsh and very audible crackling of the true pneumonatus râle, and is that which is so constantly observed in the ponderous and very highly œdematous lungs of persons dying of valvular obstruction of the blood through the left heart. This condition of the lung obviously explains the cause of the hæmoptysis, and sufficiently accounts for the dull constraining pains which, to all appearance, were not seated in the pleura.

The most valuable and interesting feature in these cases is the peculiar murmur, which, although not described by previous auscultators, was unquestionably present. Dr. White has known it for several years, and in his clinical lectures he has pointed it out in numerous cases to the students, amongst whom it has been familiarly known as his "continuous pulmonary murmur." It is a soft, minute, and continuous crepitating murmur, smaller than, but sometimes accompanied by, the ordinary pneumonic râles; and it is entirely uninfluenced by the respiration,—as holding the breath for any possible period does not in the least change its unvarying note,—it being thus impossible for an auscultator to confound it with any other. Its chief value appears to be as an indication of hæmoptysis, whether present, past, or approaching; and knowing the carelessness or the unwillingness of patients to admit of anything appertaining to phthisis, it will of course be of great value. Dr. White has known it to persist for several months; has never heard it without the occurrence of hæmoptysis, (which, however, it does not invariably attend,) and has been enabled by it, in some of the cases, to prognosticate or diagnose that symptom without having had any information of it from the patient. Such was the case in D—'s, (No. 1.) Whether

any peculiar condition of the bloodvessels, or particular motion of the effused blood, be its cause, can only be conjectured, for no post-mortem examination has as yet thrown any light upon the subject.

Newcastle-on-Tyne, Feb. 1846.

TWO CASES OF

POPLITEAL ANEURISM, SUCCESSFULLY TREATED WITH PRESSURE.

By ROBERT STORKS, Esq.

CASE 1.—John R.—, aged thirty-two, a tailor, was admitted under my care at the Blenheim-street Dispensary, Sept. 7th, 1845, suffering under an aneurism of the left popliteal artery, of which he gives the following account:—For some time past (about seven or eight months) he has experienced darting pains in the limb, which have gradually increased in intensity up to the present time. About a month ago, he noticed some swelling about the foot and ankle of the left leg, but a week elapsed before he detected the tumour in the popliteal space, about which he now applied for relief. He cannot remember ever having sustained any injury that could have caused the disease.

On examining the limb, a tumour, the size of a lemon, was at once detected in the left popliteal space, pulsating strongly, the pulsations being synchronous with the heart, and ceasing upon compression of the superficial femoral; its borders were not well defined, and its walls apparently thin. A bruit de soufflet is distinctly heard upon applying the stethoscope over the tumour, which is evidently full of fluid blood, compression over the sac nearly emptying it of its contents. The circumference of the sound limb measures twelve and a quarter inches, that of the aneurismal one being thirteen. The anterior and posterior tibial arteries pulsate distinctly, and with equal force, in both limbs. He is a flabby, weakly, and not very temperate man, liable to palpitation of the heart after the least exertion, and decidedly an unfavourable subject for any operation. His tongue is furred; pulse 75, and weak; his bowels confined; urine healthy.

Sept. 12th, 1845.—Nine A.M.: In consultation with my friend and colleague, Mr. Dyer, (to whom I am indebted for this case,) it was determined that pressure, according to the modern and improved system, should be tried before the usual operation was performed. The leg having been previously bandaged, from the toes to the trochanter major, with a calico roller, a steel tourniquet (known as Signoroni's, and manufactured by Mr. Weiss) was applied at the lower angle of Scarpa's space, at the point where a ligature is usually put around the vessel; another tourniquet was loosely applied above on the course of the artery, which the patient was directed to tighten when the pressure from the lower instrument became unbearable. The tourniquet first applied was now tightened sufficiently to stem, but not entirely to obstruct, the current of blood flowing into the aneurismal sac. The toes, which became blue and cold, were wrapped in flannel, and the foot was raised above the level of the rest of the limb.—Half-past three P.M.: Has suffered intense pain through the limb in consequence of which he was unable to bear the pressure for more than three-quarters of an hour! The tourniquet, which had slipped, was re-applied, and he was directed to take a third of a grain of muriate of morphia at night, and an aperient in the morning.

13th.—States that he bore the pressure for four hours after the last visit, and that he has re-applied it several times during the last twenty-four hours. Complaints of intense pain in the foot, which prevented his sleeping. He has some fever; his pulse is 90, and his bowels have been freely opened by the draught. On removing the tourniquet and bandage, the aneurism was found to be decidedly flatter, and the pulsations less forcible. No pulsation can be detected in the anterior or posterior tibial arteries on the most careful examination. The bandage and tourniquet were re-applied.

14th.—Has slept better; has not been able to bear the pressure for more than a quarter of an hour at a time; has suffered more pain in the limb; the pulsations are comparatively feeble; pulse 120; tongue furred, and bowels regular. The bandage and one tourniquet were re-applied, as he finds that he can, by moving the instrument a little higher, readily compress the vessel when the pressure is unbearable.

15th.—Has slept well, although at times he has suffered from severe pain in the leg. On the removal of the bandage and tourniquet, the pulsations in the aneurism were decidedly weaker, and the tumour had decreased in size; pulse 108; a little redness had been produced by the pad of the tourniquet; the bandage was discontinued, and the tourniquet re-applied.

16th.—The pain has been much less severe, which he attributes to the use of the bandage being discontinued; has kept up constant pressure with the tourniquet, except when asleep; there are some vesications on the dorsum of the foot.

17th.—Pulsations in the tumour appear more distinct to-day; several vesications have appeared on the foot since yesterday; the temperature of the limb is not below that of its fellow; the anterior and posterior tibial arteries pulsate distinctly; has suffered less pain, but feels weak and ill; pulse 96.

21st.—The tumour is harder and smaller; the pulsations are less distinct; has suffered severe pain in the aneurism of a lancing character.

24th.—The tumour is larger and harder than it was; the pulsations are very weak.

30th.—Pulsations in the tumour scarcely perceptible.

October 1st.—On examining the tumour to-day, no pulsation or bruit can be detected; but the aneurism has become larger, firmer, and tender to the touch; two arteries pulsating strongly, and of the size of crow-quills, can be readily felt; one over the internal condyle of the femur, the other running over the sac in the popliteal space. After a careful examination, no pulsation can be detected in the anterior or posterior tibial arteries.

2nd.—As yesterday. To discontinue the pressure gradually.

3rd.—Complains of severe pain, of a lancing character, in the tumour, which is very tender to the touch; there is also a slight return of pulsation. Eight leeches were applied to the tumour, and the pressure was resumed.

4th.—The pulsations in the tumour still continue; the pain and tenderness have been much relieved by the leeches. Continue the pressure.

5th.—Has slept badly; slight pulsation in the tumour; great œdema of the leg below the knee; hardness and tenderness in the calf. Continue the pressure.

7th.—Has passed a better night; pulsation in the aneurism more feeble; the leg below the knee œdematous; the aneurismal tumour and swelling in the calf are softer and less tender.

12th.—Pulsation has ceased; but a bruit is still audible.

28th.—Since the last report, matters have remained much in the same state. The bruit has never disappeared; but slight pressure upon the tumour causes it to cease. By exerting firm pressure, the cavity remaining in the sac appears to be nearly, if not entirely, emptied of its fluid contents; for, on suddenly removing the pressure, the blood can be heard to regurgitate very distinctly. The tumour is somewhat flattened and diminished in size, but is not in any other respect altered. Slight pulsations have occasionally been detected in the anterior and posterior tibial arteries. A great drawback in the treatment of this case is the intolerance of pressure during sleep. The patient, although very intelligent, and thoroughly understanding the importance of maintaining the pressure, has never been able to sleep with the instrument applied.

29th.—There is a slight return of pulsation in the tumour to-day. From this date, a flannel roller was applied to the limb, from the toes to the point of compression with the tourniquet; a pad was placed over the tumour, and firm pressure used. Under this treatment the swelling became smaller, the pulsation more feeble, and the bruit less distinct: it continued to advance thus favourably until—

Dec. 12th, when all pulsation had ceased, and no bruit on the most careful examination could be detected. The circumference of the knee is fourteen inches and a half, showing an increase of one inch and a half on the former measurement, although absorption—as shown by the gradual decrease in the size of the tumour—has been going on actively for some time past.

April 8th, 1846.—On examining the limb this day, the tumour was found to be decreasing in size, very firm to the touch, and more circumscribed. Neither bruit nor pulsation can be detected; two vessels, the size of crowquills, can be felt pulsating over the sac. He walks with great ease; his foot is on the ground; and unless he takes violent exercise, he suffers no inconvenience in the limb. The anterior and posterior tibial arteries pulsate but feebly; and the pulsations of the femoral cannot be detected beyond two inches below Poupart's ligament.

CASE 2.—March 17th, 1846.—I was requested by my friend, Mr. Collins, of Mary-street, Hampstead-road, to see, with him, W. D.—, a brewer, aged twenty-four, with popliteal aneurism of the left leg, of which he gave us the following account:—Whilst standing in the yard attached to his brewery, a little more than two months ago, his left leg was jammed between two

asks. He experienced pains in the limb immediately after the accident; and two days after the receipt of the injury, discovered a tumour in the popliteal space, which in a few hours he found to pulsate strongly. Not being aware of the importance of the injury, he allowed two months to elapse before he obtained advice, when, finding the pain much increased in the limb after a fall down stairs, he applied to Mr. Collins, who informed him of the dangerous consequences of the disease, and requested me to assist him in the treatment. On our making an examination of the limb to-day, a pulsating tumour, of the size of a large egg, was found filling up the popliteal space, the pulsations of which ceased upon the femoral artery being compressed. A distinct bruit de soufflet is audible; no pulsation can be detected in the anterior or posterior tibial arteries; the sac is very thin, and can be entirely emptied by pressure; the whole limb is oedematous, and he is suffering from an affection of the skin; pulse 72; heart's action normal, and he is apparently a healthy young man; his habits, however, like most people engaged in his business, are not very temperate. We decided upon employing pressure; and Signoroni's tourniquet—which I had found to answer very well in the case above related—was applied on the superficial femoral, such an amount of pressure being employed as would check, but not entirely obstruct, the flow of blood through the aneurismal sac. In the evening, we found he had borne the necessary pressure with very little inconvenience; and another instrument, which consists of a clamp of iron, with a screw and pad directly upon the artery, (which is recommended by the Dublin surgeons,) was applied on the course of the vessel above Signoroni's. He was directed to tighten one and relax the other, as the pressure became unbearable.

18th.—He had continued the pressure night and day; the pulsations were decidedly weaker.

19th.—The tumour was much firmer, presenting great resistance to the touch, and we found it impossible to empty it of its contents, as we could before the pressure was commenced.

21st.—Tumour harder; pulsations slightly increased in force. From this date the tumour became harder and the pulsations fainter, until the 21st day, (April 6,) when pulsation had ceased in the aneurism, and two vessels, the size of the radial artery, were to be felt pulsating strongly along the course of each hamstring. Pressure continued.

April 7th.—Pulsations slightly returned in the tumour. Continue pressure.

8th.—The pulsations have again ceased; no bruit can be detected over the tumour on the most careful examination.

May 11th.—On examining the limb this day, a tumour the size of a walnut, devoid of pulsation in the popliteal space, alone remains to mark the site of the disease, the posterior tibial pulsates feebly; there is slight oedema of the leg. He takes his usual exercise and finds the strength of the limb

daily increase. No pressure on the aneurism or bandage of any kind was applied to the limb during the treatment.

Of all the labours of that great name which is so intimately connected with the subject of aneurism, perhaps none is equal to the operation proposed and executed by Hunter, for the relief of that fatal disease—an operation founded upon principles so true to nature, and by the courage of modern surgeons so extensively applied, that until the last four years, no improvement upon a plan of treatment that time and experience had decided upon so favourably, was entertained, if we except a few instances in which the treatment by pressure (conducted upon erroneous principles) was either unsuccessful, or, success being obtained, the amount of suffering was so great that the plan was wisely abandoned. During that period, however, a great change has taken place in the views of many regarding the necessity of the Hunterian operation in the treatment of aneurism; though it is not to be supposed that the profession will at once unanimously adopt a novel and comparatively untried practice, for one which has stood the test of experience, and received the sanction of the most honoured names amongst the dead and living. It is therefore with the desire of recording two examples of the successful employment of the treatment by pressure that I have drawn up these cases.

The accompanying table (which contains the names of many whose opinions we are bound to respect, from their well-deserved reputation) attests the fact, that many, if not all cases of aneurism to which pressure can be applied, may be cured by a proceeding which does not involve the life of the patient—a matter of no slight importance when we turn to the statistics that we have of an operation, which, however favourable in its results, when compared with the older practice, still gives a frightful mortality, when placed in juxtaposition with similar proceedings, to which, from the structures they involve, or the severity of the operation, we look for less favourable results.

Mr. Benjamin Philips collected 171 cases of aneurism affecting the larger arteries, and which were submitted to the Hunterian operation. Of these cases, fifty-seven, or exactly one in three, were unsuccessful; in which all the patients, except two, died, not of the disease, but in consequence of the operation. Amongst the successful cases, secondary hæmorrhage took place fifteen times. Fifty-nine of these cases required ligature of the femoral artery, thirty-nine of which were unsuccessful; thus giving a mortality of two in three, in the artery most frequently subjected to the operation. Many, I am fully aware, will deny the accuracy of these statistics, but every surgeon must allow, that the deligation of a main artery for aneurism is an operation (notwithstanding the successful results some practitioners can boast of) attended with great risk. On the other hand, there are twenty cases of spontaneous aneurism affecting this artery, all of which, with the exception of two, have been perfectly successful, as regards both the life and the limb of the patient.

No.	Surgeon.	Treated at	Seat of Disease.	Time occupied in the treatment before bruit and pulsation had ceased.	Cases in which local pressure was employed.	Age.	Result.	REMARKS.
1	Dr. Hutton	Dublin	Popliteal Art.	56 days		30	Cured.	{ Patient died on the 14th day, of disease of the heart. The artery was pervious to within an inch of the sac, which was filled with coagula.
2	Mr. Cusack	.....	.....	5 "	.....	55	.....	
3	.....	.....	.....	10 "	.....	26	.....	
4	.....	.....	.....	12 "	.....	30	.....	
5	Dr. Bellingham	.....	.....	8 "	.....	32	.....	
6			Femoral Art.	48 "	Pad and bandage.	35		{ Pressure borne for twenty days, at which period the tumour had become solid. A spontaneous cure took place four weeks after the pressure was discontinued.
7	Mr. Liston	London	.....	53 "	Pad and bandage.	30	.....	
8	.....	.....	.....	30 "	Bandage	53	.....	
9	Dr. Harrison	Dublin	Popliteal Art.	.....	.....	28	.....	
10	Dr. Kirby	.....	.....	57 "	{ Bandage & tourniquet on the tumour	32	.....	
11	Dr. Allan	Haslar Hosp.		26 "		27		{ A ligature applied to the femoral artery successfully.
12	Mr. Greatrex	London	.....	20 "	.....	38	.....	
13	Mr. Porter	Dublin	.....	24 "	.....	42	.....	
14	.....	.....	.....	.....	.....	38	.....	
15	Mr. Jolley	Torbay		59 "	Pad and bandage.	38		{ Unsuccessful. Cured.
16	Mr. Harrison	Bristol	.....	.....	Bandage	42	.....	
17	Mr. Dartnell	Chatham	.....	5 "	.....	38	.....	
18	Mr. Mackern	Litherland	Femoral Art.	37 "	.....	30	.....	
19	Mr. Storks	London	Popliteal Art.	91 "	Pad and bandage.	33	.....	
20	.....	.....	.....	23 "	.....	24	.....	

It would, however, be unfair to the treatment by pressure, did I not advert to the particular features of those cases which I (perhaps improperly) have called unsuccessful. In Mr. Cusack's case, No. 4, we find a patient with general arterial disease, an individual, upon whom any prudent surgeon

would at least have paused before he proposed an operation in twelve days cured of his local affection. Forty-eight hours after pulsation had ceased, he suddenly expires; and at a post-mortem examination, the aneurismal sac is found filled with coagula, the condition of the heart explaining the cause

of death. Had this unfortunate result depended upon the interruption of the circulation through the popliteal artery, it is more than probable that forty-eight hours would not have elapsed without some symptoms occurring indicative of increased disturbance of the arterial system. Assume, however, that death was caused in this case by such obstruction, how much more probable is it that such a termination would have followed the application of a ligature to the superficial femoral, by which the current of blood would at once have been stopped before the collateral circulation had had time to prepare itself for the increased functions it was called upon to carry on; or would it have been good surgery to allow the patient to have remained unassisted, until his life was terminated by hæmorrhage?

In Mr. Harrison's case, No. 15, that gentleman was obliged, in fourteen days, to discontinue the pressure, at the earnest request of the patient, and subsequently to apply a ligature to the superficial femoral—the case terminated successfully. It is not improbable that more pressure was employed at first in the treatment than was absolutely necessary, as in all the cases contained in the above table, the pressure, although at times causing suffering, was readily borne by the patients, if we except Mr. Porter's second case, to which I shall revert below. In neither of these cases is there, to my mind, a single fact militating against the employment of pressure.

It is a question of some importance, in connexion with this plan of treatment, to ascertain whether the employment of pressure previous to the Hunterian operation (should that be necessary) is in any case likely to embarrass the operator, or affect the success of the operation. In Dr. Cusack's case, No. 4, where, from the death of a patient, an opportunity occurred of examining the vessel, slight condensation of the cellular tissue around the artery could alone be detected. In Mr. Harrison's case, No. 16, no difficulty appears to have been experienced in exposing the vessel, and whatever changes had taken place, were decidedly in favour of the successful result of the operation, the collateral circulation having been evidently much influenced by its use. Through the kindness of Dr. MacLachlan, of Chelsea Hospital, I had an opportunity of seeing him apply a ligature to the superficial femoral, at the point where he had previously employed pressure, and, with the exception of some condensation about the sheath of the artery, none but such senile changes as might be expected, (from the age of the patient,) had taken place in the vessel. I do not feel at liberty to allude more fully to this very interesting case, as Dr. MacLachlan has not yet published any of the particulars.

The effect of pressure upon the femoral vein is a matter of some interest as connected with this practice; as yet I am not aware that any observations have been made upon its condition in those cases in which an opportunity has occurred of examining it. The very limited number of cases as yet submitted to the treatment will account for this.

In looking over the notes of my own cases, the following facts have appeared to me worthy of notice, bearing out, as many of them do, the principles laid down by Dr. Bellingham, in his valuable paper, "On the employment of compression in aneurism."

1. The unhealthy constitution and previous intemperate habits, in Case 1, rendered any operation (more especially one in which the statistics are of so unfavourable a character) very uncertain in its results. In Case 2, the existence of skin disease, and the previous life of the patient, were not very favourable.

2. The amount of force used to compress the vessel, and the favourable change that immediately resulted from the treatment in both cases.

3. The relief obtained by discontinuing the use of the bandage on the fourth day, in my first case, from which I am inclined to think that the obstruction it offered to the collateral circulation was highly prejudicial, and I therefore determined to use no bandage whatever with my second patient, or, at all events, to wait until some symptoms arose indicating its use. I attribute much of my success in the first case, to the employment of direct pressure subsequently; but the necessity for its employment arose from a peculiarity in my patient's constitution, which prevented him taking any rest with the pressure from the tourniquet applied. Thus at night he undid what had been done during the day. The bandage prevented the sac yielding to the impetus of the blood, and thus I believe was useful. In such a case alone do I believe direct pressure will be beneficial.

4. The cessation of pulsation on the 20th day, and its return on the 22nd, (in my first patient,) consentaneously with an attack of inflammation in the aneurism. So severe was

the inflammatory action, that I at one period dreaded suppuration in the sac, an accident which occasionally (as is well known) follows deligation of the artery. I cannot explain satisfactorily to my own mind, the changes that were going on in the aneurism subsequently to the cessation of pulsation on the 20th day. The great increase in the size of the tumour, its diffused form, extending down into the calf, and the return of pulsation, led me at one time to suppose that the sac had given way; and in the absence of any positive evidence, I am inclined to think my suspicion was correct.

5. The time occupied in the treatment of these cases, and the importance of perseverance on the part of the surgeon and patient, before relinquishing the treatment and pronouncing a resort to the Hunterian operation necessary, as seen in the first case.

6. The ease with which the treatment was conducted by the patients.

7. After employing various instruments for making pressure upon the artery, I quite concur in the opinion expressed by the Dublin surgeons, that the clamp is the instrument which gives least pain, and is more readily managed than any other, however ingenious. It is known at the instrument makers as Oke's tourniquet.

Nineteen of the twenty cases placed in the accompanying table were successful, as far as the cure of the disease was concerned. The average time employed in the treatment of seventeen of these successful cases, was rather more than thirty-three days, the shortest period being five, the longest, ninety-one days. In eighteen, the mean age was thirty-four; the minimum being twenty-four, the maximum, fifty-five. In seven instances, direct pressure was employed. In sixteen, the disease was situated in the popliteal, in four, in the femoral artery. In Dr. Bellingham's cases, the aneurisms occurred at different times in the same individual; the popliteal being the first affected, and the femoral subsequently, after an interval of fifteen months. In Mr. Porter's second case, detailed in the *Dublin Quarterly Journal*, with some interesting remarks, pressure was discontinued from the intolerance of the patient, (a medical man,) twenty days after it had been applied, at which period the sac had become much harder. In a month, pulsation ceased spontaneously; and I think it fair to assume, (although many will doubtlessly dispute it,) that the successful result was alone due to the presence of the clots formed in the sac during the treatment, as shown by the hardness of the tumour at the time the pressure was discontinued.

The profession is much indebted to the Dublin surgeons for the introduction of a practice, which promises in many instances, to supersede an operation, which in the best of hands has proved but too fatal. Few surgeons, indeed, will now be found willing to expose their patients to all the dangers of phlebitis, gangrene, secondary hæmorrhage, and all the minor ills incidental to operative surgery, until a fair trial has been given to a plan of treatment, which, if it does not cure the disease, leaves the patient in a more favourable condition for the subsequent successful employment of the ligature. I do not know any similar analogy to exist between it and any other surgical proceeding.

Gower-street, Bedford-square, May, 1846.

OBSERVATIONS ON ACUTE INFLAMMATION OF THE STOMACH AND BOWELS.

By T. MOORE, B.A. M.B. M.R.C.S., Assistant-Surgeon
Gwalior Contingent, India.

DURING the prevalence of the south-west monsoon in the Bay of Bengal, the cholera disappears from the ship much sooner than in the north-east monsoon. The south-west trade-wind blows fresh up the bay, from the month of March to October, whilst the north-east monsoon, prevailing from November to March, blows down the bay, from the river and land; consequently it may be inferred, that it still retains, and is deeply impregnated with, the poisonous miasmata exhaled from the decomposed vegetable matter, and from the low swampy ground on either side of the river Hooghly at its entrance. The beneficial influence exercised by the sea-breeze over this terrific disease has been frequently remarked by seafaring as well as by medical men. In the effects produced, a transition from sickness and mortality on board to a state of comparative health takes place. At sea, when free from cholera, these coolie emigrant labourers are liable to that form of disease already described, and distinctly traced to originate from the intermixture of verdigris with their food, and, also,

to acute idiopathic dysentery, arising from insufficiency of clothing, and consequent exposure to the vicissitudes of weather and climate. Reared in filth, and habituated to idle, lazy customs by Nature, they neglect to clean their copper vessels, and when loaded with rice, ghee, and other articles of food, they conceal them for thirty-six or forty-eight hours, eating by stealth only, when unobserved, and at all hours, when prompted to it by the cravings of hunger.

During this time the copper is acted on by the acids contained in the food, and subsequently, by intermixture, a certain quantity, more or less, of the salt of copper, cannot escape being introduced into the stomach. It is injudicious, then, on the part of those connected with the coolie emigration in Calcutta to allow brass lotahs and copper thalies to be issued; utensils made of tin, of wood, or of delft, ought to be substituted for them.

To the subject of acute idiopathic dysentery, another and a very frequent cause of mortality amongst coolies, I shall hereafter revert.

At present I merely wish to direct attention to the immediate cause of its occurrence on board. The supply of clothing to these Indian labourers is very scanty, altogether insufficient for their wants; it is the same whether they leave Calcutta in the north-east or the south-west monsoon. It consists of a rug, a red night-cap, and the filthy clout which they take with them from their native village, as a kind of family relic. Yet thus provided with clothing, they are obliged to endure every vicissitude of weather, every change of climate, at a time when we Europeans are warned by the nipping cold to clothe ourselves in flannel, cloth trousers, and great coats. How much greater, then, must be the necessity of the coolie emigrant being warmly clad, reared as he has been from his infancy under the grilling sun of Bengal!

The condition of coolies labouring under an acute, a sub-acute, or chronic attack of dysentery, is rendered still more unfavourable, in consequence of no additional supply of clothing being provided by the protector of emigrants, or the emigration agent, to replace those rugs which, when soiled, are flung overboard in disgust by the patients themselves, or by some of his relatives. A liberal supply of warm clothing, consisting of a flannel shirt, with a coat and trousers made out of some coarse material, would essentially contribute towards the preservation of human life.

If I mistake not, a motion was made in the House of Commons last session for a statistical report of the mortality amongst coolies, from the time of their embarkation at Calcutta and Madras until the period of their return to India. When furnished, it will not fail to excite surprise, perhaps some degree of indignation, in the public mind in England. Can aught else be expected, when they are sent from Calcutta to herd together like so many swine on board ship, and in a state bordering on nudity, are obliged to endure cold, wet, and every change of weather, from a calm to a hurricane?

Those most deeply interested in a continuance of the emigration of coolies from the shores of India, whether they reside in London, the Mauritius, British Guiana, or the West India Islands, ought to look with a more scrutinizing glance into the reform of those abuses. If they neglect their own interests, and allow abuses not only to creep in, but to continue, without an effort being made on their part to have them corrected, they will discover that the Prohibition Act of 1839 can be re-enacted in 1846.

The following suggestions on the management of coolies emigrating to the Mauritius or the West Indies, I have been induced to make, in the hope that they may prove of service to those surgeons attached to the chartered vessels leaving this port and Madras; it is probable that some may not have had any practical experience in their management:—

(a.) The cleanliness, ventilation, and fumigation of the between-decks during the passage, are objects of primary consideration, and require the strictest attention on the part of the surgeon and officers of the vessel.

(b.) Two Portuguese topazes ought to be provided by the ship to attend solely on the sick. So little sympathy is evinced by natives, however closely connected by the ties of relationship or caste, towards each other, when attacked by sickness, that they are indispensable.

(c.) The surgeon of the vessel, accompanied by the captain, ought to proceed to the emigration dépôt in Calcutta, and select none but men of athletic frame, and strong, robust constitutions, from whose appearance they can readily infer, that they have been inured to work at field-labour in the upper provinces: none else are suited for emigration. It is worse than useless sending old, debilitated, worn-out coolies; it is a sacrifice of human life. They cannot endure the hardships

of the passage, and generally die off before the vessel reaches the Cape of Good Hope. It is the duty of the surgeon also to examine minutely into the previous state of health of each man. If he take for granted that the report in the emigration ticket is always correct, he will find himself deceived. When infection becomes engendered on board, and sickness breaks out amongst the coolies, he will regret, when too late, that they were admitted into the vessel.

(d.) It ought to be an established rule, that their food be distributed in three separate meals, in the morning, noon, and evening: when first they go on board, whilst the ship lies at her anchors in the river, they gorge themselves to excess, in eating rice, dholl, ghee, &c., at a single meal. Numbers are invariably attacked with fever, diarrhoea, and subsequently, dysentery. Poor, half-starved, famished creatures, they cannot resist the temptation of satiating the cravings of nature, and they stow away at a single meal more rice than they have been accustomed to eat during an entire week previously.

(e.) For change of diet, a quantity of coarse biscuit ought to be laid in: it is a cheap article of food, much liked by the coolies, and very wholesome; certainly preferable to the choorah, which is distributed to them in rough weather when they cannot cook.

(f.) In the distribution of articles of food, the rations are issued daily, according to a regulated scale, but when adhered to, I have always observed a great waste of provisions on board. In coming from British Guiana, although this scale was handed to me, no restriction was placed on the quantity of rice to be issued. Every morning the sirdars were summoned to take a quantity of rice, sufficient for the day's use, with the proviso, that none should be wasted. It was sometimes more, sometimes less, but in the end there was a considerable saving to the ship, and perfect contentment amongst the coolies. With the other articles contained in the list, this cannot be done; they must be issued according to rule.

(g.) If I mistake not, there is a clause in the Emigration Act, which stipulates that all children under five or seven years of age shall go free of expense. No provision is made for them with regard to food, from an idea, I imagine, of their consuming but an inconsiderable quantity. Children at the breast certainly do not consume a large quantity of rice, ghee, &c., but it is an error to suppose that children of four and five years of age at sea ought to be rated in the same scale. I mention this, (although it lies more in the province of the commander of the vessel to raise objections,) from having witnessed, on board the ship *Sophia*, a dispute between two castes, relative to the support of these under-aged children. Two hundred and seventy-nine coolies, women and children, were sent on board as emigrants for the Mauritius. They were rated as 266, their passage-money to be paid by the Mauritius Government, at fifty rupees per head. For this number, provisions were issued every morning, in strict conformity with the printed scale of rations; for the thirteen sent on board as under age, and for whom no payment would be received at the Mauritius, some were four and five years old, others two and three years, and a few were at the breast.

When the ship had been fourteen or fifteen days at sea, the coolies quite recovered from their sea-sickness, and each person could eat his allowance of food. A good deal of discontent arose among a particular caste, to whom the larger proportion of these children belonged. When the complaint was investigated, it appeared that the children had such good appetites that they ate almost the allowance of a full-grown coolie; consequently the mess of the others was curtailed. When these refused to share their provisions with them, they were of course provided for by the ship, but no remuneration was allowed by the Government at the Mauritius.

(h.) The medical treatment of coolies leaving this Presidency for the West Indies, ought to be of a mild description, unless when urgently required; they do not possess sufficient stamina, sufficient strength of constitution, to withstand active treatment. With the natives of India, who return to Madras and Calcutta from the Mauritius, improved in the moral and physical condition of life, more active measures of treatment can be resorted to than it would be prudent to employ in the other class. I do not know why it should be enjoined on the commanders of vessels not to employ these coolie emigrants in any way on board. There are few of the profession who will differ with me in opinion, in considering that by being constantly employed at light work on board, is the most certain way to keep them in good health. Is it not preferable to see them industriously employed in picking oakum, than to see them lying in every direction on the deck, asleep, from morning to night.

(i.) As the management of these coolie emigrants is chiefly

placed in the hands of the surgeon, the colonial government in the West Indies has allowed a premium of half a dollar for each emigrant landed in good health. Had they granted one dollar to the surgeon, and half a dollar to be divided between the chief and second mate of the ship, for each emigrant landed, they would have acted liberally, without any risk, on their part, of involving the colony in pecuniary difficulties. A small bonus of this kind never fails to act as a powerful stimulus with the officers of the ship, to assist the surgeon in looking after the welfare of the coolies.

(j.) The commanders of vessels will act prudently, if they provide an extra quantity of warm clothing, and twelve hammocks for the sick, to be prudently slung in the after part of the ship for the coolies they take to the West Indies or Mauritius. The few articles provided by the protectors of coolies and emigration agents at Calcutta and Madras, I have already proved to be insufficient for the passage to the West Indies. Warm clothing to these coolie emigrants is as indispensable to their existence as the food they eat. From experience, I have reason to know the baneful effects of frost, cold, wet, and frequent changes of climate, on their constitutions. When more at leisure, I shall enter into the details of the consequences resulting from a refusal on the part of the colonial government, Georgetown, Demerara, and the agents of the charter parties in London, to provide the return coolies with warm clothing. You can already picture to your mind what the sufferings of these return coolies must have been, provided with no more clothing than is worn by the same class in Calcutta. When we rounded the Cape of Good Hope in the depth of winter, we ran down to forty degrees south latitude, and when in this latitude we had the misfortune to encounter, for several successive days, terrific gales of wind, accompanied with hail, snow, and rain. The act of sending coolies to the Mauritius and West Indies, unprovided with clothing, constitutes a very grave abuse in the present emigration system: it ought to have been corrected long ere this; its continuance for so long a period betrays a want of foresight, if not censurable neglect, on the part of those directly connected with the emigration of these coolie labourers, which has been instrumental to the sacrifice of many human lives.

(k.) The between-decks of these chartered ships ought to be fitted up in the same manner for coolie emigrants as for troops. If each vessel were provided with a wooden framework, raised three or four inches from the deck, it would prove not only comfortable to the coolies, but more conducive to the preservation of their health. At present this is not the case: in rough, squally weather, the vessel is apt to ship a sea, which rushes by main force down the fore, main, and after hatchways; the between-decks are deluged with water; clothes, rugs, bedding, and trunks, are floated about in every direction. When swabbed up, the boards remain soaked with wet for several hours afterwards, and, regardless of consequences, the coolies sleep from night to morning on the wet decks. On the day following, it becomes a question of life and death whether a particular line of treatment shall be adopted to subdue the symptoms of an acute attack of fever, inflammation of the bowels, and inflammation of the lungs.

(l.) To guard as much as possible against the outbreak of cholera on board, the steamer ought to take the vessel in tow twelve hours after the coolies have embarked. Every possible delay in this respect should be avoided; no obstacles should be thrown in the way of commanders of emigrant ships, and every facility ought to be afforded, to enable the vessel to put to sea at once. Many coolie ships proceeding from Calcutta to the Mauritius have lost eight, ten, twelve, and fifteen men, from cholera, before the ship has anchored in Saugor roads. I do not hesitate to say that the mortality would be considerably less, were attention to be paid to this point.

Gwalior, India, 1846.

LIABILITIES OF THE MUSCLE IN DISEASE.

Or epidemic influences that disturb the general health, the voluntary muscles take early and constant notice; for of life, in all its varieties of action, they are the truest, readiest, and most delicate exponents. Rheumatism, influenza, diarrhoea, illness of whatever kind that is "going about," prevail, by acknowledged symptoms, in the locomotive structures of the body. All the animal blights, electrical, contagious, or miasmatic, are necessarily muscular in their development. Observe your patient, then, from first to last, as he stands, walks, sits, or lies; note well his changes of posture; see what he does with his hands; watch his features at their several periods of action and repose; compare them in their separate play. Nothing, be assured, is more truly clinical than such indica-

tion, by impaired contractility of disorder in the flesh. Remember, without disparagement of the medicine that works by dissection, analysis, and the microscope, that, while engaged in the contemplation of these muscular symptoms, we have before us nothing less than the actual visible operations of disease. Observing them, we have under our side, natural eye, not the mere segments of perverted, fast-decaying structures, not the shadowy, lenticular, spectra of a discharged and damaged fluid, but organs, living and complete, in active relation, through their function, with the blood and all else that is vital in the body. Here, in the Queen's ward, is a woman, (Mary Mc B—,) who tells us plainly, though not in words, of fast improvement and recovery. Near-sighted as I am, I see already, as we approach her bed, that since yesterday she is better. I see it, and at once, in the shape of her features; I know it by the very "wag of her eyelid." In this case, the buccinator and the levator palpebræ muscles express as much of encouragement as could be spoken by the mouth and larynx. Try and remember this patient as we knew her on March 11, when she was first admitted, scarcely conscious, exhausted, inarticulate,—how she lay, and whined, and stared. Day after day we found her stretched, as if by palsy, on her back; her knees were never bent; her hands moved but seldom from her side. In this unnatural repose of all the voluntary muscles, we could not fail to recognise the character and intensity of the disorder. The influence that operated to the prejudice of the contractile function, was, in this instance, atmospheric and of the season. It is a case, now convalescent, of the spotted epidemic fever.

St. George's Hospital, March, 1846.

J. A. W.

CONTRIBUTIONS

TO

THE PRACTICE OF MIDWIFERY.

By J. HALL DAVIS, M.D.,

PHYSICIAN TO THE ROYAL MATERNITY CHARITY; LECTURER ON MIDWIFERY AND THE DISEASES OF WOMEN AND CHILDREN.

LABOURS TERMINATED BY INSTRUMENTAL DELIVERY, WITH ILLUSTRATIVE CASES AND REMARKS.

On the employment of instruments by the late Professor Davis, with more especial allusion to a criticism by Professor Murphy.

MONDAY, SIX P.M., Dec. 9th, 1845, I was requested by an old professional friend of my late father, to attend with him Mrs. A—, aged twenty-eight, in labour of her first child.

Previous history.—The waters had been discharged on the previous Saturday evening; the orifice of the uterus, at my friend's first visit, (five A.M., Sunday,) was of the diameter of a shilling; the uterine orifice proceeded very slowly in its dilatation. Early on Monday morning, the head had gradually descended into the cavity of the pelvis, and the mouth of the womb was then fully dilated. In the course of the afternoon, the patient had become feverish and restless, and the parts heated and dry, for which her attendant had bled her to twenty ounces. Latterly, she had not been able to pass her urine, and my friend had essayed different kinds of catheters without success.

State on arrival, and subsequent treatment.—I found the head in the pelvis; a considerable puffy tumour of scalp, so as to obscure the sutures; the head seemed to fit the space pretty tightly; did not recede on a pain; the finger could—but with some difficulty, being pinched in the attempt—be passed in front of it behind the pubes; there was an obvious deficiency of parturient mucus. I managed, with a small-sized catheter, to effect an entry into the bladder; the circumscribed tumour of the distended bladder felt above the pubes disappeared entirely on the abstraction of fourteen ounces of urine. Although the head had been in the pelvis for so long a time, I did not feel justified in applying the forceps in the present condition of the vagina and the perineum. I suggested, first, the exhibition of tartar emetic, in four divided doses, at intervals of a quarter of an hour and twenty minutes; nausea and vomiting followed; a free moisture appeared upon the skin; an abundant secretion of mucus on the genitals; relaxation of the os externum and perineum followed; and at the end of two hours from the commencement of this treatment, there being no prospect of a natural termination of the case, and the parts now being in a fitter state for their use, the forceps were applied. By auscultation, I had previously satisfied myself that the child was living, finding the fetal pulsation, and most distinctly, over the left iliac aspect of the uterine tumour. The forceps were introduced along the sides

of the pelvis, were locked easily and truly, and were in application during twenty minutes; they were unlocked at intervals, and during the absence of pain. The child was a female, and vigorous, crying lustily immediately on its birth. The placenta followed, without hæmorrhage, in five minutes after; the uterus was left perfectly contracted. I saw this patient once afterwards: the bladder responded without difficulty, and no unfavourable symptom appeared to interrupt her recovery in the period usual after a natural labour.

Remarks.—The entire duration of the above labour to its completion by instrumental assistance, was about forty-eight hours. Its first stage—that occupied by the full dilatation of the uterine orifice—was tedious, for two reasons,—the early escape of the liquor amnii, and the condition of parts in a first parturition. The second stage had lasted fourteen hours, during nearly the entire of which period the head had lain in the cavity of the pelvis. The patient was, however, secured from injury likely to arise from so long a pressure upon the parts, by the judicious and timely employment of the lancet by her attendant, and by the subsequent administration of tartarized antimony. This preparatory treatment enabled me safely to apply the forceps. The detection of the fetal pulsation proving the life of the child, led me, notwithstanding the apparently impacted state of the head, to make use of the forceps.

I have said that the blades were introduced along the sides of the pelvis, as they should be, or at the opposite termination of one of the oblique diameters, according to the position. Either of these modes is legitimate, and the facility of passing the blade in the one or the other direction is equal; but to introduce them at the extremities of the conjugated diameter—that is, behind the pubes, and in front of the mid-point of the sacrum, as a *sacral* and *pubic* blade—I consider a most dangerous and incautious proceeding.

The favourable progress of the patient through her puerperium may justly be attributed to the antiphlogistic and timely treatment had recourse to.

Labours which require for their safe completion a recourse to instrumental assistance, of which the above is an apposite illustration, may be advantageously—and were by the late Professor Davis thrown together into a separate class—termed “instrumental labours.”

He who thinks it expedient, however, to adopt such a nomenclature, and, moreover, to devote a part of his time and attention to the improvement of instruments, and to the development of useful rules, precautions, and conditions, to be observed in their use, should not therefore (and cannot by any legitimate mode of induction) be supposed to feel an especial predilection for the employment of mechanical powers.

I am led to these remarks by a statement, in the form of an opinion, which has made its appearance in a work* recently published by Professor Murphy, of University College, London,—whether based on opportunities for forming a correct judgment or not, we shall see,—that his respected predecessor, the late Professor Davis, was disposed to advocate a boldness in the use of the forceps, by which, from his mode of expressing himself, we are to infer that he was not sufficiently cautious in his admonitions against their abuse, and too frequently employed them himself. That nothing could be further from the truth than this opinion, I can most conscientiously affirm. Those who attended his lectures, witnessed his practice, in consultation or otherwise, and have perused his works with due care, must, I am sure, have arrived at a very different conclusion from that of his critic. It is in the familiar recollection, indeed, of those who were acquainted with his views, by personal intercourse or otherwise, that the late Professor, on the contrary, was strongly of opinion, that instruments, and more especially the forceps, were much too frequently employed, as well as their indications and correct mode of application too little understood. To these circumstances, manifest and great injuries were, he considered, to be attributed.

To remove such defects in practice, arising, as he was convinced, out of a neglect of this part of a medical education, was ever one of the late Professor's chief aims, and the interesting motive for this direction of a part of his professional exertions will appear as I proceed. With this object in view, after a lengthened and patient attention to the subject, he published his “Elements of Operative Midwifery,” (4to.) in 1825, being the only work which had (or has) treated professedly, separately, and at length, on the precautions and rules to be observed in the use of the forceps, and other mechanical powers in midwifery.

In this ample treatise, especially devoted to the subject of

operations in midwifery, were contained suggestions of new and improved instruments, the object of their construction being to avoid the injuries which he had seen inflicted, arising not altogether from a want of dexterity, but almost unavoidably from the character of the instruments employed.

He condemned the single crotchet, and I think justly, as a dangerous instrument, and introduced the principle of the guarded crotchets, which (without or with two or three different modifications not destructive of its intention) has been by all cautious operators adopted ever since.

He introduced the osteotomist, the object of which was, by removing section after section of bone from the fetal cranium, to supersede, in the instances of greater amount of deformity, the alternative of applying forcible traction to an insufficiently diminished head, and to the manifest injury of the soft parts lining the pelvis.

He contrived important improvements in the forceps. He rendered them to a less extent a compressing instrument than heretofore they had been, and therefore less dangerous to the child, by increasing the width between the opposite blades, and between the sides of the fenestra in each blade. They were made, by his direction, less hazardous to the mother as well as to the child, by the rounding off smoothly of all angles. They were further rendered safer in their use to the mother by the addition of a shank,—that is, a smooth narrow length of steel to each blade, between the lock and the commencement of the fenestra; by which alteration the locking part was removed to a distance from the soft parts at the outlet of the pelvis.

The work on operative midwifery, which is illustrated by valuable cases, is further, as were the lectures of Professor Davis, replete with warnings and precautions to be borne in mind in the use of instruments. That they were never to be applied, except under a well-ascertained insufficiency of the natural powers, and only then when their employment was deemed preferable to all other modes of delivery. While he taught his pupils, on the one hand, the dangers of ill-timed delay, he admonished them not the less strongly, on the other, against a precipitate and rash recourse to the instrumental resources of our art.

Now, although the opinion of the late Professor—and he supported it by statistic data,* by his own personal experience, and not by loose and general impressions—was, that the forceps were much too frequently had recourse to; yet was it not the less his conviction, that the student should at all events have the opportunity given him, to learn this part of his profession, that he might hereafter, in his practice, have some guide amidst the difficulties and the doubts which might beset him in his early career, by which to regulate his conduct, and know how to avoid the mischiefs resulting from the use of instruments in uneducated hands.

To accomplish this his very praiseworthy object, he had constructed, under his own immediate supervision and direction, an extensive apparatus of machines, made with great care, upon models and close copies, carved in hard wood, of the standard female pelvis, and of deformed pelvis in various amounts of distortion, from actual cases,† in sufficient number, (to the extent of fifteen,) that each pupil might have the opportunity, under the personal instruction of his teacher, of learning accurately the principles to be attended to in the use of obstetric instruments; how to hold, to introduce, to apply them; how to be gradual and slow, not rash and sudden, in his movements.

* To establish his point, he addressed letters to different professors, in Germany and other countries, superintending lying in institutions, and obtained replies, which, in many instances, with similar reports from home sources, tended to confirm his opinion.—J. H. D.

I shall avail myself of a future opportunity, to give the statistics of his practice in the Maternity Charity.

† These apparatus were constructed most carefully by the best workmen in three different departments of trade, at my father's residence, under his close supervision and direction at every step of their progress. They occupied nearly fifteen months in the making, and their actual cost amounted to between £400 and £500. They attracted so much attention that they were visited and much admired by many teachers. Dr. Mackintosh obtained one for his class-room in Edinburgh, the only one which my father could spare. There were, however, not wanting those who abused them, as Professor Murphy has seen fit to do, and who, nevertheless, could not very well explain why they did so. One gentleman (writes Dr. Mackintosh) who had been one to condemn these admirable pieces of mechanism in no measured terms, subsequently changed his tone, and promised to his pupils, in his introductory lecture to a subsequent course, to secure the apparatus of Dr. Davis, for the benefit of his class; in short, he had written to London for the same. It is true that he did so, but my father had then parted with the only machine he could spare from his own class-room to Dr. Mackintosh, his, the applicant's, more fortunate rival, as a lecturer in that city, (Edinburgh). I have a letter in my possession, from the late Dr. Mackintosh, in which that physician expressed himself under a deep debt of obligation to my father, for forwarding to him the machine in question, adding, that the numbers of his class had since increased considerably above those of his contemporaries.

This mode of instruction was adopted by the Professor, as one by far to be preferred to the horrible alternative, by which, to become at length safe operators hereafter, junior practitioners must qualify themselves, at the imminent hazard of the lives of their fair clients, and of their own reputation, by experimental trials with the forceps upon the living bodies of their patients.

That the reflection which has, by Professor Murphy, been cast upon the memory of his predecessor in the chair, is entirely without foundation, and therefore unjust, I can further truly maintain, from my personal knowledge of what he did in his practice during twelve years, up to his lamented decease in December, 1841, and from direct information which I have from one who can speak to his practice from the year 1814. From that source I learn, that in three-fourths of the cases to which he was requested to bring his forceps, he had either found them unnecessary,—a further trial of the natural powers, or a judicious treatment, other than instrumental, in certain cases of a depletive kind; sometimes the simple use of the catheter for the relief of the bladder, or the exhibition of a clyster, having brought the labour speedily and satisfactorily to a conclusion,—or, Nature being unequal to her task, by reason of deficiency of space, the power in question was absolutely contraindicated, and therefore not employed, in consequence of impaction of the presenting head.

It was always, my informant adds, a source of great pleasure to him, which he never failed strongly to express, when he had been able, dexterous as he was in their use, to dispense with his instruments, (a dexterity which he told me he had taught himself by diligent practice on the machines, and not upon the bodies of his patients,) from that wholesome dread which he felt, and all should feel, against their unnecessary employment. It was ever a prominent principle with him, which he never failed to impress upon me, as well as upon all his pupils, that, to the performance of an operation, the prevention of it by a well-timed patience, or by a judicious and timely appeal to medical treatment, was infinitely to be preferred.

As bearing somewhat upon the subject of these remarks, I might direct attention to the fact, that my late father derived Dr. Denman's definition of a natural labour, of its limitation as to time; namely, that it should not exceed twenty-four hours. Denman's restriction of a natural labour to a limited time, although applying to the majority of cases, my father maintained, did not hold good with regard to a great number, especially of first labours, completed with perfect safety to the tissues and lives interested in the function, beyond the above time, by different periods. The chief motive which the Professor had in this alteration, besides greater accuracy as to fact, was his belief that the idea of a prescribed time being considered essential in the definition of a natural labour, might lead to a reliance less upon Nature than upon the mechanical powers of our art to officious and meddlesome practice; so much was he, in truth, an admirer of Nature's resources.

Not only is it rigidly true that my father, so far from being habitually fond of, or bold in, the use of instruments, was most guarded in his practice, example, and teaching, in that respect, but it is known to me as an interesting fact, that the first event which aroused his especial and earnest attention to midwifery and the improvement of obstetric instruments, so that they might be more safely employed, was an extensive injury inflicted on the person of his own and eldest child, by the use of an instrument exhibiting the faults which the Professor afterwards removed, and that in the hands of a gentleman of a good and a well-earned fame.*

The protracted duration and the unfortunate results of several of the early operations which he had witnessed, after the commencement of his practice of midwifery in London, although, in some instances, conducted by gentlemen who had acquired reputation as obstetricians, tended still more to encourage my father in his undertaking.

Now although Professor Davis introduced what have been very generally considered great improvements in the construction of instruments, and diligently applied himself to the framing of rules and precautions for their safe employment, he did not by any means pay a principal attention to instrumental midwifery; he had accomplished his entire object relating to that department, considerably prior to the year 1825, during the whole of which time, however, as a lecturer, his attention was fairly and impartially distributed over the different parts of a midwifery course.

His further exertions were directed to other points of ob-

stetric practice. He was the first (1819) to depart from the dangerous doctrine propounded by Rigby, on the management of unavoidable hæmorrhage, and the first in this country to point out and urge the correct principle of the plug, its indications, and its twofold intention. His lectures on uterine hæmorrhage during pregnancy, in the early and in the latter months, were extended to a considerable length, and excited a deep interest in his hearers. His descriptions of puerperal convulsions, puerperal phrenitis, and insanity, with his illustrative cases from his own abundant experience, were so graphically given, that we, one and all of us, felt as though transported at the time to the bedside of the patient.

He was the first to ascertain the true pathology of phlegmasia dolens, its dependence upon phlebitis, and the correct treatment founded upon it. The first case, that of Caroline D—, was investigated in March, 1817, ("Obstet. Med.," Art., Phlegmasia Dolens,) and formed the subject of a debate at the Bartholomew Society in the same year. Other cases occurred subsequently, presenting precisely the same appearances, under my father's personal cognizance, and one of which he received the particulars from his friend Mr. Oldknow, of Nottingham. The descriptions of these cases, which finally confirmed the accuracy of his view, appeared in his paper, which was heard with great interest at one of the meetings of the Medico-Chirurgical Society, and published in the twelfth volume of its "Transactions." That the attention of the late professor was earnestly and successfully directed to other departments of obstetric medicine, was apparent from the very numerous attendance upon his lectures throughout each course, and from the valuable store of practical information contained in his large work on obstetric medicine, published in 1836.

Although he was considered dexterous as an operator, in the few cases where an operation was called for, he was not less esteemed for his powers of diagnosis, and the accuracy and acuteness of his judgment under circumstances in practice the most trying and perplexing.

In the remarks which I have thus made upon the opinion expressed by Dr. Murphy on the professional practice and teaching of his predecessor, the only object which I have had in view has been the performance of an act of strict justice to the memory of my late parent and teacher, a tribute which I feel confident will be most readily and willingly paid to him by the many who attended his prelections, or sought his assistance amidst the doubts, the dangers, and the difficulties, of their midwifery practice.

Russell-place, Fitzroy-square, 1846.

ON THE TREATMENT OF HÆMORRHAGE FROM LEECH-BITES.

By F. L. GERVIS, Esq., Surgeon, Tiverton.

VARIOUS methods have been proposed, in THE LANCET, for checking hæmorrhage arising from leech-bites. I will mention the applications I have found most useful in my practice, whenever excessive hæmorrhage has occurred from such a cause, which have proved effectual in arresting it. In a case which lately fell under my care, where I had occasion to apply leeches to the throat, for an attack of cynanche tonsillaris in a young lady, one leech fastened over the external jugular vein, which bled so profusely, that I was sent for in great haste. The blood was streaming from the puncture, which I endeavoured to stop by dossils of lint successively applied, and adhesive plaster, at the same time keeping up a firm pressure on the part with my finger. This plan was unsuccessful, and without delay, I dipped the lint in a strong solution of alum, and placed it on the puncture. In a few minutes the hæmorrhage ceased. Not long since, a patient came to my surgery, very faint and exhausted, from loss of blood. A tooth had been extracted on the previous day, and he had bled during the whole of the night. On examining the socket of the tooth, I found that a small artery had been divided, and the hæmorrhage still continued without intermission. I applied lint, dipped in spirits of turpentine, to the part, which, in general, is an excellent styptic; but it proved quite ineffectual in checking the bleeding. I then had recourse to the alum lotion, and within two minutes it was completely arrested. The other remedy I recommend for checking hæmorrhage from leech-bites is the tobacco used for smoking. This is so efficacious, that it only requires a trial to be generally adopted, when the usual means fail. I have known various applications fail until the tobacco has been tried, and this with complete success.

Tiverton, Feb. 1846.

* My father had not then practised midwifery, and consigned the care of his wife in this her first confinement to his friend, in whose good management he felt great confidence.

EFFECT OF ELECTRO-MAGNETISM ON THE ACTION OF THE HEART.

By Dr. BUDGE, Lecturer in the University of Bonn.

ALLOW me to communicate to you the following interesting experiment, which I made in the presence of the Professor Dr. Albers, Drs. Brach, Kuch, Kilian, Mayer, Wutzer, Naumann, Remak of Berlin, Wolff, and many others. The result of the experiment is invariable.

Let an electric stream, by means of a magneto-electric rotation apparatus, pass through the medulla oblongata of a frog, when the palpitations of the heart will cease as long as the rotation is in action; and it will begin again, in the same way as before the experiment, a few seconds after the rotation has ceased. This experiment produces, in fact, tetanus in the whole of the body. When any other part of the spinal marrow is exposed to the same electric stream, tetanus is equally produced; but the heart continues its movements without interruption. Finally, when the whole skin of the frog is subjected to this stream, so that one wire lies close to the heart, tetanus in the whole body is produced, but without affecting the heart. Directing the stream upon the ramus intestinalis nervi vagi, lying before the lungs, produces the same effect as upon the medulla oblongata.

Bonn, April, 1846.

REVIEWS.

Transactions of the Medical Society of London.
London. Highley, 1846.

WE are glad to see that this, the oldest public medical society in England, has re-commenced the publication of a new series of Transactions. Twenty-eight years have now elapsed since the publication of the last volume of papers; and after such a lapse of time, it can hardly be without the idea of repeating it year after year, that the present volume has been sent forth. We hope this will prove to be the case. The permanent record of papers will stimulate their writers to greater care and labour than would be given to productions intended to be merely ephemeral, and we should hope that a feeling of emulation between the different societies will prove beneficial to them all.

The present volume contains twenty-two papers, contributed by the fellows of the Society, some of which manifest great talent, and all of them that solidity which might be expected from well-educated men, most of whom are engaged in extensive practice.

One of the most important papers is that of Mr. Pilcher, "On the Nervous System, particularly the Excito-Motory, or Reflex Functions." Of this it is not too much to say, that it is the clearest and most satisfactory exposition of the physiology of the spinal system which has ever been given in a moderate space. The proofs of the independent function of the spinal marrow are so cogently put, that we insert them in their entire state:—

"Even before birth, this function gives rise to those numerous, and often powerful, movements in utero, doubtless excited by irregular and undue pressure upon some part of its body; during parturition, the little hand clasps the attendant's finger, when placed upon, and gently pressing, its palm; the mouth often closes upon the finger when there introduced; the leg is drawn up, away from the accoucheur's gentle touch, increasing the difficulty of turning; facts well known to every midwife, and which assists them in determining the life or death of the being: and who will presume to say that these movements are mental, when multiplied facts demonstrate that the mind is not evidenced for many days after birth? Parturition being completed, this action is called into operation by the stimulus of the air playing upon the infant's face and body, and respiration occurs; if the ordinary application of the atmosphere be insufficient, the attendant blows upon its face, and a lusty cry responds; and, probably, the often wonderful effects of the warm bath are partly produced through the medium of this function. Still later, the excito-motory function is evidenced in the child's sucking; in its startings upon a breath of air coming in contact with it; in the rapid retraction of its limbs upon the slightest touch; the

rolling its body, or its change in position, all during the deepest sleep, from which it is not the least aroused. Still further, the infant is suckled in its sleep, evacuates its bladder and its rectum; and these actions are often artificially excited for the sake of cleanliness: the Jew priest takes advantage of this circumstance, and titillating the pubes and glans penis, induces evacuation of the bladder, previously to receiving the circumcised portion into his mouth for the purpose of consecrating it with holy wine. We cannot resist expressing admiration at this wise and benevolent provision, by which the safety and growth of the infant and child are insured before its mind is sufficiently developed to take cognizance of beneficial or injurious agents. The foregoing observations are equally applicable to the idiot, who, if the case be a complete one, lives a vegetable life only, is a mere automaton, whose whole actions are excito-motory. Such a complete instance, however, is rare. I have certainly seen one, perhaps two; for generally some mind exists, the hemispherical ganglia not being altogether deficient; yet the anencephalous monster, during its short existence, performs many and constant excito-motory actions, in addition to its nutritive functions. The exercise of this function in the total abstraction of the mind, as in walking, when all the mental operations are buried in some abstruse thought; in the flight of animals—when the volition, having set the muscles in action, no longer is required to maintain the rapid motion; so that the operations of their brains may be entirely directed to the mode best adapted for their safety in escape, or their success in the chase. The diseases of the excito-motory system are evidenced in its loss of function; thus in general, disease of the spinal marrow, whether idiopathic or secondary upon affection of the brain, is attended by complete suspension of motion. Often the first, and for some time the only, symptom of affection of the base of the brain, is unsteadiness in walking, in the absence of unusual care or volition; on the other hand, an excited condition of this important function is recognised in chorea, in many cases of convulsions of infants consequent upon intestinal irritation, so constantly mistaken for cerebral disease, and therefore maltreated; in spinal epilepsy, so frequently confounded with brain affections, but which has its seat in the chord, the organ being either idiopathically or symptomatically influenced. It must have been noticed by every practitioner, for the cases are of every day's occurrence, that in affections of the base of the brain or the spinal marrow, the true spinal chord, the motions of the limbs are regulated correctly enough during waking hours; but when volition is suspended by approaching sleep, excito-motory contractions occur, and the catchings, as they are called, annoy and distress the patient, until, becoming exhausted, he falls to rest, to become awakened by their return; or if he sleep on, the attendants perceive the action of the limbs or face, and the partial nature of the repose. Experiments upon living animals prove the same facts; the partridge, shot through the head while upon the wing, still flaps its pinions and pursues its way, undirected by the mind, till the shock is communicated to the whole system, when it drops; the pigeon, with its brain so carefully removed as to be insured against loss of blood or general violence, will have its wings expanded, and fly; the eel, rendered, in like manner, brainless, swims readily upon its tail being gently grasped; the pup, similarly prepared, will suck readily its mother's dugs; the brainless frog has its legs quickly and powerfully moved, as in the act of swimming, upon the slightest irritation; the careful division of one par-vagus will embarrass the respiration of the rabbit, but it will still breathe through the operation of the opposite nerve, assisted by the common excito-motory; if both para-vaga be operated upon, death will be the inevitable consequence, though respiration may be continued for some hours, from the above noticed cause, notwithstanding the late experiments of M. Flourens. The experiment of this physiologist on the fowl is a crowning example: with its entire brain removed, its mind was annihilated—its senses were destroyed, but it swallowed food and drinks which were introduced into its mouth; it evacuated its excrement, breathed regularly, its circulation was perfect; in short, the great function of nutrition was performed for, I think, nine months; in addition to all this, it stood and walked when placed in the proper position, and probably would have lived on, had its food not been suspended by neglect. Experiments upon the recently dead animal produce similar effects; the application of a straw to the anus of the cat, just, but completely, dead, excites powerful action in the posterior extremities and, the tail, such as the living animal would use to remove the irritant; if the fore part of the body be excited, then the anterior extremities will be moved; the eyelids will close upon touch-

ing the lashes; the lips will be raised upon moving the whiskers. In the recently dead hare or rabbit, by gently brushing the thick hair on the under part of the foot, the whole limb is remarkably thrown out, as in running, but the sudden piercing of the flesh with a lancet produces no effect.* These and other facts might be multiplied to tiring, and have been so frequently performed and tested by Dr. M. Hall, Mr. Grainger, and others, that to doubt their exactness must be unpardonable scepticism."

There is also a paper on "The Incubation of Insanity," by Dr. Forbes Winslow. In this paper, the importance of what the author has termed the period of incubation in insanity is dwelt upon; the mental and physical symptoms are described, and the principles upon which the mental and physical treatment should be conducted are set forth. Mr. Bishop's paper on "Stammering and Aphonia" calls for our warm approbation. It gives us sincere pleasure to see a regular practitioner attempting to reclaim a legitimate branch of medical practice from the domain of quackery, and we have no doubt Mr. Bishop's labours in this respect will approve themselves to the profession. He considers the immediate cause of stammering to be the attempt at articulation before the vocal sound has been produced in the glottis. He maintains that the vocalized breath may be interrupted in four different situations—by the closing of the valve of the glottis; by the closing of the isthmus of the fauces; by the tip of the tongue being brought into contact with the palate; and by the closing of the lips. These different interruptions, he believes to be the cause of the impediment occurring in different cases in the articulation of different sounds. The main principle of cure is, according to Mr. Bishop, "to vocalize the breath so as to utter a continuous sound, as by singing a note in music. This he should first do without making any attempt to articulate a syllable; and then, on repeating the same sound, should endeavour to articulate the word required. This he will be enabled to do immediately, if, during the whole time that the attempt is made to pronounce the articulate sounds, care be taken that the glottis is kept in action by the vocalization of the air issuing from the lungs. In this manner the worst kind of stammerers will be enabled to overcome, on the first trial, the difficulty of articulating at will."

The following are Mr. Bishop's remarks on the performance of tonsilotomy in stammering:—

"Bennati relates two cases, one of M. le Comte de Fedrigotti, who suffered, subsequently to an attack of acute nervous fever, from an enlargement of the tonsils, which was supposed to injure his voice. Two-thirds of them were therefore extirpated; and the effect produced was, that although the tenor register of his voice was improved, and the compass augmented by two notes, *he lost four notes of the falsetto register*. In the second case, (that of M. Carcelli,) the tonsils having been enlarged by chronic inflammation, the falsetto acquired an increased range of *five notes*! Gerdy also mentions a case, in which the whole pitch of the voice became more acute after the extirpation of the tonsils. Reference has been made to the preceding cases to show that, in singers at least, the tonsils are organs of some importance."

A variety of other papers, some of them of a high practical and scientific character, make up the volume. Dr. Marshall Hall, Dr. Waller, Dr. T. Thompson, Dr. Garrod, and Messrs. Bell, Dendy, Headland, Crisp, Stedman, Bryant, Hutchinson, Linnecar, and Roberts, are among the remaining contributors.

THE SYDENHAM SOCIETY.—PAULUS ÆGINETA.

To the Editor of THE LANCET.

SIR,—It is really quite amusing to mark the self-satisfaction of your correspondent "Censor." His process of reasoning, and his ideas of proof and disproof, are most remarkable,

"* Since this paper was read at the Society, an inquiry was instituted before the Lord Mayor, by some well-intentioned, but unphysiological gentleman, into the cruelty practised by the poulterers in Leadenhall Market, the fowl's limbs having briskly moved during the process of picking; the more philosophic poulterers correctly urged that the birds were completely dead, and that the strong movements were unattended by sensation, and were proofs of their previously good health."

seeing that we have every reason to believe he has, one time or another, actually mastered "a certain proposition" of Euclid. His arguments savour very strongly of that species of logic so characteristic of the fair sex. For example, he gives us something very much like the following:—Prop. 1. Paulus Ægineta is a silly work, and a degradation to our science and literature.—Proof: Because it is. Q. E. D.—Prop. 2. Being a silly work, it is not fit for the members of the Sydenham Society.—Proof: Because the Sydenham Society is not a medical archaeological association. Very flattering this for archaeological associations in general, and for medical ones in particular.

To assail such arguments as these is proverbially useless, and in the present instance, it is sufficiently evident that their supporter has been the first to stick at his own pins. "But I go to facts."

If "Censor" will take the trouble to read the second law of the Society, he will there find it expressed that "the Society will carry its objects into effect by a succession of publications, embracing, among others, miscellaneous selections from the ancient and from the earlier modern authors, reprinted or translated," and "Translations of the Greek and Latin medical authors, and of works in the Arabic and other Eastern tongues, accompanied, when it is thought desirable, by the original text." So that while I would agree with "Censor," that the Sydenham Society is not solely a medical archaeological association, it is quite clear from the above extract from its laws, that medical archaeology is among the subjects, from the works on which selections are to be made by the Council. Now, as "Censor" considers medical history "mere babbling," and holds archaeology in supreme contempt, it seems but natural to conclude that had he comprehended the objects of the Society before he enrolled himself a member, such an era in the Society's annals would never have arrived, and the Council would have been spared his expressions of discontent, and the severity of his criticism.

The remarks of the Council in their selection of Paulus Ægineta, may be useful to "Censor," and other discontented members—"If among the original objects of the Sydenham Society, those which relate to ancient medical literature are to be attained at all, the Council feel satisfied that in the estimation of all whose opinion is of value, these objects are likely to be gained by the publication of such a work as the Paulus Ægineta of Mr. Adams." And again: "If among those who are ranked as members of a liberal profession, there are any who cannot appreciate such works as the Society's edition of Paulus Ægineta, and are content to stumble through the mazes of error, regardless of the beacons set up by their forefathers to direct the footsteps of their descendants," whilst they prove themselves incompetent judges of the proceedings of such a Society as this, they afford equal proof of the necessity for its existence." These remarks may not be very flattering to the taste and opinions of your correspondent "Censor," still I think they will suffice to convince him that he has altogether mistaken the objects of the Society, of which he is a member; and as the inference from this is tolerably clear, I shall leave him to draw it for himself, and only add, that the sooner he acts upon it the better.

Jus.

May, 1845.

QUACKERY.—*To the Editor.*—SIR: Your crusade against quackery within the profession demands the sympathy and zealous co-operation of every one of its members who would promote its real respectability. I therefore send you the enclosed advertisement which I have cut out of the last number of the *Northampton Mercury*. KERR is the name of one of the physicians to the Northampton Infirmary, but whether that gentleman is in any degree answerable for this instance of quackery, I do not know. There can, however, be no harm in challenging him to speak for himself. When you have done with the metropolitan "lights of the profession," you may perhaps find time and space for the provincials. I am, Sir, with respect, yours, A PROVINCIAL PRACTITIONER.

Northampton, April 20.

* * The advertisement is headed, "DR. KERR'S COUGH PILLS;" but surely this is nothing but an impudent or fraudulent assumption of a name which the quack advertiser considered would find the weight of prestige in the town and neighbourhood of Northampton, the address of the "preparer" of the trash being "Clerkenwell Green."—Ed. L.

THE LANCET.

LONDON, SATURDAY, MAY 23, 1846.

WE cannot allow the present number of our journal to issue from the press without directing the attention of the profession, and the successful cultivators of the science of chemistry, to the remarkable paper on AMORPHOUS QUININE, from the pen of the celebrated BARON LIEBIG, which is published exclusively in THE LANCET of this week.

DR. TODD it was who pretended to consider our exposures of the Royal Society as merely "personal." We utterly repudiate the idea, and declare that it is no pleasure to us to lay bare the ugly moral anatomy of those in authority at the Royal Society. If we could have gone through these things without mentioning a single name, we would gladly have done so; but the acts are connected with names, and it is utterly impossible to separate them. We have discussed the whole matter, not as a thing of "personal feeling," but of justice and injustice, of right and wrong, of the qualifications of the Councils and Physiological Committees of the Royal Society, and of "la probité scientifique" of the Royal Society itself; and in doing this, we have dealt with *things*, and only with *persons* in so far as these have been inseparably bound up with the former: Trojan or Tyrian, and Dr. TODD or Dr. DOT, have been the same to us throughout.

We, at all events, in our inmost convictions, have held a very different view of the matter than the merely "personal." To our minds it has been a struggle between the spirits of experimental anatomy and physiology, and of mere book anatomy and physiology. It has so chanced, that in the medical section of the Royal Society the biblio-physiologists—the "paper philosophers" of Galileo—have long held the chief sway. All the evil doings we have chronicled and censured have been bred of the strife going on between these two races. There is a natural enmity between them which nothing but the ultimate victory to the right can abate or stifle. The book-physiologists, whether the retailers of the article in tomes or lectures, are as much the enemies of the true physiologists as critics are of poets, or picture-dealers of painters. Viewed in this light, it is nothing extraordinary that ROGET and TODD, and even SHARPEY and BOWMAN, the physiological luminaries of the Royal Society, should be in mortal antagonism to such men as MARSHALL HALL and ROBERT LEE: and under these, on either side, the lesser men range themselves as under different banners. The workers with the pen and the tongue contend for the superiority over the workers with the brain and the scalpel. This is the ethical idea presented by the present contentions.

Dr. TODD's low notion induces us to recal some of those doings of the individual, and of the Royal Society, as a collective oligarchy, upon which we have already animadverted.

We have dealt with grave and earnest charges—charges affecting the character of the present scientific generation. We have put the men who appropriate to themselves the first place in physiological science, on trial before their contemporaries and before posterity. What have been the answers to our charges? What their rebuttals?

We charged it upon Dr. ROGET, that during a secretaryship which we now find to have extended to its nineteenth year, the Royal Society had been made the arena of private feuds, and its honours and rewards the medium for private favouritism, and the repayment of personal obligations. Of this we offered proof, and shall continue to offer it more abundantly. We have shown that the highest scientific honours of this country, instead of being ennobled by the names and fame of their recipients, have been soiled, and turned into mean and disreputable channels. Dr. ROGET's friends and claqueurs have carried off the prizes, while those with whom he had quarrels, the HALLS, the GRANTS, have been banished from the Councils of the Society during the best portion of their lives. We strenuously contended that it was improper, that it was indecent, for the paid secretary of a Society like the Royal to remain in office, after he had embroiled himself in quarrels with some of the most distinguished of the working fellows. We contended that when he had so embroiled himself with Professor GRANT and Dr. HALL,—with either of whose labours his own works do not bear the shadow of comparison,—he should at once have resigned, or been made to resign; and not have remained between them and the Royal Society, to impede their career of distinction, and of usefulness to science and to their fellow-men. The minute particulars of these things we do not now feel called upon to recite, they will be sufficient to make the ROGET secretaryship one of the most memorable that has happened since the foundation of the Royal Society.

Dr. ROGET has written his defence; and what does it amount to? Instead of meeting the matter broadly and fairly, a few unimportant statements are nibbled at, and positively the following is the most remarkable point in which we stand corrected by Dr. ROGET. We stated that Dr. ROGET had "sent" the proofs of his Bridgewater Treatise to Professor GRANT, and that he refused to correct them, because they contained the matter of his own lectures. Dr. ROGET, in reply, says they were not *sent* to Dr. GRANT, but that he only "allowed him to see some of the proofs." This contradiction, if contradiction it can be called, is actually the most salient point of Dr. ROGET's replication.

We charged it upon Dr. SHARPEY that he had foretold the destruction of Dr. LEE's dissections of the nerves of the uterus; that he had instigated Mr. BECK to commence his dissection in opposition to Dr. LEE; that he procured the defrayal of the expenses of the dissection out of the funds of University College; that when the paper detailing this dissection was sent to the Royal Society, he suffered himself to be named a referee to the paper; that he subsequently acted as a judge in favour of Mr. BECK and against Dr. LEE, both in the Physiological Committee and in the Council; and that he was a party to the violation of the honour of the Royal Society, in the giving of a Royal medal for a paper which had not been read to the Society, or printed in its *Transactions*.

And Dr. SHARPEY's answer amounts but to this—that he did not "instigate" Mr. BECK to dissect the gravid uterus; but that on Mr. BECK proposing it to him, he merely "heartily concurred in his proposal." This is the gist of Dr. SHARPEY's reply; and we confess ourselves guilty of the difference between "instigation" and "heartly concurrence." The question naturally arises—would Mr. BECK have had a medal if he had *confirmed* Dr. LEE's dissections? Was it not

singular, that while he remained intimate with Dr. LEE, Mr. BECK should have been an "implicit believer" in the nerves of the uterus; but that when he came to be patronized by Dr. SHARPEY, he should have gone over to the contrary opinion?

We charged it upon Dr. TODD, that, as one of the referees of Mr. BECK's paper, he was one of those who, when the Physiological Committee met to recommend the award of the Royal medal, allowed Mr. LAWRENCE, the chairman, the referee of Dr. LEE's paper, and the only one of the Committee conversant with all Dr. LEE had done, to leave the chair; and that after Mr. LAWRENCE's departure, he (Dr. TODD) took the chair himself, and recommended Mr. BECK's paper for the medal. This re-construction of the Committee, which we call infamous and illegal, has been called by the actors themselves an "informality of little moment." Would it be considered an informality, if, in a committee of the House of Commons, the chairman, being told the business of the day was completed, was permitted to dissolve the committee and leave it—and if, after this, the debris of the committee reformed themselves, put a new chairman at their head, and came to an important vote on a point upon which the chairman was the only one fully informed—would this be called an affair "of little moment"? In any case, whether the business transacted were important or not, would not such a re-formation of a committee be utterly scouted? We further charged Dr. TODD with not going to examine Dr. LEE's dissections before the decision respecting the medal, though invited to do so; and we detailed the fact of his going to examine them afterwards, and that then, in his anxiety to dispute the nervous structures claimed to be discovered by Dr. LEE, he actually repudiated and denied the hypogastric nerve itself.

What is the answer of Dr. TODD? He takes the trouble to write; to contradict a circumstance detailed in another journal, but does not consider our convicting him of gross ignorance "worthy of contradiction." Then, why write at all? A great anatomical point is in controversy, and such is the conduct of the two professors of anatomy in the principal academies of London, in the nineteenth century;—the anatomical acumen of the one, is well mated by the judicial delicacy of the other!

Our charges against Mr. NEWPORT we need not recapitulate. He, instead of defending himself, tries, like his confrères in delinquency, to contradict some immaterial statement of ours; but to this he adds actual attack, accusing us and our authorities of being "utterly unworthy of credit." He refers to a mare's nest, in the shape of a letter of Dr. HALL's to "the Council of the Royal Society." This letter is held before us as a threat. To show our estimate of the value of the threat, let Mr. NEWPORT send us a copy, and we will print it at once: truth desires no secrecy, and fears no publicity.

The resemblance in the tactics of all the parties concerned cannot fail to strike the reader. They evidently act in concert. They make no attempt to explain or reconcile their own innumerable contradictions and mistakes. Dr. ROGET may say one thing, Dr. SHARPEY another, and Mr. BELL a third and different still, on a plain matter of fact; and there is no attempt to show where the veracity, where the errors, when the palpable contradiction is handed round; but the slightest discrepancy, or show of discrepancy, with ourselves, is indeed *à bonne bouche*. The charges are those of a battering ram, the

return, a mere pin's point. We aim at their scientific existences, and they are but too happy if they can cut a button from our critical coats. The sole object of the various replies that have been published, is to throw dust in the eyes of the profession and the public. Dr. ROGET and his allies are like sepia, which, when attacked, squeeze their ink-bags, blacken the water, and try to escape under cover of the cloud and dirt they leave behind.

One word more on the pretended discrepancy in the statement relative to Mr. NEWPORT's letter, set forth by him in the last LANCET.

Dr. HALL at the first gave the letter to Mr. KIERNAN, and nothing more. But Dr. HALL knew, either at the time, or subsequently, that Mr. KIERNAN gave it to Mr. MAYO, and that Mr. MAYO laid it before the Council of the Royal Society, when it was re-summoned to re-consider the adjudication of the Royal medal, which Mr. KIERNAN considered unjustly awarded from himself to Mr. NEWPORT.

At the first, therefore, it is evident that it was Mr. KIERNAN, not Dr. HALL, who really sent that letter to the Council. It was Mr. KIERNAN's affair entirely and exclusively. But when the question came to be one respecting a false and calumnious note appended to Mr. NEWPORT's paper, and directed against Dr. HALL, Dr. HALL spoke of that letter of Mr. NEWPORT, which flatly contradicted the calumny, as having been forwarded to the Council by himself. And most correctly did he do so; unless, indeed, it was necessary to adopt on every occasion the true "House-that-Jack-built" style, and say, "This is the letter which Mr. NEWPORT wrote to Dr. HALL, which Dr. HALL gave to Mr. KIERNAN, which Mr. KIERNAN gave to Mr. MAYO, which Mr. MAYO laid before the Council, which showed up Mr. NEWPORT's own note, in his own words, as an infamous and glaring calumny," &c. &c.

Having settled this knotty point, we have only to remark that Mr. NEWPORT's projection of it is but a vain hope of diverting our readers from the real question at issue, which is, not whether our "authority" be worthy of "credit," but whether the note which we have so often alluded to be a calumny; and, consequently, a blot upon the pages of the *Philosophical Transactions*, a disgrace to British science, and British character, and to the Royal Society; and, as a further contingency, whether, on every principle of truth, justice, and honour, that note should, even now, at this late hour, be forthwith expunged. Until this be done, that page may, indeed, be called the BLACK PAGE in the *Philosophical Transactions*, the joint production of the author, of the Secretaries, and of the Council of the Royal Society. Towards this note all the trickeries and chicaneries of the officials towards Dr. HALL naturally culminate. We again call upon each and all holding authority, to cancel that leaf, in the face of all Europe. The falsehood has been sent the length and breadth of the civilized world, and, on the lowest principles of justice, the evidence of its falsehood, and of its erasure, should be co-extensive.

We have occupied ourselves, needlessly, with Mr. NEWPORT's quibble, and his system of innuendo, insinuation, and accusation, (we trust this is his last,) but we have not yet done with what ought to be, and must become, the fair pages of science. We would advise Dr. HALL at once to address the noble President of the Royal Society; we cannot believe that he will be insensible to the claims of truth and honour, and we

engage ourselves not to cease our exposures until that foul blot has disappeared, by an act of the Council, which, being tardy, shall be the more complete. *That leaf, we will iterate and reiterate, must be cancelled, in the face of scientific Europe.* Now, from our watch-tower, we will observe, and trumpet forth, whether, in this matter, sacred truth and justice, or falsehood, calumny, and black and long-continued injustice, be in the ascendant at the Royal Society of London.

MR. LAWRENCE is, in a certain sense, a very fortunate individual. The bad fame of the Hunterian orator is eclipsed by that of the actors in the proceedings at the Royal Society. The exposure of the misdoings at Somerset House has, for the present, passed like an oblivious wave over those of Lincoln's-inn-fields. Dr. ROGER has completely put out the Oration and the orator. It must even be in some sort mortifying to the latter to see that his spitting and rancour can be so soon unheeded or forgotten. We ourselves needed the unanimous groan which greeted the mention of his name at the Hanover-square Rooms, the other evening, to refresh our memories respecting him.

There is a peculiarity connected with the matter: no one seems now to express any direct anger at the bad taste and worse feeling displayed in the delivery and publication of his Hunterian Oration. There is that kind of placid satisfaction with regard to the author of the Oration, which springs from the universality of the condemnation which has been bestowed upon him. No propagandism is required. There is no one to be converted to the belief in his evil behaviour, and consequently the feeling against him has ceased to be one of active aggression. This passive feeling is, indeed, so widely prevalent, that no one cares or hardly knows what became of the vote of censure passed upon the offensive parts of the Oration by the Council of the College of Surgeons. It was passed by the Council and confirmed by the profession at large. That was enough: and people do not know or care whether it was formally rescinded or not, so well assured are they that none can be found to question its justice.

But this heavy, leaden sentiment of antipathy must, to a man of quick feeling, be even more galling than violent, outspoken opposition. It can neither be met, fought against, nor overcome; it has all the qualities of physical inertia. By a kind of moral gravitation, it weighs the subject of it down with inevitable force, though, like natural gravitation, it is not positively felt by the man sinking slowly into the quagmire.

Out of this, with all his suppleness and admitted talent, MR. LAWRENCE may never hope thoroughly to emerge. It would take a generation to wear out the feeling he has evoked against himself in the minds of the great body of the profession. He will have, in all probability, abundant time to think on the past, but not time enough to remedy it. He will offer the spectacle of a man undergoing grave but merited punishment for the attempt to stir up professional strife, and prolong the war of professional classes.

We hope the other members of the Council are not mistaking the nature of the passive neglect into which their orator has fallen, and auguring therefrom a tame submission on the part of the profession to whatever acts they may themselves perpetrate. When is the Supplemental Charter to be produced? Let the Council look to it, that when it does come, it bears with it the remedy for the glaring evils of the last

Charter. If it does not, the storm of professional odium and attack which the Council must prepare for, is, we can assure them, fiercer than anything they have yet encountered in their career.

AMORPHOUS QUININE.

ON AMORPHOUS QUININE AS IT EXISTS
IN THE SUBSTANCE KNOWN IN COM-
MERCE AS QUINOIDINE.

BY BARON LIEBIG.

IN the preparation of sulphate of quinine, after all the crystals which can be obtained are separated, a dark-coloured mother-liquor remains, having an extremely bitter taste. On the addition of an alkaline carbonate, this liquid loses its colour and bitter taste, depositing, at the same time, a yellowish-white, or brownish precipitate, which, after being rinsed with water, and exposed to a gentle heat, agglutinates into a coherent mass, exhibiting the appearance of resin.

From the experiments of SERTUERNER, THIELE, BUCHOLZ junior, KOCH, and other chemists, it has been long known that this resinous substance possesses the properties of a base, that it neutralizes acids perfectly; but the salts which are formed by these combinations with acids, have baffled all attempts at crystallization.

SERTUERNER, who was the first chemist to separate this resinous substance from the mother-liquor of sulphate of quinine, considered it to be a distinct and peculiar organic base, existing in yellow and red cinchona barks, associated with quinine and cinchonine. He assigned to this, as he supposed, new substance, the name quinoidine, and greatly extolled its medicinal efficacy, in which he declared it was in all respects equal to quinine. In his journal, (*Über die neuester Fortschritte in der Chemie, Physik und Heilkunde*, Bd. iii., No. 2, page 269,) he terms it "a true fever-destroyer."

Subsequently, this substance, under the term quinoidine, has been employed medicinally in many places, and even introduced into the lists of commercial articles or price currents of many of the druggists of Germany.

In certain mother-liquors of quinine left in the preparation of the sulphate, which were analyzed by HENRY and DELONDEZ, and also a sample of quinoidine examined by GEIGER, these able chemists discovered an amount of quinine and cinchonine, accompanied by a resinous substance which they considered impeded the crystallization of the sulphates of the two bases, and which in their experiments they failed to separate. The results obtained by these chemists, and the inferences obviously deducible from these results, rendered it indubitable that the medicinal efficacy of quinoidine must vary according to the greater or less proportion of quinine it may happen to contain. Now, there cannot be a doubt but that this uncertainty with respect to the relative amount of quinine in commercial quinoidine, has prevented many physicians from prescribing the latter as a remedy, notwithstanding the testimony borne to its efficacy.

Having occasion, some time since, to pass through Coblenz, I procured from Messrs. JOBST and Co., of that town, a sample of quinoidine, for the purpose of employing it for the preparation of QUINOLEINE—a substance discovered by GERHARDT to result from the transformation of quinine, and to which much

scientific interest attaches, in consequence of the recent discovery of Professor A. W. HOFMANN, that quinoleine is identical with leucol, a body which is one of the components of the essential oil of tar, prepared from anthracite coal. It then occurred to me, that if the sample of quinoidine which I had procured contained quinine, it must yield a corresponding amount of quinoleine, and that, consequently, a very simple method of testing quinoidine for the amount of quinine it may contain might be based upon this property of quinine to be transformed into quinoleine.

On subjecting the sample I had obtained (which amounted to several ounces) to distillation with strong potass ley, I confess I was surprised at the large amount of quinoleine produced, which proved the presence of a far larger proportion of quinine than could have been anticipated. This unexpected result induced me to subject quinoidine to a stricter examination; and in order to avoid being misled by accidental circumstances, I procured, beside the Coblenz sample, specimens from Messrs. HESS, LEISSLER, and FIEDLER, of Mayence, and from Messrs. METTENHEIMER and SIMON, at Frankfort, and also from a druggist at Hamburg.

These various samples of quinoidine I received partly in irregularly-shaped masses, and partly as square cakes of a darker or lighter brown colour, which, by the warmth of the hand, became soft and flexible, but were readily pulverizable in the cold. The operation of powdering it imparted to it an extraordinary degree of elasticity. All these samples were completely insoluble in cold water, but scantily soluble in hot water, imparting to the latter a strongly bitter taste. I may here however observe, in passing, that some commercial specimens which I have since seen are soluble in cold water, arising from a considerable admixture of other substances; differing also, from the same cause, in many of the following properties:—

All the first samples I speak of dissolved in alcohol, in the proportion of one part to two of the menstruum; and from this alcoholic solution, water precipitates copious, yellowish-white, resinous flakes, which cohere into a mass like the original quinoidine. Dilute mineral acids, as well as most of the organic acids, dissolved my samples entirely, and by adding a sufficient amount of the substance, became completely neutralized. From these solutions in acids, ammonia and alkaline carbonates precipitated resinous flakes. On agitating the fluid containing these flakes and the flocculent precipitate with an equal volume of ether, the precipitate dissolves in the ether, *with the exception of a dark-brown residue*. On evaporating the ether, a resinous mass is obtained, having all the properties of an organic alkaloid.

Its salts are precipitated by tannic acid. Chloride of platinum produces in its solution in hydrochloric acid a yellow precipitate. Moreover, it dissolves completely in a solution of sulphate of copper with the separation of oxide of copper. Now there exists no resin, nor, indeed, any other substance similar to resin, which possesses this peculiar property.

These observations can leave no doubt whatever as to the chemical character of a considerable proportion of the residue to which the term quinoidine has been applied—namely, that it is a true organic base.

On subjecting the purified substance to elementary analysis, the following were the results:—

1st.—From the quinoidine of Mayence, 0.490 grammes

yielded 1.3204 grammes of carbonic acid, and 0.3395 grammes of water.

2nd.—From the quinoidine of Frankfort, 0.618 grammes yielded 1.6575 grammes of carbonic acid, and 0.4250 grammes of water.

3rd.—From the quinoidine of Coblenz, 0.3475 grammes yielded 0.9475 grammes of carbonic acid, and 0.2375 grammes of water.

According to these analyses, this substance contains

	i.	ii.	iii.
Carbon . . .	73.49	73.14	74.33*
Hydrogen . .	7.69	7.64	7.57

The determination of the nitrogen, by the method of VERRENTAPP and WILL, yielded the following results:—

0.515 afforded 0.289 of platinum.

0.617 " 0.401 "

And, consequently, the substance under examination contains, according to the first analysis, 8.04 of nitrogen; according to the second, 9.54 of nitrogen,—the medium of the two analyses giving us as its amount of nitrogen, 8.79.

ANALYSES OF THE CHLORIDE OF PLATINUM AND THE BASE FROM QUINOIDINE, (AMORPHOUS QUININE.)

I.—0.6663 grammes of the double salt yielded 0.1755 of platinum; 0.8700 grammes of the double salt yielded 1.349 carbonic acid, and 0.303 of water.

II.—0.881 grammes of double salt yielded 0.224 of platinum.

III.—1.0668 grammes of double salt yielded 0.2715 of platinum.

From these analyses, therefore, the following are the proportions of carbon, hydrogen, and platinum, which exist in 100 parts of the chloride of platinum, and the substance derived from quinoidine:—

	i.	ii.	iii.
Carbon . . .	32.44		
Hydrogen . .	3.86		
Platinum . .	26.33	26.32	26.45

Now, if we compare the proportion of carbon, hydrogen, and platinum, existing in the chloride of platinum and this base, derived from quinoidine, with the amount of the same elements present in the corresponding chloride of platinum and quinine; and, further, the amount of carbon, hydrogen, and nitrogen contained in the substance under examination, with the proportion of the same elements as they exist in quinine; we perceive at once that the two substances have identically the same composition.

Quinine, according to the formula,



contains—

Carbon, 74.33; hydrogen, 7.75; nitrogen, 8.62.

Chloride of platinum and quinine, according to the formula,



contains—

Carbon, 32.38; hydrogen, 3.53; platinum, 26.83.

The inference from these experiments, then, is irresistible: the uncrystalline substance derived from quinoidine bears exactly the same relation to ordinary quinine that uncrystalline sugar (barley-sugar) bears to crystalline (sugar-candy). Both yield the same products of decomposition; both have the same atomic weight, and identically the same composition;

* Carbon = 75, according to Prout and Dumas.

they differ only in form : in one word, the one is crystalline, the other, *amorphous*.

I deem this to be an important discovery, when we consider the high price of quinine, the possibility of a check to the supply of cinchona bark from the countries producing it, and the amount of the crude quinoidine which has accumulated since the manufacture of sulphate of quinine was commenced. Quinine, indeed, seems to be absolutely indispensable for the treatment of diseases; the progress of civilization in modern times has depended, far more than has been conceived, upon the discovery of a remedy for the fevers which prevail where tillage is imperfect, and in new and unbroken soils.

This chemical investigation has thrown an interesting light upon the testimonies borne to the efficacy of quinoidine in the treatment of fever, and the highest encomiums have been passed upon it; but the commercial specimens have differed very much in value; while some have consisted nearly altogether of amorphous quinine, others have contained only a small per centage.

It is necessary that the amorphous quinine should be separated from all admixtures and impurities, and prescribed in its pure state. There can be no doubt but the same substance will produce the same effect on the animal organism, whether exhibited in a crystalline or an amorphous state. The system, as we may say, makes no difference in such a case. As I have already observed, the mystery about quinoidine is completely solved by the discovery, that it usually contains a very large per centage of pure quinine in an amorphous state.

In a commercial point of view, it is certainly a matter of great importance that we should be able to judge by the mere external appearance of a remedy, of its purity; and consequently, how far we may rely upon its efficacy. This is thought to be the case with the crystalline sulphate of quinine, whilst the non-crystalline form of quinoidine has probably led to a disregard of the evidence for its usefulness, even more than the fact of its being, as usually sold, an admixture of various substances. But with respect to the mere amorphous form, when the quinine is separated from all its adhering impurities, it is in the same case with opium, castor, and many more of the most efficient remedies which we possess, particularly with the extracts of our pharmacopœias. It is necessary to be assured of their purity before we employ them, but their amorphous form does not prevent their use. In many of these cases, indeed, having no direct or ready way of testing them, we rely solely upon the honourable character of the merchant and dealer; but we have a completely satisfactory test for the purity of amorphous quinine. Few medicinal agents afford so ready a means of distinguishing them, and detecting admixtures, as the organic alkaloids; but if these tests are not employed, it is as easy to be deceived in purchasing crystalline sulphate of quinine, as the amorphous.

Amorphous quinine is completely soluble in dilute sulphuric acid, and in alcohol, as I have said above; it is also completely soluble in a solution of sulphate of copper, with separation of oxide of copper. And if its solution in a dilute acid yields, upon precipitation by means of ammonia, exactly the same amount of precipitate as the weight of the substance originally dissolved in the acid, there can be no doubt remaining as to the perfect purity of the sample under examination.

It only remains for me to observe, that no dependence should be placed upon the ordinary quinoidine of commerce,

As I have already stated, some samples which I have seen, dissolve incompletely in water, forming a dark-brown muddy fluid; these have been probably produced by simply evaporating the mother-liquors of sulphate of quinine to dryness. They are therefore uncertain mixtures of various substances with sulphate of amorphous quinine, with or without excess of acid, so that in purchasing such specimens, the buyer is paying the price of an organic alkaloid for sulphuric acid, &c. The pure amorphous quinine should be separated, and it would then form a most valuable remedial agent; but the prescriber must be assured of its purity, and the test I have given will suffice for this purpose.

THE MEDALS OF THE ROYAL SOCIETY.—DR. LEE'S DEMONSTRATION OF THE UTERINE NERVES.

(LETTER FROM DR. LEE.)

To the Editor of THE LANCET.

SIR,—In your journal of May the 9th is the following statement:—"Dr. Todd was shown the nerves of the unimpregnated uterus, and about these he would at first make no admission. He afterwards admitted the ganglia at the cervix, but wished to see the connexion between the ganglia of the cervix and the nerves of the body of the uterus. Dr. Lee showed him what he considered to be a newly-discovered ganglion, but which Dr. Todd would not admit to be nervous in structure. He was then shown the ganglia and plexuses at the neck of the gravid uterus: he was satisfied with these, and wished to see the nerves going from these ganglia to the body. They then examined an injected preparation, and in doing this, Dr. Lee took up the great sympathetic above its bifurcation into the two hypogastric nerves. Dr. Lee then put the right hypogastric nerve upon the stretch, and showed it running down to the ganglia at the cervix uteri. Dr. Todd looked at it, and in the most positive manner declared, to Dr. Lee's surprise, that what he showed him was *not* nerve. Dr. Lee expressed his astonishment at his ignorance, and told him that it was the hypogastric nerve which had been known to Galen, and to all succeeding anatomists, for the last two thousand years."

Immediately after Dr. Todd's departure, I made a note of the conversation, and this bears out to the fullest extent the accuracy of the above statement. After his egregious blunder, I observed to Dr. Todd, that he was "indeed a fit judge in a court from which there was no appeal in questions respecting the nervous system."—I am, Sir, your obedient servant,

Savile-row, May, 1846.

ROBERT LEE.

THE ROYAL SOCIETY.—AWARD OF THE ROYAL MEDAL IN PHYSIOLOGY.

To the Editor of THE LANCET.

SIR,—I consider the whole medical profession deeply indebted to you for the exposure which you have made of the gross irregularities committed by the Royal Society, or rather, by three individuals, who have contrived to mislead the council, and pervert the gifts of the Crown, bestowed only for great scientific discoveries. It appears to me that there is but one method by which the Society can be relieved from the obloquy under which it now lies. There is no power in the council to order Mr. Beck to return the medal which has been illegally awarded to him, and which he now holds unlawfully. He may retain it in defiance of public opinion; but it is a tarnished medal, and will only redound to his discredit. I would therefore beg leave to suggest to Mr. Beck the propriety of forthwith restoring the medal to the council, requesting his paper to be read, without delay, to the Society, and allowing it to go through the usual ordeal. If his paper contains any great discovery, he need not fear receiving justice at the hands of the council, and the royal medal in physiology would be restored to him pure and untainted by the president. There would be everything that is just and generous in this course, and the character of Mr. Beck would be raised in the estimation of all the honourable men in the profession, and his future career, I will venture to predict, would be prosperous. If he follows a different course, it is easy to perceive that his fate will be obloquy and degradation.

I am, Sir, your obedient servant,

May, 1846.

JUSTUS.

MEDICAL RELIEF TO THE POOR.

The following information is extracted from the Twelfth Report of the Poor-Law Commissioners just delivered to Parliament. We shall notice the subject of this extract on another occasion:—

Medical relief.—47. Upon the subject of medical relief, we have nothing material to state in addition to the explanations in our annual reports since 1842. The expenditure under this head has increased in the parochial year 1845, as appears from the following table:—

TOTAL EXPENDITURE FOR MEDICAL RELIEF.

Years ending Lady-day.	Amount of Medical Relief.
	£
1838	136,775
1839	148,652
1840	151,781
1841	154,054
1842	152,006
1843	160,726
1844	166,257
1845	174,330

Vaccination.—48. From the steps which we took, as detailed in our last report, we anticipated that the vaccination returns for the year ended 29th September, 1845, would show a large increase in the number of persons vaccinated by the public vaccinators of the several Unions; and it will be seen by the summary of these returns, contained in the Appendix to this report, (B, No. 13,) that the progress of vaccination during that year has been highly satisfactory, there having been 362,087 persons vaccinated, and the operation having proved successful in 347,765 cases, the successful cases being equal to 96 per cent. on the number vaccinated.

49. The following table shows the numbers vaccinated, and the births in the Unions from which returns have been received for the years ended respectively 29th September, 1844 and 1845:—

Years.	No. of Unions and Parishes	No. of Persons Vacci- nated.	No. of Persons successfully Vaccinated.	No. of Regis- tered Births.	Ratio of Persons Vaccinated to the No. of Births.	Ratio of Persons successfully Vaccinated to the No. of Births.
1844	542	290,453	278,192	452,235	100 in 156	100 in 163
1845	550	362,087	347,765	466,632	100 in 134	100 in 140

50. In order to ascertain whether the number of children vaccinated under one year of age approximated to the number of births, we framed the form of return so as to show the number vaccinated under and above that age, and we find that the numbers were as follow:—

	Under one Year.	Above one Year.	Total.*
Vaccinated	154,031	204,242	362,087
Successfully vaccinated.	147,958	196,216	347,765

The number vaccinated under one year of age is 43 per cent. upon the total number vaccinated, and 32 per cent. upon the number of births.

In every union in which we found that the number vaccinated under one year of age did not nearly approximate to the number of births, or in which a falling off had taken place in the number vaccinated, as compared with the previous year, we requested the Guardians of the Union to call the attention of the vaccinators to the subject, and to urge upon them the importance of extending the practice of vaccination in their districts. Though the number of children vaccinated under one year of age is only thirty-two per cent. upon the number of births, we still think that the relation which the births bear to the number vaccinated is a tolerably correct measure of the efficiency of the arrangements for promoting the object of the Vaccination Extension Act, as from the communication which we have received from boards of guardians and vaccinators, we learn that vaccination is very frequently deferred till the child attains its second or third year.

* These totals do not correspond, in consequence of the ages of the persons vaccinated not being distinguished in some of the returns.

51. During the past year small pox has not prevailed to such an extent as it did in the year 1844, the deaths in the metropolis in 1845 being only 909, whilst in 1844 they were 1804.

The registrars of the 115 districts, comprised in the Quarterly Tables of Mortality published by the registrar-general, are required, when the deaths are above the average, to state whether any epidemic disease has been prevailing in the districts, or if there be any other known circumstance which will account for the increase. We are thus enabled to ascertain in what localities small pox has recently been prevalent, and we then place ourselves in communication with the Boards of Guardians of the Unions in which the deaths occurred, and request that the public vaccinators may be instructed to use every means in their power to extend the practice of vaccination in their respective districts, and that the attention of the residents of the union may be especially directed to the arrangements which have been made for vaccination. At the same time we feel bound to state, that the Boards of Guardians and vaccinators generally appear to be fully sensible of the importance of giving full effect to the provisions of the Vaccination Extension Act, and manifest great zeal in the extension of the practice of vaccination. The amount paid in fees to the vaccinators during the year ended 25th March, 1845, was 25,905*l.*, being an increase of 9025*l.*, or of 35 per cent. upon the amount paid in the previous year."

DINNER TO MR. PENNINGTON

BY THE COMMITTEE OF THE NATIONAL ASSOCIATION.

"MEMBERS of the National Association desirous of attending, can obtain tickets of the Stewards, on application at the office of the Association, on or before the 25th of May."—*Advertisement of the Committee.*

No. 1.—*The National Association of General Practitioners in Medicine, Surgery, and Midwifery.*

Office, 294, Regent-street, May 15th, 1846.

SIR,—I beg to acknowledge the receipt of your note, making application, in the name of Mr. Wakley, for two tickets for the dinner to Mr. Pennington, and inform you, that the same shall be laid before the Stewards at their next meeting.

I am, Sir, your obedient servant,

To Geo. S. Brent, Esq.

GEORGE ROSS, Secretary.

No. 2.—*The National Association of General Practitioners in Medicine, Surgery, and Midwifery.*

Office, 294, Regent-street, 20th May, 1846.

SIR,—I am directed by the Committee to inform you, that the dinner about to be given to R. R. Pennington, Esq., emanated from the committee, whose guest Mr. Pennington will be, and that after the very offensive observations which have from time to time appeared in *THE LANCET*, of which you are the ostensible Editor, attributing dishonourable motives to the committee collectively, and personally obnoxious to many of the members, and which at present remain unretracted, they feel constrained to decline your application for tickets on that occasion.—I am, Sir, your most obedient servant,

To Thos. Wakley, Esq., M.P., &c.

GEORGE ROSS, Secretary.

** The Editor of *THE LANCET* thinks it necessary to observe, that both of these letters are signed by "George Ross,"—that the head-lines in both are printed, and that both exhibit the official seals of the committee.

OBITUARY.

DEATH OF PROFESSOR MEIKLEHAM.

WILLIAM MEIKLEHAM, Esq., LL.D., Professor of Natural Philosophy in the University of Glasgow, died lately, at his house in Glasgow College. His removal strikes off the last link, except one or two, of those which remained to connect the present professors with Millar, Jardine, Wilson, Young, Richardson, and others, who, about the close of the last, and the commencement of the present century, shed lustre on this university. Of these men, Dr. Meikleham was first the pupil, and afterwards the colleague; and by all of them he was held in high esteem as a man and a scholar. When a very young man, he was employed to teach the Natural Philosophy class during the illness of Professor Anderson, and his successor, Dr. Brown. His success in the discharge of his duty, combined with the character which he had previously formed, caused him to be appointed Rector of the

Academy of Ayr; and that seminary prospered greatly during his incumbency. In 1799, he was appointed Professor of Practical Astronomy in the university, and in 1803, he was promoted to the chair, which has now become vacant by his death. In discharging the duties of this important office, he was always most faithful, zealous, and assiduous. Despising everything like display, he was, perhaps, more retiring than might have been advisable; and he was, in consequence, less known to the scientific world and to the public at large than many who were far below him in scholarship and talents. Among his friends, and such of his students as were capable of appreciating his merits, he was justly regarded as a man of extensive scientific attainments, an accomplished general scholar, and a man of acute mind and sound judgment.—*Greenock paper.*

LINCOLN LUNATIC ASYLUM.

FEES FOR MEDICAL CERTIFICATES.—OFFICIAL INFORMATION.

In consequence of the following minute being made at the Board of the Lincoln Lunatic Asylum on the 4th instant, (grounded on the assumption that the practice was contrary to the spirit of the rules of the institution, and the Act of Parliament,) "that no medical certificate from a governor of this institution be accepted," the question was referred to the Commissioners in Lunacy, by whom the following answer was returned,—"That the law does not prohibit medical gentlemen, who may be governors of an institution such as the Lincoln Asylum, from receiving fees for certificates for the admission of patients."

MEDICAL NEWS,

FACTS, NOTICES, AND REMARKS.

WHOLESALE POISONING IN NORFOLK.—During the last week, the inhabitants of Happisburgh, a village on the Norfolk coast, have been in a state of great excitement, in consequence of the exhumation of a number of bodies believed to be poisoned, including those of a man named Jonathan Balls, his wife, and four grandchildren, all of whom recently died under very suspicious circumstances. The village of Happisburgh, on a cliff overhanging the sea, thirty miles from Yarmouth, and fifteen miles south of Cromer, is better known as Haisborough, and is probably one of the most secluded villages along the coast, the population amounting to not more than 200 or 300. In the parish lived an old couple, named Jonathan and Ann Elizabeth Balls, the former seventy-seven, and the latter eighty-three; both were supported by parochial relief. The woman had for several years been bedridden, and the old man was not much liked in the village. They had three daughters, married, who had a number of children, and it is the sudden and suspicious death of several of these, that gave rise to the rumours of their being poisoned, and out of which arose the coroner's inquiry. Three years ago, an infant, nine weeks old, named Ann Elizabeth Pestle, a grandchild of Balls, died, and was buried in Haisborough churchyard within a few hours; next, a boy, Samuel, of the same parents, whose death took place under precisely similar circumstances, died in last September, and was interred by the side of his sister. Three months afterwards, two more deaths in the family occurred—the wife of Balls, and another of the grandchildren, Elizabeth Ann Pestle, who were both buried on one day. Although the sudden character of their deaths excited much sensation in the parish, yet nothing of a suspicious feeling seemed to exist. The death of Balls, however, occurring on the 20th ult., after being attacked in a similar way to the other deceased members of the family, many rumours got afloat in the neighbourhood that his death, with the others, was the result of poison. Notwithstanding these reports, the corpse was buried, a large number of villagers attending the funeral. In all these cases not the slightest notice was forwarded to the coroner by the parochial authorities, as the parish officers throughout the county had received a circular from the magistrates, requesting them to make strict inquiries before the expense of an inquest was incurred, there having been a deal of complaint at the magistrates' meetings as to the heavy expense of coroners' inquests. Mr. Pilgrim, the county coroner for the district, received information of the deaths, but was, at first, unwilling to institute an inquiry, until a second and third application had been made to him. The public feeling, however, became so strong on the subject, and such numerous communications were sent to the coroner, that that gentleman at length took the matter

up. He issued a summons to the authorities for the disinterment of Jonathan Balls and Anne Elizabeth Pestle, the little girl, who was buried on the same day as his wife, and empannelled a jury to inquire into the cause of their deaths, on Monday, May 11th, at the Hill-house, Happisburgh.

The jury, having been sworn, proceeded to view the remains of Balls, and were surprised on finding in the coffin two walking-sticks, one on each side of the body, an iron poker, several pocket handkerchiefs, and a piece of plum-cake in each hand. On their return, the daughter of the deceased, Ann Pestle, a decent-looking married woman, living at Happisburgh, deposed that she had identified the bodies of Jonathan Balls, her father, and of Elizabeth Pestle, her child. Her father had died on the 20th, and her child on the 15th of April last, after violent vomiting and purging; but she did not think they had taken poison. On her return home from washing she found the child very sick, but unable to get anything up. The child died in a few hours after. Her father also was taken very ill after returning from a walk, and partaking of a slight dinner. He also died in a few hours after; still she did not suspect that either of them had been poisoned. She thought her father died from old age, and the child from a sore throat.

The inquest was adjourned, in order to allow time for the surgeons to analyze the stomachs; and on Thursday, May 14th, at nine A.M., the jury re-assembled at the Hill-house, and the surgeons were examined.

Mr. Clowes, surgeon, of Stalham, deposed that on the 20th of April last, he was called in to Mr. Balls, and found him vomiting and retching violently. Deceased complained of great pain in his bowels, and about the stomach. He died soon after. Witness did not suspect that he had taken poison, but some improper food. Witness had examined the body, and found it perfectly healthy, with the exception of the stomach, the appearances in which were quite sufficient to account for death. He had analyzed a portion of the stomach, and found that it contained a large quantity of arsenic, which was undoubtedly the cause of death. He had also removed the stomach of the child, Elizabeth Pestle, and examined it chemically, and found a quantity of arsenic in it, quite sufficient to cause death.

Mr. Hewitt, another surgeon, who assisted the last witness in examining the stomachs, confirmed his evidence.

Mr. Firth, a Norwich surgeon, had also analyzed the contents of the stomachs, and said they contained arsenic enough to poison the whole parish.

Several gentlemen present at the inquiry regretted that an inquest was not held immediately after the first death, as it might have operated as a check, and been the means of saving several lives. They believed that an inquest had not been held in the first instance, in consequence of the circular issued by the magistrates to the parish officers.

It was considered necessary that the bodies of three other persons should be taken up and examined; and in order to allow time for this to be done, the inquest was further adjourned.

On Monday last, May 18th, accordingly, the coroner and jury met for the third time, when the following evidence was taken:—

William Pestle.—"I am the son-in-law of the deceased Jonathan Balls. I have seen the bodies exhumed this morning. They are those of Elizabeth Balls, (my mother-in-law,) and Anne-Elizabeth and Samuel Pestle, my children. My mother has been dead nineteen weeks. I attended her funeral. I was not at her death, but saw her a few hours before she died. She appeared to be very quiet, as if asleep. No surgeon attended her, and she had been bedridden for the last four years. I do not know anything about poison being purchased by my wife. I have heard her say, that thirteen or fourteen years ago, she wrote a note for arsenic, and sent it with a little girl, for the purpose of killing the rats. She told me that she had got some as soon as she got it. Never heard of any poison being purchased just before Mr. Balls' death. The first time I heard anything of it was yesterday fortnight. I was told of it by John Wright about a week after Jonathan Balls' death. He told me that he had been to Mr. Heckley, a druggist, of Statham, and purchased some arsenic to kill rats. My wife did not know that fact until I told her. My children were first attacked with sickness, at least so my wife informed me. I thought it strange that they should have died so suddenly; but I never thought they were poisoned. My boy Samuel was subject to stoppages, and I considered that was the cause of death."

Phoebe Anne Neave.—"I have known Balls some years. About two years ago he asked me to write a letter to Mr. Sadler, of North Walsham, druggist, to get some arsenic, as

he had rats, or he wanted to destroy rats. I refused several times, and said 'I must not do it, as I have heard of many bad things being done with it.' He replied, 'You need not be afraid, I am not going to use it for any bad purpose,' but still refusing, he remarked, 'Why can't you write one for me as well as for my daughter, Mrs. Pestle?' I told him I was then young and knew no better, as it was twelve years ago."

Other evidence less relevant to the cause of death followed, and Mr. G. W. Firth, surgeon, of Norwich, was then examined.—"I assisted Mr. Clowes in the post-mortem examination of the bodies that have been exhumed this day. We first examined the infant; it was so much decomposed that its various parts could not be distinguished, and therefore, though we have been unable to trace poison, it is possible that it may contain some. We have looked for arsenic, and have applied the usual tests, and a more elaborate and prolonged examination might detect it. We next examined the boy, Samuel Pestle. The internal organs were in a remarkable state of preservation. We found some small ulcers in the stomach, which was coated with a brilliant yellow matter. These yellow appearances we suspected were a decomposition of the white arsenic. We cut out one of these yellow spots, and succeeded in reducing the metallic arsenic from it, and applied other tests, which proved beyond all doubt the existence of arsenic. We conclude, therefore, that it caused death. We then examined the old woman. The stomach was quite empty. We examined some of the coating of the stomach and a proportion of the liver. In each we found distinct traces of arsenic. Finding arsenic in such an organ as the liver leads to the supposition that it must have been taken in a large quantity."

Mr. R. Clowes, surgeon, of Statham, after fully corroborating the testimony of Mr. Firth, said—"I attended Balls a few hours previous to his death. He was purging and vomiting, and complained of pain about his stomach. I only suspected at the time that he had taken some improper diet. The son-in-law informed me the next morning that he was dead. I did not, at the time, suspect he had come to his death by unfair means. On Monday last, after his body had been exhumed, I made a post-mortem examination, removed the stomach, and carried it home. I subjected a portion of the stomach to a chemical analysis, and found it contained a large portion of arsenic, which was undoubtedly the cause of death. I also examined the stomach of Anne-Elizabeth Pestle, the little girl, and the appearances were similar to those of Balls. There was arsenic found in the stomach quite sufficient to cause death."

Mrs. Pestle reiterated her former statement, that she was sure the arsenic which she purchased some years ago was destroyed. The sticks, cake, poker, and playthings of the little girl, were put into her father's coffin, according to his urgent request.

The coroner proceeded to sum up the evidence in a very clear manner. He thought the facts did not fix upon any party so as to warrant them in sending the case to another tribunal. If any one was inculpated, the finger of suspicion most certainly pointed to the deceased Jonathan Balls, and he was beyond the reach of the law. He recommended them to return such a verdict as would enable the officers to have the matter further inquired into, should such circumstances arise as required it. It was a case of great suspicion.

The jury then found, after half an hour's consultation, "That the deceased Jonathan Balls, Elizabeth Balls, Samuel Pestle, and Anne-Elizabeth Pestle, died from the effects of poison, but how administered there was no evidence to show."

UNIVERSITY COLLEGE HOSPITAL.—The ceremony of laying the first stone of the left wing of this Hospital was performed on Wednesday, May 20th, by the Right Hon. Lord Brougham, assisted by the Bishop of Norwich, (who officiated in the religious part of the ceremony,) Sir Edward Ryan, Sir J. L. Goldsmid, and the professors of University College. A great concourse of students and visitors attended. In the evening, the friends of the Hospital and College, to the number of one hundred and fifty, dined together at Freemasons' Hall, Lord Brougham in the chair.

QUACKERY.—DEATH FROM ILLEGAL MEDICAL TREATMENT.—On Wednesday, May 20th, an inquest was held by Mr. Bedford, coroner for Westminster, on a child aged eight years, the daughter of respectable parents, residing in Leicester-street, Leicester-square. A druggist in Newport-street was first called in by the parents, who, it is stated, had visited the child, treated it for scarlet fever, and prescribed medicines; but on the patient getting considerably worse, it was discovered that the druggist—who had repeatedly attended other branches of the family—was not a qualified

practitioner. A respectable surgeon, subsequently called in, and who attended the child until her decease, stated, that he considered the death to be due to the administration of improper medicines early in the attack; and the jury, though they returned a verdict of natural death, expressed their strong disapprobation that any person should practise without a legal qualification.

MIDDLESEX HOSPITAL.—The governors and friends of the Middlesex Hospital had their annual dinner at the Freemasons' Tavern on Friday last, Mr. Pownall in the chair. This being the first anniversary after their grand centenary festival, when upwards of three hundred noblemen and gentlemen attended, the meeting was comparatively small; but the subscriptions were liberal, amounting to nearly 500*l.*, including Her Majesty, the patron, 105*l.*; the Duke of Northumberland, president, 50*l.*; Mr. Pepys, vice-president, 10*l.*; Mr. Charles Wurdell, vice-president, 21*l.*; Miss West, 30*l.*; &c. The dinner was excellent. The usual loyal and patriotic toasts were duly honoured; and Messrs. Hatton, Hawkins, &c. contributed to the general harmony of the evening. We understand that the whole of the receipts at the centenary festival (upwards of 4000*l.*) have been devoted to the improvement of the Hospital. The architect has prepared plans, which have been approved by a general court.

QUARTUPLE BIRTH.—A poor married woman, of the name of Mason, residing near the Pound, Bromley, Middlesex, was on Monday evening (May 18th) safely delivered of four sons, who, with the mother, were up to yesterday going on well.—*Times*, May 20th.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, May 15th, 1846:—J. F. Reeve, T. J. Sturt, P. M. Duncan, F. B. Fulcher, J. Lafarelle, J. S. Fletcher, W. F. Clay, and E. H. Mockler.

APOTHECARIES' HALL, LONDON.

Names of Gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, May 14th, 1846:—John William Williams, Southall, Notts; Metcalfe Johnson, Wisbeach, Cambridgeshire; Richard Gravely, Cowfold, Horsham, Sussex; William Andrews; William Henry Pilkington, Harlingden, Lancashire.

CORRESPONDENTS.

A Medical Student.—The first week in October. It would be to his advantage to have the lecture-rooms which he has to attend near to each other. If he has already nearly completed his attendance on lectures, he should now devote his time to the medical and surgical practice at some hospital. We cannot advise him to attend "DERMOTT."

M.R.C.S., Eng.—Certainly.

The examinations in botany at Apothecaries' Hall embrace both the Natural and the Linnean Systems. The examinations for the botanical medal are by written papers and not *visu voce*.

Anti-quack need not fear that Dr. Bright and Holloway are forgotten.

The Report from the Medico-Chirurgical Society is unavoidably postponed until next week.

The hints of *One of the Disgusted*, (Birmingham,) will not be forgotten.

*. * THE DEVELOPMENT OF THE CHICK.—Mr. Tod's paper, p. 410 in the present volume, first column, lines 40 to 42 from the bottom.—We refer our readers to the opposite page (of advertisements) for the correction of an error which was printed in p. 410. It is so printed there that the amended passage may be cut out and pasted over the erroneous one. Owing to an accident, a previous correction of the error was incompletely executed, in the advertisement page of THE LANCET for May 2nd, and the present correction is the one to be substituted.

H. G.—Cases of shoulder presentation, where the child, at the full period of gestation, has been born without artificial assistance, have been repeatedly put on record, and for these, our correspondent is referred to Denman's Aphorisms and Introduction to Midwifery, the works of Drs. Davis, Kelly, and Douglas, the London Medical Journal, vol. v.; the Journal de Médecine, de Paris, 1785; a case, by Dr. Gooch, in the Transactions of the College of Physicians, vol. vi., &c. Yet the occurrence is comparatively so rare, that Dr. Burns states, that in Glasgow, which at the time he wrote contained 150,000 inhabitants, only one case of spontaneous evolution had come to his knowledge.

A list of the gentlemen who have gained prizes at Anderson's University, Glasgow, shall be published in the next LANCET.

We cannot insert the advertisement of Mr. Hunt's.

Communications have been received from—Dr. Routh; Mr. Tod; Mr. Cousins; Dr. Alnatt, (Suffolk-place); Mr. Lilley, (Wisbeach); Mr. W. Smith, (Clifton); Mr. Greenhow, (Newcastle-on-Tyne); Mr. F. H. Brett; Mr. Chippendale; Mr. Newton, (Newcastle); Mr. Howitt, (Lancaster); Mr. Self, (Limehouse); Mr. Gibson, (Holborn-hill); Galenicus; A Licentiate, (York); Mr. T. Hunt; A Member of the College, of sixteen years' standing; Mr. Poett; Anti-Humbugina; A Non-qualified Assistant; Justitia.

ST. BARTHOLOMEW'S HOSPITAL.

MEDICAL CASES TREATED AT THIS HOSPITAL.

Reported by E. L. ORMEROD, M.B., Cambridge,

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

SUPPURATIVE INFLAMMATION OF THE LIVER, WITH INFLAMMATION OF THE PORTAL VEIN; REPEATED RIGORS; FUNCTIONAL MURMUR OF THE HEART.—DEATH.—DISSECTION, AND REMARKS.

CASE 6.—John T—, aged 23; Nov. 6, 1845; Luke backward; under Dr. Roupell. Slightly made; dark hair; surface of the body generally stained of a yellow colour; tongue moist, thickly furred on dorsum, tip and edges clean; pulse 80, full, and rather sharp; bowels confined; skin cool; urine natural in quantity, but high-coloured; has pain in the right hypochondrium, increased by cough or pressure; headach and feelings of debility, with great thirst for eleven days past. He is a horse-keeper, of intemperate habits, but generally healthy. Eleven days ago he was seized with a sharp pain in the right hypochondrium, followed by vomiting, subsequently remitting for twelve hours, and on its recurrence, relieved by free bleeding from the arm, and the administration of an enema. But the pain has never since altogether left him. Seven days ago, he had a severe, long-continued rigor, followed by perspiration, and has had these chills and following heats frequently since. Jaundice appeared five days ago for the first time. He has never had dysentery. Ordered, on admission, castor-oil, half an ounce, immediately.

Nov. 7th.—He has had rigors, followed by heat and profuse perspiration at five and seven P.M. yesterday, and at ten this morning; little sleep during the night; tongue as yesterday; abdomen less tender on pressure; he has passed six liquid alvine evacuations, partly bilious, and in part clay-coloured; pulse 84, fuller, and rather hard; skin warm and moist. No blood could be obtained from the arm, so ten ounces were taken, by cupping, from the right hypochondrium. Ordered, chloride of mercury, two grains; potassio-tartrate of antimony, a quarter of a grain, in a pill, every four hours.

8th.—He felt easier after the cupping; had two or three rigors during the night; generally much the same as yesterday. To continue the pill every four hours. Ten leeches to the right hypochondrium.

9th.—Slept well; he is free from pain in the abdomen, except on pressure; pulse 120, full, sharp; the surface of the abdomen is covered with milia ry vesicles; he had four rigors last night. To continue the pill, with opium, a quarter of a grain. To take tincture of opium, twenty-five minims, on the commencement of a rigor, and an effervescent draught three times a day.

10th.—Had only one slight rigor this morning, which seemed to be cut short by the opium; tongue rather inclined to dry; the papillæ prominent, otherwise as at first; milia ry vesicles more abundant over the abdomen; jaundice less intense. To continue the same medicines.

11th.—He has had three rigors since last note; bowels moved fifteen to twenty times; the first motions yellowish and pultaceous, the last one green, and rather slimy. To continue the same medicines, and to take aromatic confection,* half a drachm, in cinnamon water, one ounce and a half, with tincture of opium, fifteen minims, this evening.

12th.—Has had only two shorter rigors, during which, while he shivered and felt cold, he was quite hot to the feel of others; his face is anxious; breathing hurried, (56;) pulse 152, small; has had only one evacuation from the bowels, healthy in colour, pultaceous. The same medicines. Disulphate of quinine, two grains, thrice a day.

13th.—Three rigors; pulse 108, full, soft; urine abundant, dark, acid, specific gravity 1015. Otherwise generally the same as yesterday; indeed, he has changed little from the beginning. On auscultation, a few small crepitations are to be heard about the base of the right lung. To leave off the quinine, but continue the other medicines as before, and to lose a few ounces of blood, by cupping beneath the right scapula.

14th.—Felt a little lighter after the cupping; had two rather longer rigors, and two somewhat slimy alvine evacuations; he complains of sore throat, and a coppery taste in his mouth; but there is no evidence of any mercurial affection. There is now only a feeble respiratory murmur, without cre-

pititation, at the base of both lungs. There is a faint, blowing murmur at the apex of the heart, loudest at the base, and in the pulmonary artery, louder than in the aorta. Continue the same medicines.

17th.—Slight vomiting.

19th.—Feels drowsy; gums a little vascular; murmur louder in aorta than in pulmonary artery. Since Nov. 16th, he has been rubbing in a drachm of mercurial ointment, while continuing the same medicines.

21st.—He looks much depressed. The rigors are followed by less perspiration; bowels much relaxed; murmurs almost absent at base of lung, still distinct at apex.

23rd.—Severe pain came on in the right hypochondrium; diarrhoea continuing, with increased severity of the rigors, which had continued all along. Next day he refused his food. Then, as he grew so weak that he could not move in bed, œdema appeared in the right extremities.

On the 26th, he had a rigor and perspiration of seven hours. That evening he was suddenly seized with a shooting pain in the abdomen; but he soon ceased to complain, as he sank into a state of coma, and died on the 27th, at half-past four P.M.

The body being employed for dissection, the abdomen was not examined till a week after death, when the liver was found in the natural position, and not sensibly enlarged; it was stained, soft, and flabby, the result of decomposition. The diaphragm, and all the parts contained in the abdomen, were coated with a thin, white matter, which caught under the nails, being apparently the result of decomposition, besides about a pint of turbid yellowish serum, which had gravitated to the lower part of the abdominal cavity. About one ounce of thick pus had also collected in the hollow of the pelvis. On removing the liver, about half a pint of orange-yellow, turbid, intensely fetid fluid escaped by the rupture of a large ragged cavity in the upper convex part of the right lobe, communicating with several similar, but smaller cavities, a little towards the left. These cavities had no very exact boundaries; their walls were formed of shreddy filaments, from which all traces of glandular matter had been removed. A few cavities existed in the left lobe of the liver, which, in other respects, seemed more healthy than the right. The liver generally was in a state of extreme biliary congestion, some spots being of a brighter yellow than others, the lobulus Spigelii especially being throughout of such a mottled appearance. The gall-bladder was healthy, containing two ounces of yellow watery bile. A stream of pus ran from the portal vein on the division of the lesser omentum; the upper orifice contained chiefly coagulated blood mixed with pus, and the branches of the portal vein, as far as the advanced state of decomposition would allow of their being followed in the liver, were found full of the same kind of fluid. In the lower orifice, a coagulum was found, firmly adherent to the coats of the vein, prolonged downwards into a yellow flat tail of fibrin, which lay with one surface presented to the cavity of the vein, the other to a collection of pus presently to be noticed; one edge adherent to the coats of the vein; the other free, and beneath which was a ready communication between the cavity of the vein and the above collection of pus. Descending the superior mesenteric vein, the tail of this yellow coagulum was again entirely enclosed by venous walls, but not so as to obliterate the cavity of the vein. The hepatic veins, as far as they were examined, were found healthy. The collection of pus lay behind the portal vein, on, and partly in, the substance of the pancreas which formed its posterior wall; it was kept in all round by cellular adhesions to the sides of the portal vein, which was considerably dilated, and in front was only partially shut off from the vein by the flap of coagulum already noticed. Perhaps it was capable of containing rather more than one ounce. The hollow viscera were healthy, except the caput coli, which was fastened down by some firm peritoneal adhesions. Internally it was healthy, and the appendix vermiformis opened into it as usual, but immediately beyond it was dilated into a small sac, filled with grey pultaceous matter, in the midst of which lay a hard body, of an oval form, about the size of a hazel-nut, brown, of a laminated texture, and apparently a gall-stone. Beyond this, the appendix contracted again, and turning round beneath the caput coli, was lost in a number of small cells, filled with a greyish pus, communicating freely with each other and (by one or two small openings) with the cavity of the peritonæum, among the adhesions already noticed. The heart was quite healthy, as were all the other viscera, as far as it is possible to draw that conclusion from their appearance a week after death.

A case so complete as the above will repay a little attention to the details of some of the symptoms, as well as to the mor-

* The Haustus Aromaticus of the St. Bartholomew's Hospital Pharmacopœia.

bid appearances. The most striking single fact observed, was the constant recurrence of the rigors, which to the last were followed by reaction. These rigors are noticed as having occurred with the same frequency, in the second of Dr. Bright's cases of suppuration of the liver, (Guy's "Hospital Reports," vol. i. p. 630, *et seq.*) and in both Dr. Budd's cases, ("On Diseases of the Liver," p. 136, *et seq.*)

It was remarkable in this case, how, to the last, the evacuations remained bilious, although no great notice of this has been taken in the daily report of the case; and the total failure of the means used to get the system under the influence of mercury, is not less worthy of mention, from its being agreeable to general experience in cases of this nature.

Taking a personal interest in the subject, I cannot forbear also calling attention to the auscultation of the heart, as affording an instance of a murmur in the pulmonary artery accompanying other functional murmurs; the more so as the auscultation was made independently, by the clinical clerk in charge of the case.

There is one link wanting in the dissection; the veins about the caput coli could not be examined, so that it is not clear how far the inflammation extended along the superior mesenteric vein; but whether or not the inflammation extended the whole way down to the extreme ramifications is not very material, for there was certainly good evidence of the existence of inflammation at one end, while about the caput coli existed a cause quite sufficient to explain this inflammation, by its contiguity to the other end. Thus much must remain unknown—whether, in this case, the inflammation was produced by ulceration of the veins of the caput coli, and suppuration in them, or merely by inflammation arising from the contiguity of an inflamed and suppurating part, without any perforation of the coats of the vessels.

The rest is quite clear, and hangs well together thus:—A gall-stone had passed in safety down the intestines, till it had been pushed by some cause (perhaps by the contents of a distended cæcum) into the appendix, there it had given rise to inflammation and ulceration of the mucous membrane and surrounding cellular tissue, from which again arose inflammation and suppuration of the veins, by which the mischief was referred back again to its original seat, the liver, where the gall-stone had been formed.

To dwell any further on the changes in the vein, or on the connexion between ulceration of the intestine and abscess of the liver, formed by means of branches of the portal vein, would be idle, after what has been said in Dr. Budd's essay on the subject, of the truth of the principles wherein laid down this case is offered as an illustration. For the present purpose, this case is put forward as an example of suppuration in the tissue to which the branches of an inflamed portal venous trunk are distributed; in the next, we propose to illustrate the somewhat analogous effects of inflammation of a systemic venous trunk.

UNIVERSITY COLLEGE HOSPITAL.

SURGICAL CASES TREATED AT THIS HOSPITAL.

Reported by J. BURFORD CARLILL, M.B., London, formerly House-surgeon to the Hospital.

COMPOUND FRACTURE OF HUMERUS, COMMUNICATING WITH ELBOW-JOINT, AND FRACTURED RIBS; DELIRIUM TREMENS; PLEURO-PNEUMONIA; BRONCHITIS; AMPUTATION; RECOVERY.

JOHN A—, aged fifty, admitted under Mr. Quain, Feb. 17th, 1846: he is a vat-maker by trade, and has always been accustomed to drink three or four quarts of beer daily, with a proportionate quantity of spirits. As he was ascending a ladder about twelve feet high, some timber fell on him, and precipitated him and the ladder to the ground. The blow deprived him of sensibility, and he was brought to the Hospital about half-an-hour after the accident.

On admission, the countenance was pallid, the surface of the body cold, the breathing laborious, and the sensibility still so far impaired, that he was not aware of his having injured the arm or ribs. On examination, a loose transverse fracture of the lower end of the left humerus was detected; and in consequence of the external condyle admitting of a degree of mobility, it was supposed that a longitudinal fissure extended into the joint. A small wound existed at the back part of the arm; and there being a corresponding laceration of the clothes, it was believed to be caused by the fractured end of the bone. Three or four ribs were broken on the left side, near their cartilages. A broad roller was applied round the chest, and the arm was bound up in the best position,

with an angular splint on each side, a piece of lint being placed over the wound.

19th.—During the night, or rather, early in the morning, the patient became furiously delirious, and tore off the bandages and splints: the fractured parts were much deranged in the delirious ravings. In the course of the day, after the administration of brandy and opiates, he sank into a deep sleep, and the splints were re-applied.

20th.—Considerable inflammatory swelling over the seat of the fracture, accompanied by a febrile state of the system; he was ordered opiates, with brandy, daily, and constant fomentations to the arm.

24th.—Copious discharge of pus from wound in arm; an angular splint, secured by a many-tailed bandage, to be applied, for facility of dressing wound; complains of pain in chest, for which he is to have a blister.

For several days from this date, he remained in a highly-critical state; the discharge of pus became profuse, both from the original wound and from incisions which the surgeon made for its evacuation; the breathing was oppressed, and the patient was distressed with a troublesome cough, and with the painful efforts at expectoration; the pulse was rapid and feeble; nights sleepless, and marked by low muttering delirium; the perspiration colligative, and the bowels frequently relaxed. The patient refused all food, and was supported only by small quantities of wine, &c. He took a draught, containing potassio-tartrate of antimony and compound tincture of camphor, for the cough, and had repeated blisters to the chest.

March 3rd.—The suppuration diminished; thirst and heat of skin less; no pain; pulse stronger and less frequent; breathing still too frequent, and expectoration difficult and distressing. He has to-day eaten a chop.

As it was evident the powers of nature must give way in the struggle to repair such extensive injuries, Mr. Quain proposed amputation, as the only means of saving his life; to this, however, the patient refused to submit at present.

5th.—Breathes freely; night-sweats diminished; he takes an anodyne occasionally, and obtains refreshing sleep; there is free discharge of pus from the wounds.

9th.—Symptoms less favourable; he is suffering from an attack of bronchitis, indicated by sonorous and sibilant rhonchi heard all over the chest. Ordered a saline antimonial draught thrice daily, with opiate at night. The man now gave his consent to the operation, but it was deemed advisable to subdue the bronchitic symptoms before having recourse to it; these symptoms gradually yielded, and on March 18th, he was taken into the operating theatre.

The arm was amputated by Mr. Quain about the middle, an assistant compressing with his fingers the axillary artery. A short anterior and posterior flap were formed of the integuments and more superficial muscles; and the deeper muscles were cut circularly. Scarcely any blood was lost, yet the patient fainted; he, however, soon rallied on the administration of a stimulant. In a few hours the stump was dressed in the manner usually adopted at University College Hospital; an opiate was administered, and the patient had a comfortable night. From this time his recovery progressed without any drawback; the pulse settled down to about ninety; his appetite became good; and his strength daily increased.

April 1st.—Three ligatures came away.

11th.—The stump is filled up with granulations, and nearly cicatrized; he is able to take exercise in the ward.

Mr. Quain said that, considering the nature of the injury in this case, the question occurs, "would it have been advisable to remove the limb after the patient had recovered from the immediate effects of the injury?" The fracture was a very loose one; there was a wound in the integuments, which, though yielding no direct passage to the seat of fracture, was no doubt caused by the broken bone; and reason existed to apprehend that the compound fracture was complicated with injury to the joint. Considering, however, that there appeared no certainty of the joint having been injured, and that patients have an extreme and very natural unwillingness to submit to operation, it was, under all the circumstances, thought advisable to put the limb into splints, and await the progress of events. The sudden attack of delirium (no uncommon occurrence after bad fractures) removed all chance of saving the limb; for the patient, under its influence, tore off the splints, moved his broken arm violently, and bore his weight upon it. Now, the object was to wait the proper time for "secondary" operation. Stimulants, with opium, and as much fluid nourishment as the patient would take, together with incisions to remove the matter, which was formed in large quantity—these were the means resorted to, to conduct the

patient to the favourable period. Under this treatment, the fever and inflammatory affection of the lungs gradually subsided, the tongue became clean, the discharge from the incisions, instead of being thin, and reddish, and ill-conditioned, as it was at first, became yellow, tenacious, "healthy pus;" the patient was feeble, but entirely collected, and relished his food. The operation was now proposed; he refused to consent until his wife should be consulted; and as she was absent a considerable distance, a delay of two or three days occurred before her consent could be obtained. But now the circumstances were changed; an attack of bronchitis had come on, attended with fever, quick respiration, and expectoration. At length, after this complication had subsided, under the use of appropriate measures, the operation was performed. In consequence of the extreme weakness of the patient, he was taken to the operating theatre on his bed, and means adopted to prevent any avoidable loss of blood, by an assistant placing his hands against the back of the flaps; but a tourniquet could not be used, in consequence of the condition of the parts for some space above the seat of the injury.

The method of operation.—Mr. Quain has, for a considerable time, been in the habit of making the flaps short in the first instance, and adding to their length by circular incisions through the deeper muscles. This plan, Mr. Quain stated, has the advantage of removing one of the objections to the flap operation,—namely, that in primary amputations performed on this method, when the subjects are robust, and the muscles largely developed, the mass of flap is unnecessarily and inconveniently large. It is on this account that many surgeons prefer the circular form of incision. He expressed the belief that, on this ground, in places where primary amputations are frequent (as in manufacturing and mining districts) the circular operation was likely to be found most suitable; and, on the contrary, where accidents are of unfrequent occurrence, and amputations are resorted to in consequence of disease of some continuance, (as, for instance, disease of bone, or of joint,) the flap operation is not unlikely to be in favour among surgeons. He (Mr. Quain) always made flaps in the first incisions, and then divided the deeper parts by circular incisions, thus at the same time removing a part of the deeper muscles, and providing a more efficient covering for the bone. The plan undergoes some modifications, adapting it to different parts of the limbs. Modifications are necessary, in consequence of the very different manner in which certain parts are clothed with muscle—e. g., the leg and the forearm.

Condition of the fractured bone.—The humerus was found to be broken transversely about three inches above its lower end, and the parts were very loose. The lower fragment was fissured downwards into the joint, but the periosteum retained the parts (condyles) together, and the mobility allowed between them was very indistinct. The wound of the integuments communicated by a very indirect course with the fracture. On the man's admission into the hospital, in endeavouring to place the ends of the fractured bone in contact, it was found impossible to prevent one fragment from overlapping the other; the upper one was immovably laid in front of the lower one. The explanation of this circumstance being now inquired into, it proved equally difficult, even after removing a large part of the muscular substance, to adapt the ends of the broken bone one to the other. It was only after pushing one part of the bone outwards from its proper position, that this could be effected. (The fact was illustrated on the structures partially dissected.)

BELLARY DISPENSARY.

MADRAS PRESIDENCY, INDIA.

Cases reported by J. GODFREY, Esq., Garrison-Surgeon at Bellary.

DISEASE OF THE FOOT NOT HITHERTO DESCRIBED.
(Extract from Report for the year 1844.)

CASE 1.—A man named Groomadoo, about thirty years of age, a Gentoo palkee-bearer, but usually employed in catching freshwater fish from the tanks in the district, says that about three years ago he first observed a small hard lump on the right foot, which remained indolent for a considerable time, and then formed a small circular ulcer. During this period, and previously, his general health was good. Other lumps formed and ulcerated. The affection, though not accompanied with much pain, yet was not attended by any loss of sensation. None of his relatives have been similarly affected, and his daughter, about six years old, appears to be perfectly healthy. He is much emaciated, unable to stand, and propels himself about in a sitting position by his hands. Nearly the entire of

the foot, both on its dorsal and plantar aspects, is honey-combed, with small indolent ulcers, which appear abrupt at their margins, and deep from the induration and thickening of the integument, and have at the bottom a whitish-coloured loosely adherent substance, apparently thickened cellular tissue. The foot is altogether, though not greatly, enlarged. Its remaining integument retains the normal colour, feels preternaturally hard, and has slightly elevated tubercles on its surface, some in a state of incipient ulceration, some round and smooth, having partially detached cuticle on the surface, somewhat depressed on the summit with moist crusts. The nails on the toes remain entire. Ulcerations of a less indurated character surround the leg half way up on the anterior part, and posteriorly, there is an ulcer about the middle of the calf, not possessing in any degree the indurated character of those on the foot. From this ulcer a sinus extended downwards, which was laid open shortly after admission, with a view to heal the part previous to operation; but as there was no disposition to cicatrization, it was not deemed expedient to make further delay.

Amputation below the knee was performed 27th July, 1844. Muscles of the leg were soft and attenuated, and for the purpose of covering the stump as far as possible with sound integument, a convex flap, about two and a half inches in breadth, was dissected up from the anterior part of the leg, and another short flap made by transfixing the muscles at the back, which unavoidably involved a small portion (about half an inch) of the ulcerated integument on the calf. Three arteries were ligatured, (anterior and posterior tibial, and a muscular branch;) the parts healed very favourably, and the man was discharged, stout and healthy-looking, at the expiration of nine weeks, having been detained some time longer than might have been absolutely necessary, on account of poverty, and to enable him to get accustomed to walk firmly with crutches and a wooden leg.

On examination of the limb after amputation, the integuments of the foot were found thickened, of a firm brawny consistence, and studded with tubercles of a pale-brown or fawn colour, exhibiting, when divided, distended bloodvessels in the interior, having a circular arrangement. Some of the tubercles were round, others somewhat of an almond shape, varying in size from two or three lines, to nearly an inch in length. Some of those superficially situated had recently degenerated into ulceration, and others of smaller size had extended inwards to and between the bones. The periosteum in many places was entirely absent, and in others, easily detached, white-coloured, and thickened. The extensor tendons were partially destroyed, and around them a gelatinous mass was deposited. The tendo-Achillis was entirely destroyed, and its situation occupied with a fatty-looking jelly. No vestige of muscular structure on either aspect of the foot. In the leg, the muscular fibres were distinct, but attenuated, soddened, and of a pale tawny colour, having in the interstices streaks of straw-coloured matter imbedded in the cellular tissue. The gastrocnemius and soleus muscles at the point of amputation were nearly normal in colour, but the pale appearance, though in diminished degree, extended throughout the extensor and deep-seated flexors of the leg. The bones of the foot were of a worm-eaten appearance, and covered with osseous deposit, feeling rough to the knife. I may here mention, that the bones have been recently taken out of the ground, (after having been buried for four months,) and drawings have been made of three of them, which very accurately exhibit the worm-eaten appearance and osseous deposit on the surface, extending within a few inches of the upper amputated end of the fibula. The tibia is also similarly affected, though in lesser degree. The total loss of weight in the tarsal and metatarsal bones, weighed against dried bones, which have been in my possession for more than ten years, is upwards of one-half.

CASE 2.—A young man, named Yenkatah, about twenty-five years of age, healthy in appearance, by occupation a field-labourer, states, that about three years ago, a small rounded lump appeared on the upper part of the great toe of the left foot, unattended by much pain; this was followed, after some months, by ulceration. Other elevations of a similar nature have gradually arisen. None of his relatives has been similarly affected. At present, the toe is enlarged to about double its normal size, feels hard, and is surrounded with tubercles on both surfaces as far as the cuneiform bone; the toe next to it is also implicated in the disease, and there are some deep circular ulcerations over the metatarsal bone, but the greater part is covered with elevated tubercles, having desquamations of cuticle with some depression and moist crust about the summits; the nail remains firmly attached; in short, the disease seems identical with the preceding case, except that its

spread is not so extensive, and the cutaneous thickening appears to be greater, all treatment probably being hopeless, except by removal of the morbid structure. Amputation was performed by making a flap on the plantar and dorsal aspects of the foot, leaving the astragalus and os calcis in situ. Hæmorrhage was rather free, in consequence of the pad of the tourniquet which was applied in the popliteal space not sufficiently compressing the artery, and perhaps unduly pressing the vein. There was no difficulty experienced in the operation, and only one artery found to require being ligatured; this was the anterior tibial, which was fully twice its natural size. The flaps were brought together by three interrupted sutures, and the stump was found to be very accurately covered. In this instance the tubercles were of colour and shape similar to those described in the preceding case, and found to have extended also deeply through the osseous substance of the phalanges of the toe and of its metatarsal bone, the structure of which was nearly altogether destroyed, and what remained was in texture so soft that it was readily cut through longitudinally with a common scalpel.

Perhaps the two foregoing cases are detailed at greater length than might be deemed requisite, but many particulars have been purposely entered into, from my considering the affection to be dissimilar in several respects from any disease that I have been able to find recorded in books, and in possessing many of the characters of elephantiasis of the Greeks, yet differing in various particulars, being without thickening of the lips, nose, lobes of the ears, hoarseness of voice, anæsthesia, and falling off the phalanges, and more especially as being, apparently, a local tubercular affection.

I have seen three other instances of the disease in the Ceded districts, all occupying the foot, and, for want of a better term, would designate it "morbus tuberculosus pedis."

(Extract from Report for the year 1845.)

Two cases of tuberculated disease of the foot, similar to those detailed in the last annual report, have been admitted, and amputation (by flap) has been successfully performed.

CASE 1.—Paupiah, aged about thirty years, and usually engaged in agricultural labours; disease of four or five years' duration; amputation of right leg performed on the 9th of June, by transfixing the muscles of the calf in the usual manner; three arteries ligatured. Discharged, quite strong and healthy-looking, on the 24th of August.

The morbid appearances were similar to those fully detailed in my last report, with the addition of there being, in this instance, one cyst, (or excavated tubercle,) containing melanotic matter, about the size of a small walnut, extending from the plantar to the dorsal aspect of the foot, between the metatarsal bones of the great and second toe, which were in part absorbed. The integuments were not involved in this mass; a portion is at Madras; its recent appearance was angular and brilliant, much resembling fragments of coal, the rounded and dull aspect having arisen since its immersion in spirits. At present I consider it as an accidental product in, but not forming part of, this peculiar disease of the foot. It has been stated that melanosis is never quite black in the human subject. This specimen shows the contrary, and, in all probability, the carbon, on which the colour seems to depend, must here be in an unusually great degree.

CASE 2.—Anmooghadoo, about sixty years of age, and much emaciated; disease of eight years' standing; by occupation a field-labourer; flap operation below the knee performed 18th of August; two arteries ligatured. In this case, though the man was aged and emaciated, and the muscles of the leg much wasted, and of unhealthy colour, yet the healing process, under the administration of liberal diet, progressed very favourably; in fact, in twenty-four days the stump had perfectly united, except at two small superficial spots on either side of the spine of the tibia, and at the end of the month, cicatrization was complete. This man was detained until the 8th of October, in order to enable him to regain strength and flesh, which he did in a very remarkable degree. The foot is forwarded (to Madras) in spirits, and is the largest specimen I have hitherto seen. Some other instances have been seen during the year, showing that the affection is not of unfrequent occurrence in these districts. The disease appears to be known to the natives by the name of *ghootloo mahdee*, from the tubercular irregularities being supposed to resemble "eggs." The description, previously given, shows the disease to be dissimilar in several respects from any recorded by systematic writers, (so far as I am aware,) and with characters sufficiently distinct from *vullay koostum*, (white leprosy,) *kurpoo koostum*, (black leprosy,) or *aneekah*, (Cochin leg,) the only diseases with which it is likely to be confounded.

ON THE CAUSES, PATHOLOGY, AND TREATMENT OF DEFORMITIES IN THE HUMAN BODY. (WITH CASES AND ENGRAVINGS.)

By JOHN BISHOP, ESQ., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, SURGEON TO THE NORTHERN DISPENSARY, LATE SENIOR SURGEON TO THE ISLINGTON DISPENSARY, ETC.

NO. V.

MECHANICAL CAUSES OF DISTORTION.

On the use of crutches.—Effects of the use of a single crutch; of two crutches; of ankylosis of the hip and knee joints; of unequal lengths of legs; of rowing; of lying in unfavourable positions; and of sitting.

THE CRUTCH.—The common crutch is very frequently substituted for a wooden leg, when one or both legs are either wanting or disabled. When one leg only is thus deficient, persons are very apt to employ only one crutch, and the common crutch, which is either equal to the length of the body measured from the axilla to the ground, or rather longer, is generally used on the affected side, to support the body in standing, and in propelling it forwards during progression. It performs, though very imperfectly, the mechanical functions of the natural leg. During the time that the natural leg is lifted from the ground and swings forwards in walking, the whole weight of the body is transmitted to the crutch by means of the axilla, which then becomes the axis on which the body turns; but when the natural leg is on the ground, the axis on which the body is poised is the head of the femur, and thus the trunk oscillates alternately from the hip-joint on one side, to the axilla on the other. It may easily be imagined that these two actions, so dissimilar and unequal, must seriously affect the form of the body; for, since the centre of gravity cannot under such circumstances move forwards nearly in a straight line, as it ought to do, but must rotate unequally round the two points of support above mentioned, these abnormal actions must tend in a very short time to distort the trunk. When, however, either both legs are affected, or the case is otherwise such that two crutches are employed, the movements of the body are less violent and less contorted, the two crutches neutralizing that portion of each others action which tends to distort the trunk when only one is used.

In the case where either one leg is cut off, leaving the other sound, or both legs remain, but with impaired functions, so that they are only capable of extension and of supporting the body, when employed together, the act of progression is similar to that already described in a person with two stumps, except that the length of the limb must be regarded as extending from the shoulder-joints, instead of the hip-joints, to the ground. If we observe the action of such a person, we see that whilst he is resting momentarily on his legs, the crutches are rotated from behind him, and placed on the ground in front of the vertical line from the axilla, the head and neck being thrown forwards to enable the body by the extension of the legs to perform the step, and get again in advance of the crutches; and, in order to prevent the body falling forwards after it has passed the vertical plane through the base of the crutches, the head and neck are thrown back, and the legs permitted to reach the ground in advance of them; the head and neck are then thrown forwards, and by the combined extension of the trunk and arms, the body is brought up into the vertical position, and thereby allows the crutches to be raised and carried on as before. In this case it is clear that the two legs perform the functions of one leg, and the two crutches those of the other; and, since they swing from the shoulder-joints, the step is much longer than in ordinary walking—a circumstance, which accounts for the rapidity with which such persons get over the ground. Where both legs have been amputated or paralyzed, the crutches can be thrown but a little way in front of the body, owing to the absence of the extensor power of the legs, and the steps are in consequence considerably shorter. The only distortion arising from the use of two crutches takes place in the upper part of the spine; whilst, owing to the head and neck being constantly thrown forwards, the convexity is lessened, and the spine itself straightened in the mesial plane.

Ankylosis of the hip-joint.—In cases of disease of the hip-joint tending to ankylosis, the object of the surgeon should be to prevent as much as possible the shortening of the limb. He

must therefore take care that the limb is kept straight and extended on the trunk, the latter position being most important for the purpose of facilitating locomotion after the joint has become fixed. The necessity of keeping the limb straight has lately been ably pointed out by Mr. Aston Key. A little reflection would naturally suggest this position as the one to be adopted, in consideration of the disadvantages in walking that every other position would entail on the patient ever afterwards. But the person who finds himself deprived of the movements of the hip-joint little thinks perhaps of the serious inconvenience resulting from it until it is too late to be remedied. In the first place, he cannot bend the pelvis on the thigh in stooping; secondly, when sitting, the leg must be thrown downwards on the side of the seat, and when the diseased leg is thrown forwards in walking, the pelvis must rotate on the other hip-joint. Owing to this oscillatory movement, the trunk is twisted spirally; the shoulders turn slightly round its axis; and after a short time the line joining the shoulders, instead of being perpendicular to the mesial plane, is oblique to it. From the operation of the above-mentioned causes, notwithstanding the most judicious management, anchylosis of the hip-joint almost always produces deformity of the spine.

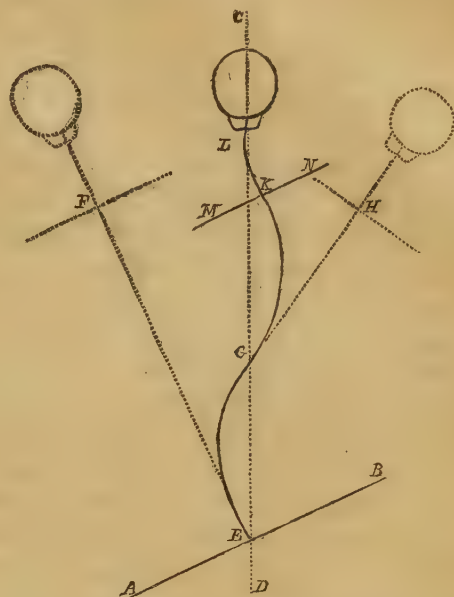
Anchylosis of the knee-joint.—What has been said of the position in which the leg should be kept in a case of anchylosis of the hip-joint, applies also to the knee. When the leg is retained in a straight position during anchylosis of the knee-joint, the limb is afterwards available for the purposes of progression; but, strange to say, this important consideration is very commonly neglected or overlooked by surgeons. The result is, that we daily see persons hobbling about the streets in all directions, with one foot dangling in the air, in consequence of the surgeon having allowed the knee-joint to become anchylosed in a flexed position of the limb. If the leg is kept straight, it is used in walking without the aid of artificial supports, the effect of the loss of motion in the knee being nearly the same as when the common wooden leg is used, except that the natural leg is capable of motion at the ankle-joint. It cannot, however, lower the centre of gravity in walking, as the sound leg does; hence, as in the case of the wooden leg, the length of the step must be diminished, and there also arises an unequal action of the two legs on the trunk, which must swing laterally, in order to allow the stiff leg to clear the ground, thereby producing distortion. With all these inconveniences, a stiff limb is much better than a wooden one: though if fixed in a flexed position it is of less value than a wooden leg, because the person can use the latter in walking, but not the former, without having recourse to additional means of support.*

Legs of unequal length.—It has been stated by Dr. Little, that an inequality in the length of the legs is rarely accompanied with deformity of the spine, but this opinion is contrary to experience, and entirely at variance with the principles which have been advanced in these papers.

At the present time the author has under treatment many persons having their legs of unequal length, and who consequently labour under spinal distortion, but without any organic disease of the spine; and it is indeed demonstrable from the laws of dynamics that, in order to preserve the equilibrium of the body in such cases, the spine must necessarily be curved. This will appear more clearly from the following illustration, (figure 1.)

Let AB be a line passing through E , the junction of the spine with the sacrum, parallel to the line which joins the heads of the thigh-bones, CED a vertical line, and the points A B unequally distant from the horizontal plane, owing to one leg being shorter than the other, or to some similar cause. EF , at right angles to AB , is the natural position of the spine, viewed from behind or in front; but, since it would produce a great expenditure of muscular action to maintain it in that position, an effort will be made to diminish the waste of muscular power by supporting the head in the vertical line CD ; and the process of effecting this will be as follows:—The head will be thrown towards the opposite side of the vertical line, bringing the spine into the position EG , by means of the muscles attached to it on the concave side of the curve EG ; and if the corresponding muscles on the other side of the spine were inactive, EGH would be the very position; but these latter act in a similar manner, and bring the spine into the

Fig. 1.



ultimate line, EGK having the head in the vertical. In this case the line MN , joining the shoulders, being at right angles to the curved spine, will not be horizontal, but inclined towards the same parts as A B .

Fig. 2* represents the case of a young man, aged eighteen years, in whom distortion is produced by the combined effects of unequal lengths, and unequal forces of the legs. From the

Fig. 2.



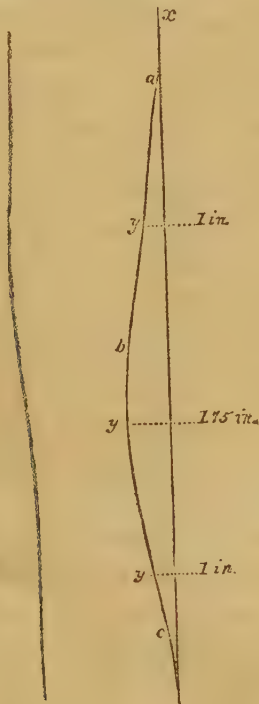
* M. Bonnet states, that in inflammatory diseases of the knee-joint, "when the most energetic antiphlogistic treatment has failed, and the disease begins to assume an aggravated character, the limb should be straightened and kept immovable by a suitable apparatus. By these means the progress of the disease is arrested, cessation of pain is soon induced, and progressive improvement results. If anchylosis of the joint takes place by the formation and adhesion of false cellular or fibrous membranes, we have seen that the straight position is equally applicable to the production of the most favourable results when mechanically considered."

* In all the figures where x y , and x' y' , occur, x is the vertical and y the horizontal, and x' y' the inclinations to these directions.

age of six to fifteen he wore a high-soled shoe, in order to make up the deficiency in the length of the left leg, which was the shortest. Subsequently to this period the difference in the length of the legs has been 1.25 inches. The spine presents a single lateral curve, abc , having its convexity towards the left side, the exact amount of which is shown in Fig. 3, y . It will be observed that the left shoulder is the highest, being the same side as that of the shortest leg. The trunk is thrown towards the right side, the line uniting the hip-joints is inclined upwards, and a line uniting the shoulder-joints downwards, in a direction from left to right; the muscles of the right hip-joint are hypertrophied, and the spine is necessarily curved, in order to preserve the equilibrium of the body in standing. When he walks, the movements of the body are very eccentric. Just before the left leg is about to be placed on the ground,—that is, when the two legs are at that part of the step in which, if they were of equal lengths, the left foot would be in the act of touching the ground, the right hip-joint, in order to accommodate itself to the shorter leg, and allow it come to the ground, rolls downwards obliquely in an arc curved outwards, arrives at its vertex at the moment when the left leg reaches the ground, describes the remainder of the arc whilst the body is moving forwards, and its weight is transferred to the left leg, and completes the curve, the instant the right foot quits the ground. During this period, the trunk is thrown obliquely on the left side, and the centre of gravity, after being lowered, recovers its position, whilst the latter portion of the curve is described. In this case, since the longer leg is capable of being flexed, so as to swing past the shorter leg, no particular derangement of the hip-joints takes place; and, where the longer leg becomes the support of the body, the shorter swings forwards into the position above mentioned, just as if both legs were of the same length. When the left foot was placed on a raised surface, so as to render the line joining the hip-joints horizontal, the head and trunk were thrown towards the left side, and the curvature was partially rectified; but, when a weight of fourteen pounds was placed in the right hand, a new attitude was required to preserve the equilibrium, and the body was still further drawn by the muscles of the left side of the trunk to that side, in order to equipoise the weight in the right hand, and the result was a further diminution of the curve; indeed, the spine then presented an appearance nearly normal, as represented in Fig. 4.

FIG. 4.

FIG. 3.



The practical deductions which may be drawn from this case are of very great importance with reference to the treatment of deformities of the spine when arising from mechanical causes, and there will be occasion to notice them in a future

paper, when considering the mechanical treatment of these cases.

FIG. 5.

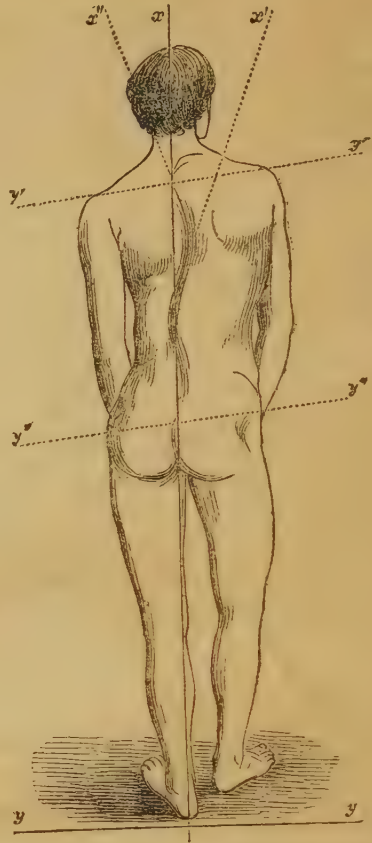


Figure 5 is a case of three lateral curves, arising from the same mechanical causes as those connected with fig. 2. The distortion is represented as it appeared before any means had been employed for its correction. The patient was a young man of about fifteen years of age, whose legs had been of unequal length from infancy, the right leg being one inch shorter than the left. It will be observed that these curves produce the same kind of appearance with respect to the obliquity of the shoulder and hip as the case of one curve. When one of the lower extremities is curved, the effect is obviously to render the length of one leg less than that of the other. The effect on the trunk is similar to that which occurs when one limb becomes shorter than the other, owing to disease of the hip-joint, or otherwise; and it is gratifying to find that the trunk, after having been so distorted, will resume its normal figure when the leg has become straight. Cases of this kind in children are often presented to the surgeon, the parents very commonly supposing that the spinal curvature is the cause, and not the effect of the deformity in the leg. The tendency to distort the trunk, which has been shown to arise from unequal lengths of legs, is alone sufficient to induce surgeons to pay more attention to the subject than they have done; but there are so many other circumstances which render it desirable that the lower limbs should be preserved of a proper figure, that it is surprising how much it has been neglected, and that the most eminent surgeons have thought mechanical support unnecessary for children whose legs have been bent in various ways. The consequence of this neglect has been that the deformity has often remained during life. They seem to have laboured under an erroneous impression, that these curvatures will disappear when the child has grown older, and the bones have become stronger, the fallacy of which hypothesis has been already shown in No. 1, (p. 122.) There are, however, some cases of children in whom the bones become spontaneously straight after the lapse of time, owing to certain changes in the mechanical and chemical condition of the bones at that period of life. The principles concerned in these cases may easily be deduced from No. 1.

By inspecting figs. 1, 2, and 5, we observe that, whenever the number of curves is odd, as one or three, the lines which

join the shoulder and hip-joints, if produced, will meet on the side of the longer leg, or in other words, the hip of the longer, and shoulder of the shorter leg are the highest; but, if the number of curves be even, both the hip and shoulder will be the highest on the side of the longer leg. We also find that the difference of only an inch in the lengths of the legs is sufficient to produce a very serious distortion of the trunk.

Rowing.—Rowing has been long observed to be amongst the occupations tending to distort the spine. It is reported that the strongest and best-proportioned men, after having been some time engaged as bargemen in the royal navy, become distorted. The act of rowing is performed by the alternate flexion and extension of the body. The arms are called into

violent action, which tends to curve the trunk forwards, but the muscles which extend the trunk oppose the flexure of the spine, and draw the body backwards. These actions tend to exercise and strengthen the muscles of the back, but the compression exerted on the anterior portion of the intervertebral substances and bodies of the vertebræ, causes, after a time, a partial absorption of those parts, and the spine becomes bent forwards in the mesial plane.

Position of persons lying.—According to the late Mr. John Shaw, "lying on a feather-bed in a curved position of the trunk for lengthened periods, is prejudicial to the figure;" and he remarks, that "the consequence of a long continuance in the position represented in figure 6, must have

FIG. 6.



been observed by those who attend an hospital, as there is scarcely a patient who suffers from the common disease of the hip, whose spine is not curved in this way. This sketch, although it may serve to illustrate the distortion consequent on the disease of the hip, is offered to exhibit one of the causes of the common lateral serpentine curvature of the spine." The view here taken by Mr. Shaw is intended to convey the idea, that distortions coincident with diseases of the hip-joint depend on the position to which the patient is confined in bed, whilst under treatment in our hospitals. Now it has been shown above, that there is always distortion of the trunk in hip-joint cases, whenever the leg on the diseased side has lost any portion of its mechanical power, and the curvature must therefore begin simultaneously with the disease of the hip; but, since these cases are not usually admitted into hospitals until the complaint has passed through its earlier stage, during which the patients have continued to use the defective limb, the distortion has in reality been already produced, although it may have escaped the observation of the surgeon. It is, however, not only probable, and consistent with the principles here advanced, but apparently a necessary consequence of the patient being confined to the posture of lying on the healthy side, that the figure of the spine should be altered, unless by some contrivance unequal pressure on it is prevented. I must, in justice to Mr. Shaw, observe that,

although I differ from him in many respects as to the treatment of deformities, I still consider his work by far the most rational that has hitherto been published in this country on the subject of distortions.

Position of persons sitting.—When a person is sitting on a seat in the ordinary manner, the motion of the trunk backwards or forwards is effected by the rotation of the tuberosities of the ischia on the plane of the seat. Now any one sitting with the trunk erect soon feels the position exceedingly irksome; and, if there be no support behind, the trunk very soon inclines forwards. The explanation of this tendency is as follows:—In sitting, the trunk is in a position of unstable equilibrium, and the extensor and flexor muscles are in a state of constant action; but, since the flexors are much weaker than the extensors, the body is naturally inclined forwards, by which means the former are relieved at the expense of the latter. Hence it is evident that the upright position cannot be long maintained without fatigue, but that, by throwing the body forwards, the great power of the extensors enables us to sit for a considerable time without being tired. Parents, governesses, and the masters and mistresses of schools, are constantly ordering young people to sit upright, under an absurd notion that the flexed posture leads to stooping, whereas it really strengthens the extensor muscles of the back.

ON THE TREATMENT OF CHRONIC DISEASES OF THE SKIN.

By THOMAS HUNT, ESQ., M.R.C.S. Eng., Herne Bay.

ORDER VII.—TUBERCULA.

LUPUS.

LUPUS is the next genus in the order tubercula. This disease has many names; and the cognomen Lupus is applied by authors to two or three very different diseases. Rayer describes two varieties—namely, *lupus exedens* and *lupus non-*

exedens, to which M. Bielt adds a third—*lupus with hypertrophy*.

The first of these ulcerates from the surface inwards, and leaves deep excavations; the second spreads and ulcerates horizontally; the third rarely ulcerates at all. The two latter are tubercular diseases, and are comparatively rare in this country. The former, *lupus exedens*, or *noli me tangere*, is a frightful disease, difficult of cure, and when cured, leaving behind it more or less of deformity. To this disease the writer will at present confine his observations. He is disposed to agree with Mr. Plumbe in doubting whether this form of

lupus is strictly of tubercular origin. It is, in fact, a chronic cutaneous inflammation of a peculiar character, at once indolent and irritable, but often for a time devoid of pain; of a livid colour, commencing generally in a small portion of the ala of the nose or the circumference of the nostril, and speedily tending to phagedenic ulceration. The ulcers are covered by dirty-looking adherent scabs, which, on desquamation, discover a surface moistened by a glutinous exudation, soon drying into a new scab; and this, on its separation, disclosing deeper excavations, until not only the subcutaneous tissues, but eventually the cartilaginous structure, of the nose is eaten into. The disease commonly extends to the upper lip, and the gums of the upper jaw. The whole of the nose, upper lip, gums, and incisors of the upper jaw, and even portions of the bone, have been known to be sacrificed to the ruthless invader. The lower eyelid and the commissures of the lips are sometimes respectively the seat of lupus exedens, the ravages of which produce suffering and deformity not less deplorable than lupus of the nose.

The causes of this horrible disease are utterly unknown. Its subjects are commonly young and previously healthy women, from the age of sixteen to thirty. The diagnosis is not difficult; but through the too general neglect of the study of cutaneous diseases, and the consequent ignorance of the symptoms of well-defined and specific diseases, the repulsive malady has very often been most inexcusably confounded with syphilis, and the disease has been aggravated by mercurial salivation. In syphilis there can always be traced, at least, a concatenation of secondary symptoms previously developed, and the disease usually commences from within, the cartilages suffering first; and the ulceration, when it appears, has a character of its own, quickly appreciated by the experienced eye. In lupus, on the contrary, the disease appears in persons who have generally enjoyed good health, and in whom neither primary nor secondary symptoms have ever appeared: it first appears in the skin, which is not copper-coloured, but livid. The prognosis is generally as melancholy as the disease is horrible. The writer has sought in vain, both in books and hospitals, for a single case in which its ravages have been actually and permanently arrested; although, here and there, allusions to cures are found in books. Precepts for its treatment are sufficiently plentiful; but demonstration of their utility is lacking.

The following case will show, however, that the disease may not only be arrested and reproduced at pleasure, during a certain time, but permanently and radically cured:—

CASE OF LUPUS EXEDENS OF NINE YEARS' STANDING, CURED BY ARSENIC.

Mrs. S—, aged thirty-two, the wife of an agricultural labourer, had been the subject of lupus exedens for nine years, when she first requested the advice of the writer. The disease had probably been mistaken for syphilis, for she had twice been salivated, (of course without benefit,) and had submitted to escharotic applications, and a variety of treatment, both in hospital and private practice, without the slightest advantage. She had been under the care of Mr. Earle, in St. Bartholomew's Hospital, for twenty-two weeks, and reports that she was treated with sarsaparilla and caustic.

Jan. 5th, 1837.—The tip, both alæ, and a part of the septum of the nose, are already eaten away. A portion of the upper lip and of the gums of the upper jaw have disappeared, and the four incisors of the upper jaw have been sacrificed to the voracious enemy. The remaining portion of the extremity of the nose, the upper lip, frenum, and gums, are in a state of ulceration, and the parts exposed to the air are covered with a dirty, dark-looking incrustation, the edges of which are of a dull livid colour. The breath is offensive, indicating deep-seated mischief; she has a nasal tone of voice, and there is reason to suspect the existence of a greater extent of disease than is obvious to the eye. She complains of severe burning pain in the seat of the disease, and is "troubled to get any rest." She is emaciated and weak, but otherwise in good health. The parts were ordered to be dressed with a pledget of pure fresh spermaceti cerate, thinly spread upon fine lint, simply to protect them from the oxygen of the atmosphere, and from sudden changes of temperature, no other application being used. Five minims of the liquor arsenicalis were ordered to be taken with the meals, thrice a day, which dose was persisted in with exact regularity for three months, when the conjunctiva became affected. The dose was then and afterwards reduced as occasion required. This plan was uninterruptedly pursued for two whole years, the disease, meanwhile, advancing as heretofore, but she at length experienced some alleviation of the pain. The action of arsenic is slow but sure.

January 30th, 1839.—She has now lost all pain, has regained her flesh, spirits, and good looks, and has undisturbed rest, but there is no appreciable improvement in the ulcerated surfaces. The disease has committed visible ravages since the commencement of the arsenical treatment, but the patient fancies it has been "at a stand still" for the last few weeks.

January 12th, 1840.—She has now steadily persevered in the arsenic for three years. The conjunctiva has been more inflamed "latterly," but the skin of the nose, lips, and gums, is perfectly whole and sound. No traces of ulceration or scalliness are visible, but there are ugly cicatrices and scars, with great loss of substance, and the contaminated breath suggests the idea of disorganized cartilaginous structure.

March 2nd.—There is no visible trace of existing disease in the nose, lip, or gums, but the breath is still offensive. She thinks she has taken cold, and complains of pain in the chest, dyspnoea, and hard dry cough. There is a croupy hoarseness, as well as a nasal intonation in her voice. Pulse 96, firm; skin hot and dry. Fourteen ounces of blood were taken from the arm; aperients, salines, and low diet; discontinue the arsenic.

April 10th.—Quite well, with the exception of foul breath, and nasal tone of voice. No medicine prescribed.

August 3rd.—She has taken no arsenic for five months. There is a slight return of ulceration in the right side of the nostril, but the livid appearance of the skin, and the foul unhealthy character of the ulcer, are not so obvious as before. A small tuberculous elevation also appeared on the left cheek near the nose, which healed after being touched with lunar caustic. The arsenic was now resumed in small doses, and continued regularly for a month.

Sept. 5th.—The skin is again healed, and has a normal surface.

January, 1841.—She has continued in excellent health for four months, and taken the arsenic till this time. It was now considered safe to discontinue it altogether.

July.—She has taken no arsenic for the last six months. Slight return of ulceration in the nose. Resume the arsenic in doses of two minims of Fowler's solution three times a day. The ulcerated portion of skin healed in ten days, and the arsenic was ordered to be taken for six months longer, which order was faithfully obeyed.

January, 1844.—She has now abandoned the arsenic for nearly two years. There is no return of the disease, but the breath is still offensive.

September, 1845.—She remains well; less fœtor in the breath.

After this patient had taken the arsenic about twelve months, a brown, dirty, and mottled appearance of the rete mucosum was observable, first, on the legs and thighs, then, at the end of the second year, on the trunk of the body, and ultimately on the arms and neck, the face only escaping. This disappeared gradually, without desquamation, after the medicine was abandoned. The writer is not aware that this effect of arsenic has ever before been recorded.

In this extraordinary and highly satisfactory case, the controlling power of the arsenic is so perfectly demonstrated by repeated experiments,—the disease uniformly advancing when the medicine was withheld, and as uniformly receding under its influence, until the very tendency to diseased action was absolutely destroyed under its continued use,—that no comment can add any force to the facts. The concurrent testimony of writers on the skin to the improvement of the ulcers of lupus under the topical use of arsenic, is worthy of notice, in connexion with this case. The object for which arsenical applications are recommended is to check the destructive process of the ulceration by exerting a new action on the surface. Is it not more probable that the temporary benefit derived from the dressing is attributable to the absorption of arsenic? Mr. Plumbe seems to be aware of the influence of the internal use of arsenic in lupus, but he does not tell us that he ever succeeded in curing the disease by it. The cause of his failure is unconsciously confessed in the following sentence:—"It is proper to increase the dose gradually, till some manifestation of tendency to disorder of the stomach and bowels occurs, when it should be entirely withheld, and purgatives, with opium, substituted, till such symptoms have subsided."* I have marked in italics certain words in the preceding extract, to indicate the rock on which practitioners generally split in the administration of this medicine. The writer has administered arsenic in hundreds of cases, but has never observed the slightest tendency to disorder of the stomach or bowels, because he has invariably

* Plumbe on Diseases of the Skin. Third edition, p. 55.

reduced the dose before it has done any mischief; and probably mixing the medicine with the food has protected the stomach and bowels from injury. It is strange that some writers advise it to be taken on an empty stomach. It may not be unadvisable to repeat, that the curative properties of arsenic will always be found to reside in doses too small to be mischievous.

The diseases comprehended in the eighth order of Willan, *MACULE*, (if diseases they can be called, being simply deviations in colour,) do not fall under our notice.

Concluding remarks—In reflecting upon the uniform success which has attended the right use of arsenic, in the treatment of a great variety of diseases apparently so unlike, one is naturally led to inquire—how does the medicine act? and, what points of coincidence are apparent in this motley group, which may be supposed to indicate uniformity of treatment? To these questions, full of interest as they are, the writer does not feel himself in a position to hazard a reply. His present object is to direct the attention of the profession to a series of facts, rather than to risk their value on the hazard of a speculative theory. It is certain, however, that there must be something in all these cases constitutionally wrong, which the arsenic has the power to rectify. In several of them there was no manifest deviation from health, functional or structural, in any organ, save the skin. It may therefore be inferred, as a corollary from the above results, that local diseases may, and often do, indicate a cachectic condition of the circulating fluids, where there is neither any apparent deviation from healthy vascular action, nor any palpable abnormal tone in the nervous system. Beyond this it is difficult to carry our inquiries. It is hazardous to deduce pathological conclusions from therapeutical facts, especially from those which are limited to a confined range. But the field is open for further experiment. It may turn out, at last, that arsenic, though all-sufficient, is not essential to the cure of these diseases. There are other alternatives, probably of equal power, if not of equal promise, which have never yet been tried methodically, or with sufficient care and nicety, to test their value. To this end it is necessary to try a medicine alone, rejecting the aid of external applications and artificial diet. Without this there can be no advance in our knowledge of the *materia medica*, whatever we may learn of the general principles of pathology. Our very natural and laudable anxiety to do the very best we can for the relief and restoration of our patients too often tempts us to a course of conduct, which, on the first appearance of difficulty, finds us at fault. If a man would know the value of a remedy, he must use it as he would an instrument, determined to try its power and temper, and to operate with it unaided and alone,—not heroically, or regardless of danger, but mingling discreet vigilance with a resolute determination not to abandon it.

It is now many years since the writer resolved to try what could be accomplished by arsenic in the treatment of the more unmanageable disorders of the skin, and he confesses himself astonished at the result. He has little acquaintance with other remedies beyond his knowledge of their general inefficiency. He has abjured medicated baths, ointments, and lotions, and, excepting for the purpose of reducing inflammatory action where it existed, he has placed no restriction upon diet. Moreover, he has, in almost every protracted case, allowed the arsenical course to be interrupted again and again, and generally found he could check the disease, or allow it to advance at pleasure. In this way he has had the satisfaction of establishing the value of this one medicine beyond the possibility of doubt and the reach of cavil, and by illustrating the efficacy of small doses, and thus securing for the medicine an innocuous operation, he has removed the only valid objection to its use—namely, its dangerous properties. Still nothing would give the writer more pleasure than to hear that any one of his brethren had discovered, by sure induction, a remedy less objectionable than arsenic, but equally potent in its control over these disorders. This, however, is scarcely to be expected. A medicine which, besides being almost certain in its operation, is safe, cheap, and tasteless,—which can be taken at mealtimes, through a whole life, if necessary, generally without creating disgust or nausea,—which interferes, in curative doses, with no healthy function,—which gives no pain and inflicts no inconvenience,—has surely recommendations which are not easily surpassed.

There are two or three circumstances connected with the history of the preceding cases which ought not to be overlooked.

1. Especial care should be taken to ensure the purity of the medicine. The necessity of attention to this point is more

palpable than may appear at first sight. One would think that a medicine so cheap as arsenic would scarcely be adulterated, and that its well-known poisonous properties would always secure a careful and accurate preparation of its formulæ. It is a fact, however, that the arsenious acid, (oxide of arsenic,) as sold in powder, is very commonly adulterated with sulphate of lime, and although it is difficult to make the Fowler's solution of such materials, (inasmuch as the gypsum being insoluble in the solution of carbonate of potash, the former will always appear as a precipitate;) yet, that the solution is sometimes prepared in this way, or otherwise adulterated, is more easy to believe than that such enormous doses may be borne with impunity, as are said to have been administered.* The solution used in all the preceding cases was procured from Apothecaries' Hall, and its operation has been found, at least, as uniform as that of medicines in general.

2. The cases were, for the most part, treated by the seaside. Whether the influence of a marine atmosphere, or of mere change of air, may account in part for their successful termination, must be left an open question, to be decided by future experiment; but it is right to mention that most of the patients were so circumstanced.

Lastly. Having pointed out an eligible method of bringing to a happy termination these annoying and loathsome maladies, the author feels that there is yet an ulterior and very momentous question to be decided, before these results can be contemplated with entire satisfaction.

There prevails in the profession, as well as among the public at large, a *suspicion* (to say the least) that some of these diseases cannot be *safely* cured at all; that morbid affections of the skin, though severely afflictive, sometimes exercise a salutary influence upon the system at large, acting as wholesome and natural drains, or safety valves, to the vascular apparatus, and thus, by their timely or continuous action, preventing the accession of still more serious forms of disease, probably involving the vital organs, and sometimes even endangering life. It is impossible to do justice to the merits of this really important and somewhat knotty question, in the limits allotted to this paper; but, with the editor's permission, the point will be fully discussed in a future number.

MEMOIR OF THE LATE PROFESSOR DAVIS.

By J. HALL DAVIS, M.D., Lond.

PHYSICIAN TO THE ROYAL MATERNITY CHARITY; LECTURER ON MIDWIFERY, AND THE DISEASES OF WOMEN AND CHILDREN.

THE following biographical sketch of the late Dr. Davis, professor of midwifery in University College, London, will be interesting to the many to whom he was known.

He was born June 15th, 1777, in the parish of Llandefeilog, near Carmarthen, in South Wales.† He was the eldest of three children, (sons.) His father farmed his own freehold, was distinguished in his locality for his intelligence and gentlemanly bearing, and was greatly esteemed and beloved in his neighbourhood. After having received a good grammatical education in a school at Carmarthen, the subject of this memoir was, in 1793, removed, for the further pursuit of his studies, to a college at Northampton, where he resided until 1798; when, in October of that year, he proceeded to the University of Glasgow. He there became one of the most distinguished pupils of the late Professor Mylne, from whom he received the award of the first prize for prose composition of his year. He at this University took the degree of M.A., and subsequently, in 1801, that of M.D.

The first ten years of his professional life were passed at Sheffield, in Yorkshire: here he married, and here his two elder sons—one the writer of this notice—were born. During the greater part (nine years) of his residence in that town, he held the appointment of one of the physicians to the Sheffield General Infirmary—an institution which, both for its size and the excellence of its arrangements, is equalled by few provincial hospitals. In 1811, Dr. Davis was elected a fellow of the College of Physicians of Edinburgh; and two years after—

* Since the above was written, the writer has ascertained that it was formerly very common for wholesale druggists, in making Fowler's solution, to meet with a precipitate of white powder, which was supposed to be a residuum of arsenic remaining after the saturation of the solution! The practice was to pour off and bottle the clear liquor, and throw away the residuum. Whether, or to what extent, this practice prevails at present, is a question to which her Majesty's ministers are probably very indifferent, albeit their lives may one day depend on it.

† His father and his mother died from old age, the former, in the spring of 1841; the latter, three years previously, both at the age of ninety-three.

wards, when he made London the scene of his exertions, he became a licentiate of the Royal College of Physicians. Up to this period, he had practised solely as a general physician. In 1806, he had rendered an elegant and faithful translation of Pinel's *Treatise on Insanity*,* at that time, and long afterwards, esteemed one of the first authorities on that important subject, in which the late Dr. Davis had himself taken, and continued ever after to feel, a great interest. He was the author, during these years, of many able articles on professional subjects in the *Edinburgh Review*, and delivered several lectures on medical science.

In 1812, he visited London, entrusting his official duties at the Infirmary, and his private practice, to the care of a professional friend, his object being to attend the distinguished lectures on midwifery by Dr. Haighton, at Guy's Hospital, and the practice of midwifery, as house-pupil, under the late Dr. Gooch, at the Westminster Lying-in Hospital. Having followed up his new pursuit with unwearied diligence, he was enabled, with further assistance from Dr. Denman's friendship and kind interest in his welfare, to settle in London towards the close of the year 1813. In December of that year, he became a candidate for the office of physician-accoucheur to the Queen Charlotte's Lying-in Hospital, to which Dr. Denman was consulting physician, and obtained the election to that appointment, vacant by the death of Dr. Andrew Thynne. He resigned this appointment in a few years after, on the breaking-out of the puerperal fever in that institution.

In 1815, he first entered upon the duties of a lecturer in midwifery. His first course was delivered at his own residence; the subsequent course was addressed to a larger class, at Dr. Squire's residence; and that of the following season at the medical school of Mr. Taunton, in Hatton Garden. About this time he was elected physician-accoucheur to the Northern Dispensary, and for several years supplied his pupils with midwifery cases, chiefly from that source. In March, 1816, he was a candidate for the office of physician-accoucheur to the Royal Maternity Charity, to succeed Dr. Squire, (who had resigned, on account of his age and infirmity,) and was appointed on the strong and united testimony of the three physicians of the institution—Dr. John Sims, Dr. Ramsbotham, senior, (the present consulting-physician,) and the late Sir Richard Croft. He now assisted Dr. Sims in his private practice, and soon became his successor.

At this period (1817) he was determining his attention to the improvement of the instrumental department of midwifery. He modified the forceps in the manner, and with the object in view, which I have already detailed. (See last *LANCET*, p. 579.) He constructed the guarded crotchets, to supersede the single unguarded crotchet. (See p. 579.) He soon, subsequently, contrived the osteotomist, in which are combined the principles of the punch and scissors, capable of removing clean sections of two inches in length from the foetal cranium to any extent required. The business of delivery was thus rendered much safer, superseding, on the one hand, the long-continued, and too often violent, pulling by the crotchet, to the imminent risk of the maternal tissues; and very much shorter, not only under circumstances of great confinement of the pelvic space, but also in those crotchet operations where the room in the pelvis was less encroached upon. Hours of suspense and suffering were thus saved to the patient, and recovery the more certainly secured. The first case in which Dr. Davis used the osteotomist was one of so much deformity of the pelvis, that Sir A. Cooper had been sent for, by the gentleman in previous attendance, to perform the Cæsarian section. Dr. Davis, however, was subsequently requested to attend, and on examination, decided on the perfect practicability, notwithstanding the extreme deficiency of space, of delivery by the natural passages. He accomplished his object, without difficulty, by the osteotomist, removing section after section of bone from the presenting head, even to the base of the skull, before he applied his traction. In 1817, the late Professor Davis discovered that which is now esteemed the correct pathology of the phlegmasia dolens, its dependence on phlebitis, as mentioned in my last communication, (*LANCET*, May 23; and in 1823, his paper, containing additional illustrations of his view, was read before a large meeting of the Medico-Chirurgical Society. He discovered moreover, on post-mortem examination, distinct proofs of phlebitis in the peritonæum and lateral appendages of the uterus in puerperal fever, and thence suggested such condition, and was the first to do so, as an essential feature of that disease, (which he viewed as a type of peritonitis.) He taught this pathology prior to 1825, and up to his decease in 1841, annually in his lectures. (See "*Obstetric Medicine*.") He was a strict contagionist, having had

very painful and convincing proofs in private, as well as in public practice, of the infectious nature of the disease. He had likewise found that typhus fever, erysipelas, scarlet fever, measles, had communicated the disease on several occasions. For these reasons he gave his pupils very strong injunctions, of a precautionary nature, in regard to change of dress, &c., and he struck off from his practical midwifery list, for a season, any pupil who had been in attendance upon a case of puerperal fever. For the same reasons he entertained strong objection to in-door lying-in institutions, as tending to favour the spreading of the disease.

In 1819, Dr. Davis filled the distinguished office of physician-accoucheur to the Duchess of Kent, upon the occasion of the birth of her present Majesty, Queen Victoria, (which took place at a quarter past four A.M., May 24th, 1819,) and he was honoured by the friendship and regard of the Duke of Kent as long as his royal highness lived. During the preceding years he had also been engaged in the construction of the extensive obstetric apparatus above referred to, the object of which I have fully explained, (*LANCET*, May 23.) He delivered lectures, annually, on midwifery and the diseases of women and children, for twenty-seven years, and had taught, on his decease, eleven hundred pupils. For several years he was the lecturer on midwifery at the school of the late Mr. Edward Grainger, in the Borough, during the last two years of his connexion with which, he was attended by eighty pupils, and that at a time when attendance on midwifery was not compulsory. At that time, (and he continued to do so till his appointment to the University College,) he delivered lectures on the same science in the theatre at his own residence, George-street, Hanover-square. For some years he also lectured at the Aldersgate School of Medicine, commencing with its first foundation; and he was there associated with Dr. Jones Quain, the late Mr. Tyrrell, and other able teachers.

In 1825, he completed his work on operative midwifery, containing a full statement of his views in that department of obstetrics, with a description of the instruments which he had designed, and had had constructed, some years previously. In 1836 was published his large work on obstetric medicine, (4to, two vols.,) containing the fruits of a large experience, and of unwearied research into the literature of his subject; and not long subsequently appeared his work on acute hydrocephalus,* the object of which was to remove very general impressions which he had found to prevail, that to attempt the saving of a child's life under the disease was almost a fruitless task—a forlorn hope; and to convince his readers that the malady is very manageable at an early period of its progress, if treated upon the same principles as the phrenitis of adults. In the course of it he declared his decided preference for the abstraction of blood by cupping, to the uncertain—sometimes insufficient, often too profuse, always slow, and, therefore, less efficient—abstraction of blood by leeches. It was the conviction of the late Professor Davis, from a large experience, that depletion by leeches, as contrasted with that by cupping, was an unsafe proceeding, and that, indeed, in proportion as the child was younger, from its uncertainty. In the end, the child generally lost a larger quantity of blood, and yet with little effect on the destructive course of the disease, on account of the slowness of the abstraction; whereas, by the speedy operation of cupping, a definite quantity might be removed, be it one ounce, two, three, or more ounces, dictated by the judgment of the attendant, and varying with the child's age, but chiefly with its constitution, and the activity of the inflammation. Not only was the disease thus cured, and quickly, if timely treated; but a greater economy was observed in the expenditure of the child's blood.

In 1827 he was elected to the chair of midwifery in University College, and at its first opening in October, 1828, he entered upon the duties of his professorship. On the institution of the University-College Hospital, he was appointed its obstetric physician. He continued his responsible services connected with these appointments, distinguished for the very impressive and graphic excellence of his teaching, which attracted to his lectures a very numerous attendance of students and practitioners, up to his last illness, which proved fatal, after a confinement to his house of one month, on the 4th of December, 1841, in the sixty-fourth year of his age, leaving a widow, three sons, and two daughters, to lament his loss. Thus was closed a distinguished career of great usefulness in his profession; but his name will long live in his works, and his memory will ever be cherished with feelings of respect and admiration in the recollection of his numerous pupils and professional friends.

In his professional capacity he was alike distinguished for

* Published by Cadell and Davies, Strand, London, 1806.

* 8vo, London, Taylor and Walton.

the soundness of his judgment, the accuracy of his decisions, the clearness and impressiveness of his teaching, his dexterity and caution as an operator, and not less for his marked admiration of Nature's resources.

Of his character it may be truly said, that it was remarkable for its strict integrity, openness, and candour. In his social and domestic relations, he was a warm and firm friend, a kind husband, and an affectionate father.

The following is an outline of his state of health from 1831, which up to that period had been almost uninterruptedly excellent. In 1831, he sustained, through an act of great carelessness on the part of the driver, a fall from a cabriolet, by which he received an injury of the elbow-joint, followed by exfoliation of bone, and from the effects of which he was confined to his bed for about six weeks. In the latter part of the same year, he was laid up for three or four weeks by a severe attack of inflammation of the absorbents of his arm, the consequence of inoculation of his finger during delivery of a patient, under a protracted labour, by craniotomy. In 1832, he was again an invalid from an attack of nephritis, for which he was ably treated by Dr. Elliotson. In 1833, he was the subject of the then prevalent influenza, from which period might be dated the commencement of distressing paroxysms of dyspnoea, of cough always present during easterly winds, frequently recurring attacks of rheumatism, and palpitation of the heart; and during the last two years a bellows sound, audible opposite the base of that organ. Notwithstanding these affections, he continued his duties as a lecturer and practitioner of his especial branch, assisted by the writer of this account. He also proceeded with his great work, rising at half-past four in the morning for the three years prior to its completion. He, at first, and, indeed, until the last year of his life, derived considerable relief to the palpitation of the heart, and to his asthmatic attacks, by the use of the hydrocyanic acid. For the latter affection, he had tried the stramonium and the lobelia inflata, without any useful effect.

In the spring prior to his decease, an attack of total blindness, which lasted about five minutes, supervened during a violent vomiting, induced unintentionally by a purgative. This left behind double vision, in certain positions of objects only, which continued for about six weeks. He showed symptoms of rapid failure of health during the following summer; he nevertheless, until the last month of his summer course, continued to throw the same interest into his lectures, and to address his class apparently with the same spirit as heretofore. He recovered in some degree his strength and energies by a brief residence at the sea side, sufficiently to induce him, on the October following, to recommence his duties, which it was now destined he should enter upon for the last time. I should not omit to state that a distressing insomnia had been a part of his case during the last three years of his life. He frequently arose in the morning without having closed his eyes, and during the last months of his life, this had been a very frequent occurrence. To get some respite from this affection, he was in the habit of visiting Ramsgate almost every Saturday during the summer months, and always, by this expedient, obtained his entire night's rest, with perfect freedom from his chest-affection, and from the palpitations of his heart. On the 4th of November, having ceased to lecture, on account of illness, a week before, he resigned his professorship, and it was hoped that, with rest and quietness, he might yet be spared for a period to his family. He soon, however, became rapidly worse; and partial delirium supervened during the last eight days of his life, but without violence. He continued yet, however, to join his family daily at dinner, and to take a deep and a most anxious interest in those around him, until Friday, the morning of the 3rd of December: during that day he was unable to leave his bed. At five in the evening, having just before swallowed some beef-tea with considerable difficulty, he gradually fell into a deep sleep, as it appeared, and so remained until his death, which took place on the following day, at half-past twelve.

Throughout his life his habits had been most temperate, his common beverage being water; and during the last four years he had abstained entirely from stimulants of every kind, on account of the aggravation they caused of his dyspnoea, palpitation, and cough. While a student at college, he was an early riser, partly for the reason that he could study more advantageously and think more clearly at that period of the day; but he also found that practice was more agreeable to his feelings and comfort, whereas, late hours never agreed with him.

Subjoined is the report which I received of the post-mortem examination, made on the 5th of December, by Mr. P. Mathew, an able anatomist, in the presence of Dr. Elliotson, who had

been most kind and assiduous in his attention to my father during his illness.—Quantity of adipose tissue considerable, but body remarkably pallid. (My father had presented a pallid aspect, and a sallowness, which was sometimes more marked than at others, long after the epidemic attack in 1833, for which, on account of severe inflammation of the lung attendant upon it, he was bled, at the instance of his friend, Dr. Elliotson. He had, more especially for the relief of his head and affection of vision, in the previous spring,—when, no doubt, the extravasation of blood took place, as indicated in the examination of the brain after death,—been bled to the extent of thirty ounces; after that his pallor and sallowness never entirely left him. Previously to the above-mentioned period, he lost blood in smaller amounts for the more severe and febrile of his attacks of rheumatism, but in his last illness, and since the head attack in the spring, no treatment of a depletive kind had been had recourse to.) The dura mater is so adherent to the bone that it could not be separated, and this is universal. At the base of the brain there is about half an ounce of clear serum; the vessels on the surface of the convolutions, and those at the base, large, although not containing much blood; at the base they are obstructed by a dense semi-opaque deposit, likewise met with in the smaller arteries, on the convolutions in various parts. The whole surface of the arachnoid has a gelatinous and semi-opaque appearance, and there are several small opaque patches, chiefly at the superior parts. The red points exhibited, on section of the substance of the brain, larger, but not more numerous than usual. The cortical substance darker in colour than natural; the superior parts of the hemispheres firm. Each of the lateral ventricles contain half an ounce of serum. Choroid plexus of both sides pale, and studded with several cysts, containing clear serum, the largest as big as a large pea, on the right side. Optic thalami flattened out and gelatinous, opaque, exhibiting yellow patches on their surface. Fornix remarkably soft. Fifth ventricle contains an unusual quantity of clear serum. The corpora striata, and the thalami of both sides, softer, but only slightly so, than natural. In the thalamus of the left side, anteriorly, a spot of the size of a small horsebean, of reddish-brown colour, not hard, in a distinct cyst; substance of brain immediately around that spot softer than the other parts of the thalamus, and slightly discoloured. The corpora quadrigemina exhibit the same gelatinous surface as elsewhere. Third and fourth ventricles large; the floor of the latter gelatinous, and marked with arborescent ramifications filled with dark blood. Pons varolii and medulla oblongata somewhat less firm than usual. Cerebellum natural.

In the chest, half an ounce of clear serum in the pericardium; heart greatly enlarged; right cavities much enlarged, but the walls not much thicker than usual; valves healthy; cavity of left ventricle large, and the walls much thickened; mitral opening somewhat large, and valves somewhat thickened near the base by opaque yellowish cartilaginous deposit; aortic valves also thickened at base by a similar deposit, and also a few small patches of it under the lining membrane of the ventricle; chordæ tendineæ not at all thickened; arch of aorta dilated, and patches of the same deposit on its surface; coronary arteries very large. Left lung universally adherent at the apex, below, and in front by old cellular adhesions, but free posteriorly, where there are about four ounces of serum; a small quantity of serum in the right pleura, but no adhesions except at the apex, and here they are dense. Lungs posteriorly congested, exuding on pressure much frothy serum, easily broken down, but still crepitant; the congestion greater in the lower lobes. On the apex of the right lung, a puckering seen, with thickening of the pleura; beneath this, four or five scattered cysts in the substance of the lung, with thick and dense walls of a blackish colour, the largest the size of a small pea—some containing a cretaceous matter, others opaque, whitish, and containing a cheesy matter; no other trace of tubercle; on the apex of the left lung, there is also a puckering of the pleura, but no disease of the substance beneath; the longitudinal fibres of the bronchial tubes hypertrophied in both lungs; the circular fibres also in parts, but less distinctly so; the mucous membrane preternaturally vascular; liver somewhat paler than natural, otherwise healthy; stomach and intestines distended by flatus; the mucous membrane pale. Right kidney enlarged and flabby; its fibrous coat easily stripped off; substance soft, and the cortical portion diminished in thickness. Left kidney rather larger than the right, and rather more congested; coat easily stripped off, substance soft, but surface not preternaturally vascular. The organs of the abdomen not mentioned presented a natural appearance.

Russell-place, Fitzroy-square, May, 1845.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

MAY 12.—DR. BABINGTON IN THE CHAIR.

ON THE RELATION BETWEEN THE CONSTITUENTS OF THE FOOD AND THE SYSTEMS OF ANIMALS. By R. D. THOMSON, M.D., Lecturer on Practical Chemistry in the University of Glasgow.

(Communicated by Sir B. C. BRODIE, Bart.)

The first individual who showed that wholesome food should contain matters identical with animal substances, was Beccaria of Bologna, who wrote an excellent paper on the subject in 1742. Dr. Prout has taught and extended this view for more than twenty years, and his opinions are now followed by all physiologists. That the systems of animals are capable of sustentation by a supply of fibrinous matter alone, is obvious from the history of the primitive inhabitants of the prairies of America; but it appears, from experiments made on the nutrition of animals with pure fibrin, that an auxiliary in the production of animal heat is either indispensable or advantageous, since animals fed on fibrin alone have invariably declined in health—(Magendie.) That the amount of calorific, or heat-producing food, in contradistinction to nutritive food, properly so called, as it has been well defined by Liebig, is out of all proportion greater than that required to supply the waste of solid matter of the body, is obvious from an experiment made by the author on a cow, in a state of rest, in which it was found that 15½ lbs. of food were taken into the circulation in one day. Of this, only 1½ lb. was nitrogenous, or nutritive food, the rest being calorific and saline. From this experiment, frequently repeated with nearly the same results, the author concludes, that in such a condition of the system, the natural relation of the nutritive to the calorific constituents is nearly as 1 to 8½. The author gives formulæ for calculating the amount of nutritive and calorific food, with a view to determine the laws of dieting. He also gives tables, from his own analyses, of the amount of nutritive matter in about twenty different kinds of vegetables, (principally farinaceous food.) By these it is shown that oatmeal consists of 1 nutritive and 5 calorific matter, and barley 1 and 7—facts which explain the universal employment of these substances. From these tables it is also inferred, that as milk is the natural food of the infant mammalia, the constitution of their food should be formed on the same type, and that the use of arrow-root or starchy food, where the relation of the nutritive to the calorific matter is as 1 to 26, instead of being, as in milk, 1 to 2, is opposed to the principles attempted to be established by the author. He observes that, in nutritive tables, it is usual to give a column of equivalents—representing, for example, 100 parts of beans as equal in nutritive power to 1160 of starch; but, according to the author's views, such a method is not founded on scientific principles. In a correct plan of dieting, a proper equilibrium must be maintained between the wants of the animal organism and the constitution of the food. The importance of this view is supported by the results of an extensive series of experiments, made by the author, with different kinds of food, upon cows. These results are highly interesting, and were given in a tabular form, but our limits will not allow us to detail them at length.

The author concludes by observing that, when more condensed forms of vegetable are required, the object might be obtained by mixing certain portions of American flour with different kinds of meal, which could not otherwise be raised by fermentation—for example, by mixing equal parts of flour and oatmeal, flour and pease, or barley meal, excellent bread could be formed; and two-thirds of Indian corn, with one-third of flour, yielded an excellent loaf.

Specimens of bread made with various mixtures of grain were exhibited.

Dr. Thomson, in answer to a question, stated that the quantity of water consumed by the animals in these experiments was truly enormous. The brown cow swallowed six gallons at a time. His observations on this point went to prove the correctness of those made by Sir B. Brodie, who had found that these large quantities of water had been disposed of in the colon; the stomach could not hold them; thereby proving that absorption of saline matters went on in the colon.

Dr. Snow said that he considered organic chemistry would have to be much further advanced than it is at present, before it would be safe to follow it, in giving directions on diet, instead of being guided entirely by experience. It was true, that farinaceous food did not suit young infants, especially in large quantity; so far, experience coincided with Dr. Thomson's theory; but if we were to argue, from the chemical con-

stitution of the milk, as to what ought to be the chemical constitution of the food to be adopted after weaning, it would have to be a sort of diet that we had never known given to children; they could not digest beans, and the only alternative would be, an exclusively animal diet. But the fact was, that the chemical constitution of milk was no criterion of what should be the food afterwards; there was the smallest possible difference in the chemical constitution of the milk, which was the earliest food of all the mammiferous class; but no sooner was this left off, than they betook themselves to the most different kinds of nutriment, some living on grass, and others exclusively on flesh. This was in accordance with the circumstance, that there was a great resemblance in organization in the early period of the development of animals, and that they took in their specific characters as they grew up. Dr. Thomson had spoken of the albumen and other nitrogenous constituents of food as the nutritive part, and of the farina as the calorific portion. He had indeed admitted that the former might assist in the function of respiration, but he had not admitted that starch might assist in nourishing the fibrinous tissues. It happened, however, that many animals living exclusively on coarse vegetable food, of which the nitrogenized elements formed but a small part, were amongst the strongest and most active of the animal kingdom, and possessed a lower temperature than did, in general, the carnivora, many of which were lazy and inactive in their habits. Taking all circumstances into consideration, the opinion of Dr. Prout must be the true one—that the saccharine elements of the food, as he called them, combined with the nitrogenous principles of the bile, and were thus capable of renewing the waste of the body, and that the vegetable feeders were not condemned to burn off the greater part of their food as fuel in the lungs.

Dr. GOLDING BIRD, whilst he bore testimony to the industry and patient investigation which characterized the researches of Dr. Thomson, could not agree in the conclusions at which he had arrived with reference to the dietary of persons in health and disease. It should be recollected, that previous to the labours of Liebig, the proportion of carbon which existed in various articles of food was thought to offer a fair indication of their nutritive power. That distinguished philosopher, however, had shown the fallacy of such a view, and had proved, that with the exception simply of the fatty tissues, every structure in the body was supported, and its waste supplied, by the nitrogenized elements of food. Dr. Thomson's paper had the merit of satisfactorily showing that animals could not be well nourished on either nitrogenized or carbonized food by itself, but that there should be a certain proportion between the two, so that the richly-nitrogenized food might make up the waste of tissue, whilst the richly-carbonized would become a source of animal heat. He (Dr. Bird) did not believe that the composition of the food of the infant animal, or milk, gave us any sure indication, in our selection of nutriment for the adult; for milk, nearly identical in composition, afforded nourishment to the infant cat, sheep, and porpoise; whilst, in after-life, how remarkably different was the food of these different animals. Admitting that the tables of Dr. Thomson were correct, it would seem that the most nutritious food for infants and invalids, next to milk, would be beans and peas. This could not be followed out practically. White bread, according to the tables, was below beans and peas in nutritious power; but, trusting to the same authority, a portion of cheese added to it would theoretically raise it high in the scale of nutriment: yet who would carry out this view practically? He admitted that infants might be literally starved from eating arrow-root, in consequence of their supply of nitrogen being cut off; he yet believed that in these inquiries sometimes more than mere chemical principles must be taken into the account in our determination of the diet we shall select for our patients. The ease with which different kinds of food were digested, and the vital endowments of the stomach, must not be overlooked.

Dr. BABINGTON observed that the last speaker had gone much too far in his criticism, as every one must be aware that animal food and some other kinds of condensed nitrogenous matter might not be suited to children, from their difficulty of digestion. He considered the paper a very valuable one, and deserving of the thanks of the Society.

Although one of the speakers stated that there was not much novelty in the views brought before the Society by Dr. Thomson, we confess, that to us and to all with whom we have conversed on the subject, many of the facts and deductions are quite original. The table, which exhibited an increase in the butter of the milk of the cow, in proportion to the augmentation of nitrogen in the food, is perfectly new, and

apparently at variance with the theories of Liebig, who derives the butter from the starchy constituents of the food; but which Dr. Thomson reconciled, by considering the food in these cases to be so formed as to restore the proper equilibrium of the system of the animal. This view also leads to the novel suggestion, that by experiment we should determine the amount of matter removed from the system under different circumstances of rest and exercise, and that a true plan of dieting should be founded on such knowledge, and should not be left to mere instinct. We believe, with Dr. Thomson, that on this consideration depend the true laws of dieting,—a subject of so much the greater interest in an artificial state of society, where the food is too frequently concocted to minister to the palate instead of to the condition of the waste of the system. The relation which Dr. Thomson instituted between the food serving for nutrition and that for the mere production of animal heat was very striking, and we have certainly never seen the subject so treated before. The analysis of arrow-root, tapioca, and sago, was also quite new, and demonstrated the impropriety of employing them as food for children. The table, already alluded to, showed, contrary to the statement of one of the speakers, that arrow-root could not produce fat, and that such views are imaginary. The table containing the amount of albuminous matter in various kinds of vegetable food, was highly important. The higher position occupied by Scottish oats and barley-meal over English flour was sufficiently striking, and explains the cause of the great fact of entire nations subsisting mainly upon these kinds of grain. We firmly concur in the concluding observation in Dr. Thomson's paper, that his remarks tend towards an extensive field of experiment and deduction, of a highly practical nature, and may assist in indicating the direction in which the physician should pursue his inquiries when studying the laws by which the animal system is to be retained in a state of health.—*Reporter of THE LANCET.*

AN ACCOUNT OF A CASE OF RUPTURE OF THE GALL-BLADDER FROM EXTERNAL VIOLENCE. By D. MACHLACHLAN, M.D., Physician and Principal Medical Officer to the Royal Hospital, Chelsea.

The subject of this case was a pensioner, aged seventy-seven, a large and powerfully-made man, but now reduced in flesh, and feeble. He had been a patient since March, 1844, for weakness of intellect, senile debility, and loss of memory. There were no signs or symptoms of disease, except those referrible to the brain. On the 9th of February, in the act of getting out of bed, he fell with great violence on the floor, having taken a hearty meal some hours previous.

He was insensible for a time, but rallied when he had vomited the contents of the stomach. There was epigastric tenderness, the pulse scarcely perceptible, and great prostration of strength. On the following day, the belly was generally tender under pressure, partly about the iliac regions. He died forty-eight hours after the fall. On examination after death, it was found that the gall-bladder had been ruptured, with copious effusion of bile into the cavity of the abdomen, producing intense peritonæal inflammation. The gall-bladder was much atrophied, but there was no apparent disease of its coats. A calculus of the size of a large nut was impacted in the cystic duct, just as it leaves the reservoir. The liver was healthy.

After referring to cases of a somewhat similar nature, detailed by several writers, the author concludes by observing that a practical caution may be derived from such a case—viz., the danger of employing emetics for the expulsion of biliary calculi—a practice which some physicians are in the habit of recommending. Dr. Stokes, in his "Lectures on the Theory and Practice of Medicine," states that a distinguished medical friend related to him the particulars of a case in which the gall-bladder was actually ruptured after the exhibition of an emetic.

BRITISH AND AMERICAN MEDICAL JOURNALS.

ON THE BEST MEANS OF AVOIDING THE TASTE OF NAUSEOUS MEDICINES.—By WILLIAM ACTON, Esq., Surgeon to the Islington Dispensary, and formerly Externe to the Venerable Hospital of Paris.

As I am in the daily habit of prescribing those peculiarly nauseous substances copaiba and cubebs, my attention has been constantly directed to render these medicines as palatable as possible, without in the least interfering with their efficacy

Fashionable physicians of the last century appear to have thought of only one way of disguising the taste or odour of nauseous medicines, by prescribing largely, aromatic water, essential oils, honey, or syrups. Need I say this plan has now been given up, or only followed by the remains of the gold-headed cane school, who still seem to adhere to the motto,

"Omne tulit punctum, qui miscuit utile dulci."

The Young-England school of pharmacy began their improvements by introducing certain culinary innovations; among others, stands prominently forward the

Copaiba Custard, which, we are told, should be made in the following manner:—The yolk of an egg; copaiba, four drachms; orange-flower water, three ounces; syrup of tolu, half an ounce; distilled water, two ounces; essence of lemon, two drops. Mix.

It is to be regretted that this Esculapian Ude has not furnished posterity with his name; were he alive, however, I fear his former patients would recommend him to confine his practice to the servants' hall, as his *entremets* are not adapted to the present fashionable style of cookery.

Other pharmaceutical artists have turned their attention to concentrate the powers of nauseous medicines in extracts and essential oils, thinking thereby to do away with bulk and flavour, but they soon found that when they destroy the flavour, they are obliged to increase the quantity. In illustration I beg to give the prescription of a physician, brought to me a few weeks ago, by a patient who had been under his care for four months. Resinous extract of copaiba, two drachms; extract of cubebs, a drachm; essential oil of cubebs, two drachms; powdered liquorice, twelve grains; mucilage sufficient to make a mass for division into thirty-six pills; four to be taken three times daily.

Twelve pills a day! Why, surely a statue should be raised to the martyr who thus supports the pill trade! Statists would tell you that this individual took 84 a week, 336 a month, or 1344 during the four months; and, as the poor fellow told me with a sigh, all to no purpose. When he related his tale, I was disposed to ask him, as Mr. Adolphus, the barrister, asked a witness, (who came forward on a trial to speak of the efficacy of large numbers of Morison's pills,) how he managed to swallow them; was it by the aid of a shovel, or a coal-scuttle?

But to be serious: these means are now seldom resorted to, and modern surgeons in private practice find it only necessary to resort to some expedients for bulky or nauseous solids, and one or two others for liquids. The best plan of giving solids is by means of

Wafer paper, which, according to Dr. Ure, is made in the following manner:—"A certain quantity of fine flour is to be diffused through pure water, and so mixed as to leave no clotty particles. The pap is not allowed to ferment, but must be employed immediately it is mixed. For this purpose a tool is employed, consisting of two plates of iron, which come together like pincers, or a pair of tongs, leaving a small definite space betwixt them. These plates are first slightly heated, greased with butter, filled with the pap, closed, and then exposed to the heat of a charcoal fire. The iron plates being allowed to cool, on opening them the thin cake appears dry, solid, brittle, and about as thick as a playing-card." We meet with it in small sheets, of a light colour, breaking easily when dry, but tenacious and moulding itself easily to the substance it covers when wet, increasing but slightly its bulk. When any powder is to be taken, it must be mixed with syrup or other tenacious substance to the consistence of a bolus, and the patient be desired to break off as much of the paper as may be necessary to envelop the substance; dip it (the paper) in water, lay it on a plate or clean surface, and then place the electuary in its centre; fold the corners carefully over it, and swallow it by drinking a little water. Some persons have suggested putting the powder on the paper, and folding it without wetting the powder. This I should not, however, recommend, or an exposure of the mixture might result, much to the disgust of the patient, and to the injury of the method. Those who are unable to swallow pills can manage to bolt these boluses covered with wafer-paper; they slip down the throat easily, as would an oyster, and do not produce that convulsive action of the muscles of the larynx and pharynx which frequently attends the effort of swallowing pills. I would strongly recommend the use of the wafer-paper as an envelop for scammony, when prescribed for children—a medicine so frequently producing nausea. It is equally applicable for taking the compound powder of jalap, or any other substance prescribed, in drachm or half-drachm doses.

The best modern method of giving nauseous liquids is in the form of

Capsules.—Of these I find no end of varieties; but I fear the majority of the makers of such useful articles have not a very clear idea of the objects sought to be attained. It is important to obtain a capsule of a certain definite size, so that we may know what dose the patient is taking. Another circumstance to which the manufacturer gives but little attention, is the thickness of the capsule. I would recommend the chemist to reject all samples that are not an eighth of an inch thick. In many instances I have known the capsule burst in the effort of swallowing, or dissolve as soon as it is in the stomach. An improvement has lately been introduced by enclosing copaiba in membranes, thus obviating many of the objections to all gelatine capsules. I am told that these membranous capsules are in the hands of respectable parties, who make a point of filling them with genuine copaiba. I would suggest, however, to the patentees, to increase the size, and make them uniform, or the surgeon will return to the gelatine capsules, which, when properly manufactured, answer the purpose.

The chemist should, in the selection of his capsules, take particular care that no one of them leaks, or the odour of the oil will be rapidly communicated to the others, and our object in giving copaiba in this way frustrated. The patient should be told likewise to take his capsules after meals. By this means the gelatine will not immediately be acted on by the gastric juice, and those unpleasant results after copaiba—eructations, will not be experienced. Many persons will tell you they are unable to take pills, and feel convinced they will be unable to swallow capsules; recommend such sceptics to take about a dessert spoonful of water in the mouth, and then place the capsule on the tongue, when the whole will be swallowed without difficulty, whereas if the capsule be placed on the tongue and the water be drunk, the patient will often swallow the water, but the capsule will remain, and produce convulsive action of the pharynx. Given in this way, it is singular how soon the medicine will act, and effect the purpose we have in view; and it is no less remarkable that the stomach becomes tolerant of the medicine—a patient has not that tell-tale face so often characteristic of one taking nauseous doses.—*Pharmaceutical Journal.*

LITHOTOMY IN A FEMALE.

The case of a female, aged forty-nine, who had laboured under disease of the urinary bladder, is recorded in the *Transactions of the New-York Medical Society*, by Dr. BAKER. Having ascertained the presence of stone in the bladder, and being prevented, by the extreme irritability of the parts, from attempting its removal by dilatation of the urethra, he resolved on performing the operation by cutting, and thus proceeded:—

"The patient was placed on the table and secured in the common way. A straight grooved staff was introduced through the urethra, and the stone felt with the beak of the instrument. An opening was now made by dividing the urethra half an inch posterior to the meatus urinarius with a sharp-pointed bistoury, into the groove of the staff. The beak or probe-point of the lithotome knife was introduced through the opening thus made in the urethra into the groove of the staff, and pushed forward along the groove, in a direction obliquely outward and downward, until it penetrated the bladder, and the incision continued until of sufficient size to admit the forceps. The knife was now withdrawn, and the forceps introduced. A stone about the size of a nutmeg was drawn out. The search was resumed, and another stone secured and removed, and so on to the number of ten, varying very little in size. No more stones being found, the bladder was washed out with warm milk-and-water, and the patient put to bed. She bore the operation well, and expressed herself as being freer from pain than she had been in six months. She could now lie in any position. The walls of the neck of the bladder were much thickened, probably the result of the long-continued irritation from the friction of the stones."

A catheter was introduced (through the meatus?) into the bladder, and allowed to remain (being occasionally removed) for a fortnight. The wound had then healed, and she had complete power over retention of her urine. The author then remarks—

"The satisfactory result of this case is to be attributed to the mode of performing the operation—namely, to leaving the

meatus and anterior portion of the urethra undivided. Where dilatation of the urethra is practicable, it should undoubtedly be chosen as the simpler method, but even in this, incontinence of urine is a frequent consequence. Unfortunately, however, in the majority of cases, especially those of long standing, there is so much irritability of the parts as entirely to preclude the success of this operation. Such was the fact with the case under consideration. It is well known to the profession, that the common operation of lithotomy in the female—namely, of dividing the urethra its entire length, is almost invariably followed by incontinence. Such at least appears to have been the experience of Sir Astley Cooper, both in his own operations, and those he witnessed in others. He says—'In all the cases of this operation that I have performed or witnessed, the urine has not afterwards been retained, but I would not deny that a patient might recover the retentive power. As the loss of retention is a greater evil than I can describe, producing excoriation and a very offensive state, I shall, in any future operation of lithotomy, try what may be effected by employing a suture to bring the divided parts together.'

"The advantage of leaving the commencement of the urethra uncut, will be apparent, and needs no particular explanation. It at least acts the part of Sir Astley's proposed suture, without the risk of its irritating or being torn out, not to speak of the pain and difficulty of its application. The only precaution I consider necessary to secure success, in addition to the common position, and care, is the continued use of the catheter, to prevent the urine flowing through the wound. The two extremities of the wound being secured by natural structure, and the wound being kept free from urine by the use of the catheter, there is nothing to prevent its rapidly and permanently healing, as in other parts. This operation, so far as I know, was originated by Doctor Mitchell."

This suggestion seems sufficiently reasonable, and is deserving a trial in suitable cases.

DESCRIPTION OF AN UNUSUAL MARK ON THE NECK OF AN INFANT.

Mr. HARVEY relates the following case in the *Medical Gazette*. He very appropriately remarks, that had the child been found dead under suspicious circumstances, the presence of this peculiar mark would have tended to confirm any opinion which might have been formed as to death by violence:—

"On Feb. 6th, I was summoned to attend M. E—, in labour with her second child; this event was not expected to take place before the beginning of March. On arrival, I found the membranes had just ruptured; the os uteri was dilated, and the breech pressing on the perineum. Two moderate pains expelled the child, which never breathed, but merely gave two or three convulsive gasps, and died. Whilst endeavouring to restore animation, I observed a bright-red mark, extending completely across the upper and fore part of the neck, from one angle of the lower jaw to the other, exactly as though produced by strangulation with a cord, except that the mark was not continued round to the back part of the neck. This mark was not like a bruise or ecchymosis, but was of the vivid red colour of arterial blood; it was not raised above the surface, but had very much the appearance of a recent excoriation; so much so, that on first touching it, I expected to find my finger stained with blood; but the epidermis was in no part broken or abraded. This mark was most clearly defined in front, where it was about a quarter of an inch in breadth. At the sides it was more diffused, particularly on the left, extending down towards the clavicles. The face was not swollen, neither were the veins full, as though any obstruction existed to the return of blood to the heart; but the external jugulars, below the mark, were both filled with dark blood. Had the mark been caused by strangulation, the jugulars below the stricture would probably have been found empty, and the face turgid. The funis was of the usual length, and not coiled either around the neck, or any other part, but perfectly free. On examining the part, on the following morning, with a powerful lens, I could discover no bloodvessels ramifying either over the surface, or around the edges, as commonly seen in a true *navus maternus*."

A NEW SIGN OF PREGNANCY.

"Dr. POLLENDEEN states, that during a practice of eighteen years he had observed a peculiar smell of the vaginal mucus to be a constant and unerring sign of pregnancy. The smell is musty, like that of spermatic fluid or liquor amnii; and, after a vaginal examination, it cannot be mistaken for any other odour. In a great many cases of pregnancy, during the

first, second, and third months, when the condition of the patient was doubtful, owing to the earliness of the period, the author never, in a single instance, failed to discover the true state of the party by means of this sign. According to his latest observations, the odour is perceptible as early as the eighth day of gestation."—*Northern Journal of Medicine*.

THE SHAPE OF THE EXTERNAL EAR IN RELATION TO MENTAL DISEASE.

Dr. CONOLLY, in one of his admirable letters on French Innate asylums, makes the following remarks:—

"M. Foville has made curious, and, I believe, original, observations on the shape of the ear in different forms of insanity, and has noticed an analogy or resemblance between the development of different portions of this organ and the brain of the patient. Of these views he was so obliging as to give me some explanation, illustrated by an extemporaneous diagram, and afterwards by corroborative examples. In some of the cases of dementia, or of the lowest degree of intelligence, the flatness and defective form of the helix, anti-helix, and tragus, and the disproportionate enlargement and pendulosity of the lobe of the ear, and rounded clumsy shape of the outer edge of the auricle, were very striking. Subsequent observations have led me to believe these views to be exact as well as curious; and they exemplify the abundance of external evidence available to the physician in relation to internal disorder."

In support of the view here proposed, he relates the following anecdote:—

"Not very long ago, M. Foville was called upon by an intelligent and philanthropic person, who appeared to take much interest in the management of lunatic asylums; and he was greatly struck with a conformation of ears in this gentleman which he had never previously observed, except in cases of mental irregularity or disorder. I happen myself to know that the individual who was the subject of this observation has had several attacks of insanity, and although now at large, and exhibiting considerable mental activity, has repeatedly been in confinement; circumstances of which M. Foville had no knowledge when he remarked what seemed to him to be an anomalous peculiarity."—*British and Foreign Review*.

THE AGE AT WHICH INSANITY IS MOST PREVALENT.

"To determine the period of life which furnishes the greatest number of insane persons, it is sufficient to bring together the records, made up under different circumstances. One of them, made at the Bicêtre, where poor men only are received; another, at the Salpêtrière, a hospital destined for poor women; the third, at an establishment devoted to the wealthy. From these reports we may conclude:—1st, that the age which furnishes the greatest number of insane, is, for men, that from thirty to forty years; whilst for women, it is that from fifty to sixty years; 2nd, that the ages which furnish the least, are, for both sexes, childhood, youth, and advanced age; 3rd, that among women, insanity appears earlier than among men, indeed from twenty-nine to thirty years of age; 4th, that the rich are afflicted, in comparison with the total number of insane persons, in a greater proportion than the poor."

THE SYMPTOMS AND DIAGNOSIS OF ANEURISMS OF BONES.

Symptoms.—Sometimes the pain and uneasiness of this disease is long in establishing itself, but for the most part it comes on suddenly, with a sense of cracking near the joint. After continuing two or three months, a tumour is perceived. This is at first very small, and may escape notice; but after a while becomes prominent, the skin over it then becomes violet-coloured, and transparent, so as to exhibit the numerous subcutaneous veins. On examining the tumour we find it connected with the bone, and presenting different degrees of consistency at various points. Frequently, on pressing the more resisting portions, we are sensible of a sensation which has been compared to the crackling of parchment, or the breaking of an egg-shell, a sign dependent upon the depression and re-elevation of the thin osseous shell of the bone. One of the most characteristic symptoms consists in well-marked pulsations synchronous with those of the heart, and which are suspended when the principal vessel leading to the part is compressed. There is no *bruit de soufflet*. The disease has always been observed in young persons or adults, and has, in different cases, been attributed to various acts of external violence, although, doubtless, the changes in the bone had already commenced. The progress of the disease is generally slow. There is no authentic example in which rupture has occurred, for the

ulcerations and hæmorrhages spoken of by some authors probably arose from pulsating cancerous degenerations.

Diagnosis.—An aneurism of a bone may be confounded with one of the soft parts, the symptoms of the two being so very similar; and before post-mortem examinations had explained the true nature of these cases, the mistake was inevitable. In the cases treated by Pearson, Scarpa, and Lallemand, the disease was supposed to be an aneurism of the articular arteries of the knee, or of the anterior tibial. The osseous aneurism forms one body, as it were, with the subjacent bone, a thin shell of which imparts a sense of crepitation; when the tumour is reduced by slow pressure, we perceive the loss of substance in the bone. The aneurisms unconnected with the bone are more mobile, and impart the *bruit de soufflet* to the ear. A malignant pulsating tumour is distinguished with greater difficulty. The chief points are, that it cannot be partially reduced by pressure to the same extent as an aneurism, while it usually gives the *bruit de soufflet* in auscultation."—*Medico-Chirurgical Review*.

SERIOUS EFFECTS FROM THE INHALATION OF THE VAPOUR OF SULPHURIC ETHER.

Dr. MILLER calls attention, in the *Western Journal*, to the pernicious effects of the inhalation of this vapour—a habit which seems to prevail amongst young persons in some districts of the United States. He refers to three cases, one of which terminated fatally by phrenitis; a second suffered severely from the same disease; whilst, in a third, paralysis was the consequence. The editor of the above journal, in a note, refers to several similar cases.

RABIES IN A HORSE.

A cart mare, supposed to have been bitten by a mad dog some three weeks previously, was seen at eleven A.M. grazing quietly,

"but about one P.M. she was observed to run after and bite the other horses in a most furious manner, and, covered with perspiration from excitement, tear the bark from the trees in the field, and gnaw the roots above the ground: she nearly gnawed through the top rail of a gate, and afterwards with her teeth lifted it from its hinges, and carried it into the road; she tore down some bars and got into a wheat field, frequently attacked a pony which followed her about, and, which is very singular, although the latter was covered with blood and saliva from the gums and mouth of the rabid mare, not the slightest abrasion of the skin could be detected. At times the paroxysm abated, and she bit some of the wheat ears off and ate them; but if any one approached her, she ran at them furiously, endeavouring to bite; at times she seized her arms and legs, and lacerated them to a great extent; all her incisors were at last broken by the violence with which she continued to seize the gate, bars, &c."

"Every effort to secure her was unavailing, and she continued in this state until six P.M., when she fell exhausted, and was unable to rise. When down, she attempted to bite the ground, and appeared to be extremely vicious; death put an end to her sufferings in about two hours from the time she fell."—*Veterinary Record*.

THE SALIVARY SECRETION IN THE COW.

In the same journal, Mr. LEECH mentions the accidental opening of the parotid duct of a cow, and the collection by him of the secretion which came from it, which amounted to the enormous quantity of a pint per minute during the act of mastication. It seems to have been a favourable but neglected opportunity for an analysis of this fluid.

SWEDISH STABLE TREATMENT OF HORSES.

"In Sweden, the floors of the stables are planked, and the planks are perforated with holes, so that wet will not lodge on them—the bare boards being the only bedding allowed. To this strange method the Swedes attribute the soundness of their horses' feet, as it is quite uncommon to meet with a lame or foundered horse in Sweden which has been so stabled."—*Veterinarian*.

"Time is the most experienced doctor; patience is the gentlest medicine.

"Thanks for a merciful punishment come as sincerely from the heart as a risus Sardonius."

THE LANCET.

LONDON, SATURDAY, MAY 30, 1846.

DR. RICHARD BRIGHT, the "chief physician of Guy's," still silently permits HOLLOWAY, the quack of Temple Bar, to advertise him as the sworn patron of his pills and ointment. His taciturnity upon the subject, when publicly arraigned by one of the organs of professional opinion, is one of the most insulting affronts which has ever been offered to the profession. Not only has he remained silent, but he has ostensibly done nothing to separate himself from his unnatural alliance. Dr. Locock, with a higher professional rank than that of Dr. BRIGHT, thought it not beneath him to clear his name from the suspicion of connivance at quackery. This physician was able to quote the opinion of his legal adviser, to the effect that no legal proceeding would be adequate to reach his case. We thought Dr. Locock should have made the attempt, and we think so still; but we rendered him just credit for his publicly expressed anxiety to stand acquitted in the eyes of his brethren. But Dr. BRIGHT could have no such excuse, for we declared to him the clear reading of the law relating to his case, and we showed, from the Law Reports, that a humble country clergyman, with a higher sense of his personal and professional dignity than pertains to the metropolitan physician, prosecuted to a verdict the magistrate who suffered an illegal and extra-judicial oath to be taken before him, in a matter involving the professional character of the clergyman. Instead of asserting his own honour, and the honour of the profession, when the remedy was at hand, Dr. BRIGHT has suffered judgment to go by default, and the profession may not be slow to pronounce their verdict. Let Dr. BRIGHT proceed a little longer in his untoward course, and his brethren, instead of seeking him as the consulting physician, may avoid him as the ally or the willing victim of the quack. The communications we constantly receive from all parts of the country, give us to know that such is the tendency of professional feeling. We promise Dr. BRIGHT that we will follow the matter so closely and doggedly, that unless he alters his line of conduct, he shall be more remembered as the utensil of HOLLOWAY the quack, than as the distinguished physician. We are but too much grieved that a man, who has in past years laboured so worthily and well for a good fame, should jeopardize it in such an ignoble field.

We give a string of advertisements, culled from the newspaper columns, devoted to this notorious professorial humbug. One word, in passing, on the mode in which quack certificates of cure are obtained. Some of the quack establishments keep a flash hand, purposely to concoct testimonials, and obtain signatures thereto. It will be seen, from the advertisements we give, and the hundred others to be seen in almost every newspaper published, that the extraordinary nostrums whose virtues they set forth, as readily cure a pimple as an apoplexy, an asthma as an ulcer, a dyspepsia as a dropsy: ague or inflammation, chapped hands or cancer, a bunion or a bilious fever, disappear with equal facility before their miraculous virtues. One advertisement modestly ends with "rheumatism, lumbago, likewise piles." The genius of their inventor grasps the poles, and embraces

the two hemispheres in his benevolent aspirations. At one time he aims at the East Indies, under the guise of his infallible pills for "dysentery, cholera, jaundice, and liver complaints;" at another, the West Indies are captured by the ointment, "a certain remedy for the bite of moschettoes, sand-flies, chigo-root, yaws, and coco-bay." The whole nosology is at the feet of Dr. BRIGHT's pilular and unguental hero. He has seized on Cullen, body and soul, from CLASS I., PYREXIE; Order I., *febres*; Genus, *intermittentes*; Species, *tertiana*; to CLASS IV., *LOCALES*.; Order VIII., *dyalyses*.; Species, *ulcus et ulcus*.

Testimonial No. 1 is from a poor broken-down Irish earl, who, in a fit of fatuity, seems to have taken HOLLOWAY for his household god, and looks to "another box of pills and a pot of ointment" as the Lares and Penates of the Villa Messina. Our nobility could not fall into this state of imbecility, and so constantly become the dupes and prey of quackery, if the physicians and surgeons in high practice were themselves pure and untainted.

(No. 1.)

"THE EARL OF ALDBOROUGH CURED OF A LIVER AND STOMACH COMPLAINT.

Extract of a Letter from his Lordship, dated Villa Messina, Leghorn, 21st February, 1845.

TO PROFESSOR HOLLOWAY.

SIR,—Various circumstances prevented the possibility of my thanking you before this time for your politeness in sending me your pills as you did. I now take this opportunity of sending you an order for the amount, and, at the same time, to add that your pills have effected a cure of a disorder in my liver and stomach, which all the most eminent of the faculty at home, and all over the Continent, had not been able to effect; nay, not even the waters of Carlsbad and Marienbad. I wish to have another box and a pot of the ointment, in case any of my family should ever require either.

Your most obliged and obedient servant,

(Signed) ALDBOROUGH.

Testimonial No. 2 is from a so-called proprietor of a newspaper. It is an Irish testimonial, and this is, perhaps, the excuse for the statement that our army was "many years" in Cabull. N.B. the particularity with which the prices are mentioned. We have no doubt pills and ointment may be had "at our office," and that the profits of quack medicines and quack advertisements are a very considerable item to the *Armagh Guardian*.

(No. 2.)

"CURE OF A CONFIRMED ASTHMA, ACCOMPANIED WITH GREAT DEBILITY.

Extract of a Letter from John Thompson, Esq., Proprietor of the Armagh Guardian, Armagh, 17th April, 1846.

TO PROFESSOR HOLLOWAY.

SIR,—There is at present living in this city, a sergeant, who had been for many years in the army at Cabull, in the East Indies, from whence he returned in September last. On his way here, from the change of weather of a tropical to a moist climate, he caught a very violent cold, which produced a *confirmed case of asthma*. In December last, he commenced taking your pills, and by the use of two 11s. boxes, with two 4s. 6d. pots of your ointment, well rubbed into his breast, he is, I am happy to say, not only quite cured of the asthma, but is also become so strong and vigorous, that he informed me yesterday he could now run round the Mall with any person in the city, and that he never got any medicine equal to your pills and ointment.

(Signed) J. THOMPSON.

Testimonial No. 3 is from another of the "gentlemen of the press," who do what they can for the discredit of our profession, and the disgrace of their own. There is not a fouler blot upon the literature of the age than the tendency among men, who live by the pen, whether of high or low estate, to foster and support quackery of all kinds.

(No. 3.)

"FIFTY ULCERS CURED IN SIX WEEKS."

Extract of a Letter from John Martin, Esq., Chronicle office,
Tobago, West Indies.

February 4th, 1845.

TO PROFESSOR HOLLOWAY.

SIR,—I beg to inform you, that the inhabitants of this island, especially those who cannot afford to employ medical gentlemen, are very anxious of having your astonishing medicines within their reach, from the immense benefits some of them have derived from their use, as they have been found here, in several cases, to cure sores and ulcers of the most malignant and desperate kind. One gentleman in this island, who had, I believe, about fifty running ulcers about his legs, arms, and body, who had tried all other medicines before the arrival of yours, but all of which did him no good; but yours cured him in about six weeks, and he is now, by their means alone, quite restored to health and vigour.

(Signed) JOHN MARTIN."

Testimonial No. 4 is from Dr. RICHARD BRIGHT. Ely-place is, of course, a subterfuge,—there neither is, nor was, any Dr. RICHARD BRIGHT, a "celebrated physician," at "Ely-place."

This spot is too small for two celebrities; and the homoeopathic quack—Dr. CURIE, was long the chief Curer and Healer of Ely-place. Thousands know the name of Dr. RICHARD BRIGHT who do not know his location in Savile-row, and never give him the benefit of an *alibi*. As far as public injury is concerned, he might as well have given the testimonial as have allowed it to pass current without interruption.

(No. 4.)

"THE TESTIMONY OF DR. BRIGHT, OF ELY-PLACE, HOLBORN, AS TO THE EXTRAORDINARY POWER OF HOLLOWAY'S OINTMENT IN THE CURE OF ULCERATED SORES."

Extract of a letter from the above celebrated physician.

'TO PROFESSOR HOLLOWAY.—SIR: I think it but an act of justice to inform you, that I have tried your ointment in several old cases of ulcerated sore legs, which for a considerable time had resisted every kind of treatment, but which were afterwards effectually cured by its use. In the treatment of bad breasts, I have also found your ointment of the greatest service. Indeed, from my practical knowledge, I conceive it to be a most invaluable remedy.

(Signed) 'RICHARD BRIGHT, M.D.'

Testimonial No. 5 is from a modest lieutenant, who desires his "piles, fistulas, and bearings-down," to be anonymous, but is too benevolent to hide the pills and ointment under a bushel.

(No. 5.)

"PILES, FISTULAS, AND BEARINGS-DOWN."

A remarkable cure by these pills and ointment.

A half-pay lieutenant, lately residing at St. Helier's, Jersey, whose name by request is omitted, had for three years suffered from piles and fistula, besides a general bearing-down, of the most distressing nature. He had twice undergone an operation, but to no purpose, and at last gave himself up to despair. Yet, notwithstanding this complication of complaints, together with a debilitated constitution, he was completely cured of all his infirmities, and restored to the full enjoyment of health, by these justly-renowned medicines, when every other means had failed."

Testimonial No. 6 is from a Wesleyan minister, and certifies that the pills made "a poor man" "quite another man:" we hope they made him a rich man. We certainly advise the Rev. DAVID WILLIAMS to try a box, and should be glad to know they had made him "quite another man." The Conference should certainly send him a supply of pills. We have heard it is common for outlaws and deserters to take these "invaluable medicines" and return to their homes, secure against all detection.

(No. 6.)

"A CURE OF ASTHMA AND SHORTNESS OF BREATH."

Extract of a letter from the Rev. David Williams, resident Wesleyan minister at Beaumaris, Island of Anglesea, North Wales, Jan. 14th, 1845.—To Professor Holloway.

SIR,—The pills which I requested you to send me were for a poor man of the name of Hugh Davis, who, before he took them, was almost unable to walk for the want of breath, and had only taken them a few days, when he appeared quite another man; his breath is now easy and natural, and he is increasing daily in strength.

(Signed) DAVID WILLIAMS."

Testimonial No. 7 is from a gentleman of "literary pursuits," who has evidently given the testimonial less in consideration for his "bowels" than a gratuitous advertisement of the "Book of the Bastiles, &c., &c."

(No. 7.)

"A CURE OF INDIGESTION AND CONSTIPATION OF THE BOWELS."

Copy of a letter from G. R. Wythen Baxter, Esq., Author of the "Book of the Bastiles," &c. &c. The Bryn, near Newtown, Montgomeryshire, North Wales, March 3rd, 1845.—To Professor Holloway.

SIR,—I consider it my duty to inform you, that your pills—a few boxes of which I purchased at Mr. Moore's, druggist, of Newtown—have cured me of constant indigestion and constipation of the bowels, which application to literary pursuits had long entailed upon me. I should strongly recommend authors, and studiously-disposed persons generally, to use your valuable pills. You have my permission to publish this note, if you wish to do so.—I am, Sir, your most obedient servant,

(Signed) G. R. WYTHEN BAXTER."

Testimonial No. 8 is from a canting bootmaker, respecting his wife, who probably has no existence save in the imagination of the professional puffer of the Temple-bar establishment. Some of our readers may perhaps understand the anatomy of the "several pieces of bone," said to have come from the mammary gland of this wonderful woman. We confess she is to us a *lusus naturee*.

(No. 8.)

"CANCERED BREAST—A WONDERFUL CIRCUMSTANCE."

Copy of a Letter from R. Bull, Bootmaker, Tatton, near Southampton.

February 9th, 1845.

TO PROFESSOR HOLLOWAY.

SIR,—The Lord has permitted to be wrought a wonderful cure of Cancers or Abscesses, of twelve years' standing, in my wife's breast. In the latter part of the time, eleven wounds were open at once. The Faculty declared the case as past cure; several pieces of bone had come away, and I expected that my poor wife would soon have been taken from me. It was then that a friend recommended the use of your Pills and Ointment, which, to our utter astonishment, in the space of about three months, healed-up the breast as soundly as ever it was in her life.—I shall ever remain your most grateful and obedient servant,

(Signed) RICHARD BULL."

Testimonial No. 9 is from "one of the greatest sufferers in the world," who, after taking about eighteen hundred pills, suffers no longer from "short breath." His testimonial, we should think, would cause many people, sick and well, to draw a "long breath" after its perusal.

(No. 9.)

"WHEEZING ON THE CHEST, AND SHORTNESS OF BREATH."

Copy of a Letter from Mr. Jeremiah Casey, No. 1, Compton-place, Compton-street, Brunswick-square, London, April 25th, 1845.

TO PROFESSOR HOLLOWAY.

SIR,—I beg to inform you, that I believe I had been, for more than three years, one of the greatest sufferers in the world with Chronic Asthma. For weeks together my breath was frequently so short that I was afraid every moment of

being choked with phlegm. I never went into a bed; very often, indeed, I have been obliged to pass the night without being able to recline sufficiently to lay my head on a table, least I should be suffocated. No one thought I should live over the winter, nor did I expect it myself; but I am happy to say that I am now able to work from morning to night, and that I sleep as well as ever I did in my life; and this miracle (I may say) was effected by rubbing your invaluable Ointment twice a day into my chest, and taking ten of your Pills at bedtime, and ten again in the morning, for about three months.

(Signed) JEREMIAH CASEY."

Testimonial No. 10 is from a chemist and druggist, whom we recommend, with many others of the same trade, to the attention of the Pharmaceutical Society.

(No. 10.)

"A WONDERFUL CURE OF DROPSY OF FIVE YEARS' STANDING.

Copy of a Letter from Mr. Thomas Taylor, Chemist, Stockton, Durham, 17th April, 1845.

TO PROFESSOR HOLLOWAY.

SIR,—I think it my duty to inform you that Mrs. Clough, wife of Mr. John Clough, a respectable farmer of Acklam, within four miles of this place, had been suffering from Dropsy for five years, and had had the best medical advice without receiving any relief. Hearing of your Pills and Ointment, she used them with such surprising benefit, that, in fact, she has now given them up, being so well, and quite able to attend to her household duties as formerly, which she never expected to do again. I had almost forgotten to state that she was given up by the Faculty as incurable. When she used to get up in the morning, it was impossible to discover a feature in her face, being in such a fearful state. This cure is entirely by the use of your medicines.—I am, Sir, yours, &c. &c.,

(Signed) THOMAS TAYLOR."

Testimonial No. 11—but they are like Banquo's kings, and we'll "see no more." The last shall be the great Bright affidavit.

(No. 11.)

"HOLLOWAY'S OINTMENT AND PILLS.—EXTRAORDINARY CURE of a CASE abandoned by Guy's, the Metropolitan, King's-College, and Charing-Cross Hospitals. This fact was sworn to this 8th day of March, 1842, before the Right Hon. the Lord Mayor, at the Mansion House.

Summary of affidavit.—William Brooke, Messenger, of 2, Union-street, Southwark, London, maketh oath and saith, he (the deponent) was afflicted with fifteen running ulcers on his left arm, and ulcerated sores and wounds on both legs, for which deponent was admitted an out-door patient at the Metropolitan Hospital, in April, 1841, where he continued for nearly four weeks. Unable to receive a cure there, the deponent sought relief at the three following hospitals:—King's-College Hospital, in May, for five weeks; Guy's Hospital, in July, for six weeks; and at Charing-Cross Hospital, at the end of August, for some weeks more; which deponent left, being in a far worse condition than when he had quitted Guy's, where Sir Bransby Cooper, and other medical officers of the establishment, had told deponent that the only chance of saving his life was to lose his arm! The deponent thereupon called upon Dr. Bright, chief physician of Guy's, who, on viewing deponent, kindly and liberally said, 'I am utterly at a loss what to do for you! but here is half a sovereign: go to Mr. Holloway, and try what effect his Pills and Ointment will have, as I have frequently witnessed the wonderful effects they have in desperate cases. You can let me see you again.' This unprejudiced advice was followed by the deponent, and a perfect cure was effected in three weeks, by the use alone of Holloway's Pills and Ointment, after four hospitals had failed!! When Dr. Bright was shown by the deponent the result of his advice and charity, he said, 'I am both astonished and delighted! for I thought that if ever I saw you again, alive, it would be without your arm. I can only compare this cure to a charm!!'—Sworn at the Mansion House of the City of London, this 8th day of March, 1842, before me,

JOHN PIRIE, Mayor."

There is a mawkish feeling abroad that quacks must not be noticed, because of the publicity given them by the notices. They are welcome to the benefit of any notoriety we give them. The publicities of quackery have reached such a pass, that it is

to be hoped publicity will come to be of less and less value. And this is really the case: many of the advertisers are finding out that single advertisements "don't tell," therefore they are seen in strings, repeated over and over again in the same paper on the same day. This is a good sign. But even if it were otherwise, and a temporary good were given to quackery by the publicity incident to opposition, our duty, and the duty of all honest men, is clear; the system is dangerous to the public health, perverse of public morals, and a robbery of the medical profession; as such, it must be battled with till it is abated.

But our reason for inserting these advertisements is, that we may ask the question of our readers, in what respect is Dr. BRIGHT better than JEREMIAH CASEY, or BULL the boot-maker, or WYTHEN BAXTER, or the EARL of ALDBOROUGH, or any of the fools or knaves we have placed on record? Is not the axiom that a man is known by the company he keeps applicable here as elsewhere? Has not Dr. BRIGHT willingly bemired himself when the way of purification and escape was clear. Dr. BRIGHT is, by his obstinate silence, daily forcing persons, in and out of the profession, to the belief that he did address the man BROOKE to HOLLOWAY, and that he did give him the half-sovereign to buy pills and ointment with. The remarkable point, on perusing these advertisements, is, that the BRIGHT contribution is the most odious and glaring of the whole,—the trump-card of this monstrous quackery. The ultimate question is—Will the general body of the profession, suffering as it does from quackery on all hands, sanction a man who, like Dr. BRIGHT, gives the consent of silence, when his name is so glaringly involved in the support of quackery?—or will they not pass a sentence of professional outlawry upon him?

On the 27th of June, the commemoration-day of the illustrious HARVEY, the Harveian Oration is to be delivered by Dr. ELLIOTSON. After the Oration, the Fellows, with a distinguished party of guests, are to dine together, in the dining-hall of the College of Physicians. Dr. BRIGHT, who has been twice Censor and twice Consiliarius,—who is, we believe, a president-elect, and who is the covert ally of the grossest quackery of the day, will of course be there. At this commemoration of HARVEY, who loved his profession beyond life or lands, Dr. BRIGHT will have to sit at meat before the offended shades of LINACRE and the other noble minds who founded the College of Physicians for the promotion of physic and the destruction of quackery. By his side at the board, a vacant seat should be left for the Genius of HOLLOWAY, with whose name his own has been so long connected. But even without this, to look at Dr. BRIGHT will be sufficient to suggest the pill-and-ointment monger to the assembled Fellows and their guests, unless he should previously repudiate the unhallowed connexion.

WE propose, on the present occasion, to give a more succinct account than we have hitherto done, of the manner in which the medals of the Royal Society have of late years been distributed, in those branches of science collateral to medicine. We have already dwelt largely upon the merits of some of the parties who have obtained medals, and we shall now chiefly confine ourselves to the singular manner in which the Council, in making the awards, have constantly broken their own regulations.

We take up the time after the accession of WILLIAM THE FOURTH, when that monarch restored the foundation of the Royal medals, originally granted by his predecessor, GEORGE THE FOURTH. The official communication to the Royal Society stated that—

“Two gold medals, of the value of fifty guineas each, shall henceforth be awarded, on the day of the anniversary meeting of the Royal Society, on each ensuing year, for the most important discoveries in any one principal subject or branch of knowledge.”

It lay with the Council to frame proper regulations as to the manner in which the royal gift should be administered. They forthwith inserted the following notice at the commencement of the *Philosophical Transactions*:—

“The Council propose to give one of the Royal medals, in the year 1836, to the most important paper in Animal Physiology communicated to the Royal Society for insertion in their *Transactions*, after the present date, (May 13th, 1833,) and prior to the month of June, in the year 1836.”

In the year 1836, the medal, as our readers already know, was awarded to Mr. NEWPORT. In the Presidential address it was stated that,—

“The Royal medal for the present year, which the Council had proposed to give to the most important paper on Animal Physiology, communicated to the Royal Society within the last three years, is awarded to GEORGE NEWPORT, Esq., for his series of investigations on the Anatomy and Physiology of Insects, contained in his two papers published in the *Philosophical Transactions*, within that period.”

We have already shown that the second of these papers was not published till March, 1837, so that the Duke of SUSSEX was made to utter a positive falsehood, when he said that this paper had been “published within the period.” It had neither been read nor published when he gave Mr. NEWPORT the medal. But there was a further irregularity; the notice of the Council sets forth distinctly, that papers competing for this medal were to be communicated for insertion in the *Transactions* “prior to the month of June, in the year 1836.” The paper, as published in the *Transactions*, is headed with the words, “Received and read, (i. e., the title,) June 16th, 1836.” This is the Royal Society’s reading of “prior to June.”

It has been mentioned that Mr. KIERNAN felt himself aggrieved at the award of the Royal medal to Mr. NEWPORT. The Council had already awarded the Copley medal for the year 1836 to Professor BERZELIUS. They, however, made a second Copley medal for that year to pacify Mr. KIERNAN. Mr. BAILY, the celebrated astronomer, (a good authority,) said, that “the Council committed one blunder, and then committed a second, to hide the first.”

On the demise of WILLIAM THE FOURTH, the Royal medals were announced to be continued by his successor, in the following terms:—

“Her Majesty Queen Victoria, in restoring the foundation of the Royal medals, has been graciously pleased to approve of the following regulations for the award of them:—

“That the Royal medals be given for such papers only as have been presented to the Royal Society, and inserted in their *Transactions*.

“That in case no paper coming within these stipulations should be considered deserving of the Royal medal in any given year, the Council have the power of awarding such medal to the author of any other paper, or other of the several subjects forming the cycle that may have been presented to the Society, and inserted in their *Transactions*, preference being given to the subjects of the year immediately preceding; the award in such case being subject to the approbation of her Majesty.”

The Royal medal for 1842 was given to Mr. BOWMAN, for his paper “On the Structure and Use of the Malpighian bodies of the Kidney, with observations on the circulation through this gland.” This paper was received Feb. 14th, read Feb. 17th, 1842, and published in the first part of the *Philosophical Transactions* for 1842. Dr. TODD, Mr. BOWMAN’s friend and colleague, was, we believe, a member of the Physiological Committee, and was also the referee of Mr. BOWMAN’s paper.

In 1843, the Royal medal not having been awarded in the department of mineralogy and geology, was awarded in that of physics to Professor WHEATSTONE, for his paper, “On an Account of several new Instruments and Processes for determining the Constants of a Voltaic Circuit.” We mention this paper, because one of Dr. LEE’s papers was put in competition with it for the medal. It deserves to be noted, that Mr. WHEATSTONE was at this time a member of the Council, and, consequently, ineligible to the medal. Further, this paper of Professor WHEATSTONE’s was received and read June 15, 1843, and published as the Bakerian Lecture, at the end of the second part of the *Philosophical Transactions*, which was not printed till 1844! This award comes under the exceptional clause, that in case no paper on the subject named by the Council shall be thought worthy of the medal in any given year, it shall be given in another section; but here, also, there is the bar, “and inserted in their *Transactions*.” The regulation states, that a medal given under its provisions is “subject to the approbation of her Majesty.” Has this award been submitted to her Majesty? Would she be likely, properly advised, to approve of a medal given in direct violation of regulations which she has already “been pleased to approve of”?

The medal irregularly awarded to Mr. BECK in 1845, has been sufficiently discussed. Like some of the others, it was awarded, in violation of the regulations, before the paper had either been read or printed. Up to this time it has not been published. It could not wait for the Royal medal in physiology, but it can wait many months, as Mr. BECK says, “in consequence of the time required to engrave the drawings.” The particular and suspicious blunders connected with this medal we have already commented on. If its holder had had a proper spirit, he would, before this, have returned the premature medal to the Council, to “bide his time,” and see whether, when the legal day of award had arrived, his labours would have stood the test of examination and discussion.

Such are some of the irregularities connected with the distribution of the medals and rewards of the Society during the ROGET secretaryship. If all other circumstances were free from suspicion, the constant infringement of their own laws would be sufficient to vitiate the awards which have been made; this alone would be a source of suspicion; but, coupled as it is with other acts of the darkest character, it is not surprising that there should be in the profession but one mind and one voice of condemnation respecting the matter.

The proceedings of the medical section for the last nineteen years are everywhere viewed with distrust. We put it to the Marquis of NORTHAMPTON, whether these things do not call imperatively for a change? Is it to consult the true interests of the Royal Society to allow the same hands to remain at the helm after they have piloted the noble vessels so carelessly amongst shallows and quicksands. We, and the pro-

fession, and the public, recognise one individual who has witnessed all these things,—who has borne a part in all the transactions we have been called upon, in this and former articles, to criticise and denounce, and who has made no conscientious interference for the defence of the honour of the Royal Society. Presidents have died and changed, junior secretaries have given place to new men, councils have again and again been renewed, and even the Physiological Committee has been newly organized; Dr. Roger, the senior Secretary, the principal acting officer of the Royal Society, has alone remained, and to him, chiefly, will his contemporaries and posterity look as the responsible individual during the medical cabals of his too long secretaryship.

WYKE-HOUSE LUNATIC ASYLUM, BRENTFORD.

TO THE

RIGHT HONOURABLE LORD ASHLEY,
AND THE OTHER
COMMISSIONERS OF LUNACY.

MY LORD AND GENTLEMEN,—

It is not without the most mature consideration, and the most perfect conviction as to the public necessity of drawing your attention to the subjoined narration, that I at length resolve to do so. I shall be minute in relating the various facts, in order, on my part, to make the statement so complete as to render no point doubtful or obscure concerning the patient whose malady and treatment are described.

On the 7th of August, 1845, my husband, Dr. John Sheridan, the highly-gifted editor of the *Morning Advertiser*, was taken to Wyke-House Lunatic Asylum, at Isleworth, near Brentford, under the following circumstances:—

Two days previously to the above date, he had been brought to his house, No. 1, Rodney-street, Pentonville, by Dr. Shelton Mackenzie, of Grafton-street, Fitzroy-square, in a state of the highest delirium. Dr. Sheridan had left home on the morning of that day, in a very excited condition, after a journey from Boulogne on the evening before. He required personal restraint when conveyed to Rodney-street by Dr. Mackenzie; indeed, in about an hour from that time, he suddenly seized an opportunity to throw himself out of the window of the first floor, but fortunately without receiving any personal injury. Shortly afterwards, Dr. Costello, the proprietor of Wyke-House, was sent for, and came at three o'clock in the afternoon, and, immediately on seeing Dr. Sheridan, wished him to be removed from home. Dr. McCann, of Parliament-street, surgeon, also saw Dr. Sheridan, but did not assent to this desire, believing Dr. Sheridan only to be labouring under delirium tremens, the effects of which would disappear when he had been treated for that disease. Dr. Costello considered that the residence at home would keep up the excitement; Dr. McCann thought that a strange place would renew or increase it. Sir Alexander Morison, M.D., of Cavendish-square, was also consulted, and coincided with Mr. Richard Martin, a barrister, who was present, in the opinion that his removal from home was essential, Mr. Martin, who was a friend of Dr. Sheridan, at once assuming all the responsibility of that proceeding. Mr. Fergusson, of Dover-street, Piccadilly, surgeon to King's-College Hospital, also saw him, and pronounced him to be in a very dangerous state. On Sir Alexander Morison's recommendation of removal, it was agreed by Mr. Martin, (and, at that stage, by Dr. McCann,) that Dr. Sheridan should be removed from home, and taken to Wyke-House. I remarked, that as Dr. Sheridan's brother was expected instantly from Ireland, it were better not to remove Dr. Sheridan from home before he arrived; but Mr. Martin resolutely opposed this proposal, again repeated that he would take all responsibility upon himself, and, in the afternoon, told me that he held a paper on the subject, which it was necessary for me to sign,—a legal document, as it proved to be, for consigning my husband to the charge of Dr. Costello, at Wyke-House. Having laid it on the table, Mr. Martin asked me if he should fill up the blanks. I replied that that was of no consequence, as I would do so myself, he remaining at my elbow, at the drawing-room

table, while I filled it up, and signed it, as he requested, remarking, however, that if symptoms of change occurred in Dr. Sheridan, I hoped that he might not be removed from home; but a keeper from Dr. Costello's establishment was then in the house, and remained in attendance upon Dr. Sheridan until Thursday, the 7th, when, at eight o'clock in the evening, Dr. Sheridan was conveyed in a cab to that place. At twelve o'clock on that day a great change had occurred in the symptoms of the malady. The raving had gradually subsided, and he became tranquil and powerless. I called Mr. Martin's attention to the alteration, and hoped that as a change, and to such an extent, had taken place, he would not think of removing him. I repeated the hope during all the day, at different intervals, Mr. Martin, however, taking but little notice of my entreaties. Dr. Sheridan grew weaker and weaker, and at length, in alarm, I thought he was dying. It was in this state that he was removed by Mr. Martin, who, with the keeper, accompanied Dr. Sheridan to Wyke-House. I have since heard the state which Dr. Sheridan was then in, described as a state of "collapse," and one in which it was critically dangerous to remove him. I, however, thought that he was in the best hands, and that all parties were acting in a spirit of the purest friendship. In fact, he was placed at Wyke-House on the presumption that Dr. Costello was an old friend of the patient, without any previous inquiry being able to be made by me into the nature of the institution, I thinking, therefore, that Dr. Costello was better fitted than a stranger to have the care of him. Four guineas per week during his residence at Wyke-House were to be paid for him, Mr. Martin and Mr. Murdo Young (Editor of the *Sun* evening newspaper) becoming the acting agents in the negotiation.

About eleven days afterwards, namely, on the 18th of August, I went to Wyke-House, and there saw Mrs. Costello, and the manager, Mr. Cox, Mr. Martin having shortly before called on me, and stated that Dr. Sheridan was improving under the treatment. Meantime, Mr. William Sheridan, the brother of Dr. Sheridan, had come from Ireland, and been to Wyke-House, subsequently telling me that my husband was violently excited against the establishment, and against him (Mr. S.) for leaving him in it, as he did not wish to remain there, because,—as he (Dr. Sheridan) subsequently told me,—he considered that he was not properly attended to; indeed, that he was shockingly neglected, and that he was left alone for hours at a time, particularly at night, and, at times, when labouring under the greatest thirst, without means of allaying it; sometimes, also, being placed under bodily restraint, by means of fastenings to the bed, &c. At this visit Mrs. Costello said that Dr. Costello was then from home, and that he had left word that Dr. Sheridan should not be seen by any visitor during his absence. I mentioned the antipathy which Dr. Sheridan entertained to Wyke-House. In reply, Mrs. Costello and Mr. Cox said that he was much better, and that for me to see him would only renew his excitement, and do harm.

When Dr. Sheridan had been at Wyke-House exactly one fortnight, he was out of doors, walking, with a keeper, named George Farrington, whom he persuaded to let him go to London; whereupon they did both go to the *Sun* newspaper office, in the Strand, and there saw Mr. Young, at whose house they slept on that night. On the next day, Dr. Sheridan (and afterwards the keeper) came to his house in Rodney-street, accompanied by Mr. Martin. On seeing Dr. Sheridan, I myself thought him then not to be of sound mind. He talked vehemently and excessively. Mr. Martin was anxious that Dr. Sheridan should go directly to Ireland, and it was settled, I believe at Mr. Young's residence, that he and the keeper should both start for Ireland on the following morning. This resolve was taken on the grounds that Dr. Sheridan's relations were in Ireland.

Accordingly, on the next morning, (Saturday,) Farrington and the Doctor went to that country, by railway and packet. They stayed at Stradbally, at the house of the brother of Dr. Sheridan, a fortnight. While there, Mr. William Sheridan wrote to me, stating that his brother was still very ill, and much excited against several members of his family. Induced by anxiety on his account, and on account of two of my children, who were there with him, I went to Ireland, reaching Stradbally on the 1st of September. But Farrington, I was informed, said that an interview between us would be likely to excite Dr. Sheridan disadvantageously, on which account I did not see him, but returned with my sons, first entreating Mr. Sheridan not, under any circumstances, to replace his brother at Wyke-House; whereupon, it was agreed that he should remain in Ireland until an asylum could be provided for him at Hanwell, or some equally suitable place.

Four days after reaching London again, the post brought me a letter from Mr. Sheridan, in which it was stated that he "had sent his brother off" from Stradbally; and that "if his (Dr. Sheridan's) mind was made up for Wyke-House," he (Mr. Sheridan) "would prefer it, in consequence of George, (Farrington,) being," he said, "I think, very kind and attentive; and I now know how necessary attention of that kind is to a person affected as he is." He continues—"Of course you will do everything for the best; and I feel confident that Mr. Beal" (an officer in the navy, my brother-in-law) "will do everything to settle him comfortably." He added, "They are just starting, and Farrington says he will take him to Wyke-House, under the idea that they are to remain there a fortnight, and then go to France. My step-son will call on you, and let you know all. Trusting that all that is done may be well done, I remain, &c."

I was then informed by Mr. Sheridan's step-son (Mr. Whelan) that Dr. Sheridan had been sent back to Wyke-House in charge of Farrington; and there, at my request, Mr. Whelan went to visit him; but Mr. Whelan afterwards informed me that he was only allowed to see him through a window, and without being suffered to converse with him. On this occasion of his return to Wyke-House, Dr. Costello's charge for his custody and maintenance was reduced, by agreement, to 2l. 2s. per week. Mr. Whelan then, at my wish, wrote to Dr. Costello, to know when I could see Dr. Sheridan, or when he would be allowed to receive a letter from me. To this application Dr. Costello replied, that when fit for either communication, he would inform me; but four or five weeks elapsed without any letter on the subject arriving.

In this dim silence, during which I heard nothing of Dr. Sheridan, beginning to regard him as a friendless and deserted person, I asked a gentleman, who has never swerved in the fidelity of his friendship to Dr. Sheridan, to call at Wyke-House, and endeavour to obtain some intelligence about him. Three gentlemen who were acquainted with Dr. Sheridan had already, I now heard, been there for that purpose, and gave information that they were only permitted to see him through a window, not to speak to him; and that, judging from his appearance, they considered he was in a very "deplorable" condition, and ought not to remain there: but their advice to me, under the circumstances, was, not to act precipitately with regard to him, as a conference of friends should be held, to arrange means for ascertaining what really were his condition, his treatment, and his prospects at that place.

The conference decided that he should remain at Wyke-House; when, at that moment, Dr. Sheridan *escaped*, wandering about, throughout the evening and part of the night, until the police of Ealing, having been informed that he was at large, took him into custody, and conveyed him back to Isleworth. On the morning that he was replaced at Wyke-House, but before Dr. Costello knew of his return to that place, Dr. Costello called in Rodney-street, and asked the servant, privately, if Dr. Sheridan had come there. But the girl refused to keep secret the visit of Dr. Costello, and informed me of it, when, on seeing Dr. Costello, I mentioned to him my dissatisfaction at Dr. Sheridan's remaining in his house; told him that I had heard grievous statements respecting his usage there, and said that it was without my knowledge, consent, or wish, that he had been reconveyed to that establishment. Dr. Costello replied that he was sorry to hear that, more particularly as Dr. Sheridan was "a very troublesome patient." But as I had originally signed a paper assenting to his conveyance to Wyke-House, all that I could now do was to remonstrate against his continuance there. Whereupon Dr. Costello left, sending me, in the evening, the following acknowledgment of the return of Dr. Sheridan:—

"10, Golden-square, 11 o'clock.

"Madam,—On my return here, I find that the Doctor returned to Wyke-House a short time after I had left. He passed the night in an inn in a neighbouring village.—I am, Madam, your obedient servant,

"Mrs. Sheridan."

"WM. B. COSTELLO.

"In about ten days from that time, I received a note, wishing me to call at Wyke-House, where I at once saw Mr. Cox, the manager, and had an interview with Dr. Sheridan, who was calm in his actions, but rapid and excited in his conversation. He said that on leaving Wyke-House, when he escaped and went to Ealing, he intended to go home. While I was hearing his statements, Dr. Costello came in. I had just previously expressed a desire to have my anxieties on the subject of the treatment of Dr. Sheridan set at rest, by being shown the

arrangements of the house, at least so far as Dr. Sheridan was concerned; but in reply I was informed that that would be inconvenient. I repeated to Dr. Costello that the worst impressions prevailed abroad with regard to the security and management of the establishment, as an asylum for insane patients. Dr. Costello replied that he could not help observations made out of doors, and that probably Farrington had been the disseminator of reports to that effect, as he had himself dismissed Farrington for brutality to the patient; indeed, that he had broken Dr. Sheridan's thumb, when in Ireland. Having been told that Dr. Sheridan was a "ward-patient" in the house, I inquired the exact meaning of the term, as I had heard it stated that ward-patients experienced undue severity, and were subjected to great carelessness and neglect. Dr. Costello replied that the ward-room at Wyke-House was a very comfortable room. Half an hour having elapsed, Dr. Costello was desirous that I should leave, and Dr. Sheridan was then anxiously secured,—that is to say, to all appearance,—so that he should not escape with or through my aid.

I wish to remark here that Mr. Martin did not desire it to be known that Dr. Sheridan had returned from Ireland to Wyke-House. He told me that I must not mention it.

Suddenly, one evening, in the first week of December, at seven o'clock, Dr. Sheridan *once more* reached his house in Rodney-street, having again escaped from Dr. Costello's establishment. His mind was still generally discomposed. On each leg he had numerous bruises, and there were severe bruises on his arms, which, I was told, were lately produced in struggles with the keepers, on occasions when he was accused of certain delinquencies, alleged trespasses, &c., but of which he affirmed that he never was guilty, though they punished him on account of them. These may have been the illusions of insanity, yet they were related with the greatest semblance of truth; and, most certainly, the existence of the bruises was not the work of imagination. He also complained of pain in the side, as a consequence, he said, of having had three of his ribs thrust in there, by blows, or pushes with the fist, or a stick. On one occasion he was, he said, for what he termed "insubordination" directed against general irregularity and incorrectness in the ward, placed in a dark room, and chained. But he said that he preferred *that* to being in the ward, because in the dark room he was removed from disturbances, and could be quiet.

Four days after the last-mentioned escape, Dr. Costello called to know if Dr. Sheridan was at Rodney-street. And here I should say that, from the first moment of his return, Dr. Sheridan apparently laboured under such unbounded alarm lest some one should come from Wyke-House to take him back again, that he instantly barricaded all the windows and the doors, allowing no person to come in or go out at the street-door, not even the servant who had gone out to church. He seemed to tremble with terror at the thought that any person belonging to Dr. Costello's establishment should even suspect that he was at home. But, in a short time, Dr. Costello *did* call, when Dr. Sheridan caught sight of his figure, as he rang the bell at the gate, and followed me to the hall-door, in an agony lest I should afford any reason to Dr. Costello for supposing that he was there. Indeed, it would have been dangerous for Dr. Costello to enter the house, as Dr. Sheridan would have personally assaulted him. On opening the door, I told Dr. Costello, verbally, in obedience to Dr. Sheridan's commands, that he was not there; but thought it proper to make a sign which should indicate the contrary, when Dr. Costello, on observing it, instantly exhibited the greatest satisfaction, as though delighted that no other event had befallen, and directly left the door. Next day, a man, named Edmund Hetherington, came, as he said, to "recapture" Dr. Sheridan, according to the views expressed in the following note:—

"10, Golden-square, Friday.

"DEAR MADAM,—I have received a letter from the Commissioners in Lunacy, requiring me to fulfil the obligations of the Act of Parliament, in reference to the discharge of Dr. Sheridan. This act is specific, and empowers me to recapture the Doctor, and, if need be, by force.

"I am not disposed to do anything that would have the appearance of force, and, I think, under the circumstances, the best course would be for the Doctor to return to Wyke, from whence, at your request, he may be regularly discharged, and thus put an end to my responsibility. My report of his escape to the Commissioners compels me to this course.

"My man, the bearer, will accompany the Doctor to Wyke-House, or if it should seem more advisable to you and the

Doctor's friends, he is directed by me to remain with the Doctor, at Rodney-street, until my responsibility is put an end to by the adoption of such other course as may be deemed most eligible. The commissioners require to be informed this evening of the event.—I am, dear Madam, yours respectfully,
 “W. M. B. COSTELLO.”
 “To Mrs. Sheridan.”

But Dr. Sheridan, aware that Dr. Costello had called, left, on that evening, in the greatest alarm at the prospect of being again conveyed to Wyke-House: he went to Brighton, quitting home in such haste as to go, in the midst of a deluging rain, without even his great coat; fleeing purely out of terror. The keeper, therefore, could not take him back; and, indeed, this man, when I related to him my opinion, admitted to me that he considered the system at Wyke-House was “too harsh.” They were most anxious, I was informed, to recapture him, in order, as expressed in the above letter, that he might be formally discharged, on the application of his friends, and so Dr. Costello be relieved from the odium and responsibility attached to his escapes. In a few days two more keepers applied for him in Rodney-street, but he was not there on either occasion. After ten days' absence, Dr. Sheridan returned, at dark, from Brighton, in a most wretched condition, with scarcely any clothes upon him, his feet sore, through wearing thin-soled shoes, and nearly starved, and haggard, from having slept one or two nights in the open air, through want of money when he fled. His first act was to survey the fastenings of the house, for fear of keepers from Isleworth, when, imagining that one of the doors was not sufficiently secured, he became so terrifically excited against me, that I escaped from the house to seek assistance from friends, particularly applying to Mr. Young and Mr. Martin, but without success. A Dr. and Mrs. Delany, however, came, and received from Dr. Sheridan a most painful account of his sufferings at Isleworth. On my return, he was again excited in the extreme, because I had not, during his absence, been able to obtain the clothes &c. which he had left in the possession of Dr. Costello. He afterwards said that he had heard from Mr. Martin, that on the expiration of twenty-one days Dr. Costello had no power to claim or demand him; but he thought, as Dr. Costello seemed to persist in retaining his clothes, that it was contemplated getting him back, through the concurrence of Messrs. Martin and Young. I therefore called at Golden-square, and on asking what description of release was necessary, Dr. Costello informed me, that on his application to you, my lord and gentlemen, as the Commissioners of Lunacy, you had absolved him from further concern on the subject, inasmuch as that more than fifteen days having elapsed since Dr. Sheridan's escape from Wyke-House, he was not legally bound to adopt any additional steps to retake him. Still, however, labouring under the apprehension of being returned to the management of Dr. Costello, he again disappeared from Rodney-street, without the slightest knowledge on my part as to what had become of him, until a gentleman, whose kindness to Dr. Sheridan I can never sufficiently acknowledge, in reply to anxious inquiries from me, told me as follows, by note:—“I have this day seen Mr. Young, who informs me that he learns, by a letter from Mr. Martin, that poor Sheridan is at Boulogne, in a very bad state, and that they hardly know what to do with him. I believe they purpose going to the Consul, and conveying him to this country, and thence to Ireland, there to get him placed in some asylum, for they believe he is not safe to be at large.” In a few days from that period, Dr. Sheridan returned to town, and came to Camden-street, where I was then residing. He was still in a very excited state, when, two evenings subsequently, he went to the *Morning-Advertiser* Office, where two friends delivered him into custody, and lodged him at Guildhall for the night, in order to afford me an opportunity of placing him under proper protection; whereupon I intended to avail myself of the kind aid of Sir A. Morison, to convey him to Bethlem, when, to my inexpressible dismay, I found that Mr. Young had been to Guildhall, and, there liberating him, had accompanied him to the office of Messrs. Wire and Child, the attorneys of the *Morning Advertiser*, and received from them, on Dr. Sheridan's receipt, the final amount that was due to Dr. Sheridan from that journal, a certain amount of which he had placed at Dr. Sheridan's disposal, with which my husband immediately proceeded to Ireland.

I must here unavoidably mention, as one of the effects of the treatment experienced by Dr. Sheridan, the existence of feelings of deep repugnance on his part to his brother William, for not removing him from Wyke-House; so that when he now proceeded to Ireland, his brother could not venture into his presence, but sent to me, saying, “Perhaps you will

write to him, to know what he is about, or try to get him under your own care again.” Shortly afterwards, Mr. Sheridan again wrote to me, saying, “He (Dr. Sheridan) is now confined for a month, from the 3rd of February, on a charge of threatening my life, and I shall not know what to do with him at the expiration of that period. I feel that my life would not be safe in this country were he at large, and there are no funds available here for placing him in an asylum.” Immediately afterwards, he addressed to me another letter, saying, “I wrote this morning, informing you that Dr. Sheridan was confined in the Richmond Penitentiary, on a charge of threatening my life; this was the only means I had of having him put up, and now there is no money available to place him in an asylum: so what is to be done? I wish he were in England once more, where you could get him into a free asylum.” In a letter which I received from Mr. Young, I learned that the “state of Dr. Sheridan's mind was at that time so bad, that certificates had been obtained from two respectable medical gentlemen, in order to have him placed in Swift's Hospital for the Insane, in Dublin, where, accordingly, after the lapse of nearly a month, he was conveyed, and where he is at the present moment. Although most ardently solicitous to obtain his liberty, yet he seems to entertain perfectly kind feelings towards those who are about him, observing, in a recent letter to me, “I have not yet had Croker's opinion, but there is, generally speaking, fair play among parties here.” And again—“The keepers here (naming two of them) I regard more as friends than in any other light.” This he says, notwithstanding an extreme wish to achieve his liberation.

In what manner Dr. Costello obtained from you, my lord and gentlemen, a discharge from his responsibility relative to Dr. Sheridan, I have not heard; nor have I ever learned how it was that Mr. Young allowed the subject to be brought to a termination with him.

As regards the apparel of Dr. Sheridan, I underwent the greatest annoyance in endeavouring, by a continued series of applications, to obtain it from Wyke-House. On the subject of Dr. Sheridan's writing-desk, I had the additional trouble which the following correspondence will illustrate. Dr. Costello refused to return the desk to me, empowering Mr. Cox to say, “In reply to your note, when we receive authority from Dr. Sheridan's brother to give the desk up to you, we will do so.” Whereupon I wrote to Mr. Sheridan, who, at a later date, replied, “I forgot to mention that Dr. Costello has no instructions from me to hold any property belonging to my brother.” But Dr. Costello still refused to give up the desk, stating that it contained papers belonging to other persons, as well as to Dr. Sheridan, adding, “We retain it by advice of his brother's friends.” On which I again wrote to Mr. Sheridan, requesting him to command Dr. Costello to place the desk in my possession, Mr. Sheridan replying, “I have written to Dr. Costello on the subject. I know of no person but you who can be considered to have any claim to it, and therefore hope he will give it up.” Another striking indication of the system at Wyke-House I beg to mention. Two days previously to Dr. Sheridan's final self-liberation from that establishment, I went unexpectedly to the asylum, and saw Mrs. Costello, who observed that her husband had just gone out, and left special instructions that no visitor should see Dr. Sheridan. I was expressing my severe disappointment at this, when the servant announced the arrival of two gentlemen to see Dr. Sheridan; whereupon Mrs. Costello abruptly rose, and left the room, accompanying those two gentlemen immediately to the patient. Yet she would not allow me to see him on that occasion!

Here, my lord and gentlemen, I rest in my statements. Comment from me is at present unnecessary respecting such manifest absence of protective power, where it should have been most anxiously, incessantly, and faithfully exercised.

For myself, I will simply add the painful truth, that the matters which I have described form but a part of the melancholy history of this case. Other consequences—those of the utter ruin and desolation of a whole family—attach to them. Calamity, alas! of every sort, has, by reason of these melancholy events, invaded a recently happy home, and a group of but yesterday provided for and rejoicing children, to-day is plunged into destitution and sorrow. Having thus acquitted my conscience of a task which it has for some time unceasingly prompted me to perform,—I have the honour to remain,

My lord and gentlemen,

Your very humble and obedient,

But most afflicted servant,

FRANCES KEITH SHERIDAN.

Islington, May 23, 1846.

TRUE AIMS OF THE MEDICAL PROFESSION, AND
NECESSITY FOR DENOUNCING QUACKERY.*To the Editor of THE LANCET.*

SIR,—Amongst the numerous and substantial claims to the gratitude of the profession, to be based on your editorial labours, few, perhaps, are more entitled to consideration than those which arise from your uncompromising and indefatigable exposure of quackery, and your fearless denunciation of individuals of established reputation, for their encouragement, direct or indirect, of the growing nuisance. In this matter,—as, indeed, in every effort to promote the *real* interests of the profession,—the lay portion of the public are as much your debtors as ourselves; and it is devoutly to be hoped, that the rapidly increasing intelligence of the age may, ere long, place this truth within their apprehension. Meanwhile, however, the gullibility of mankind in general as to matters affecting health remaining what it is, deep culpability attaches to those men, who, occupying exalted places in the medical profession, either tacitly allow the influence of their names to be fraudulently employed in behalf of nostrums, or—oh, foul disgrace!—actually barter their recommendation of these pernicious abominations “for a consideration.” No one who looks upon his profession in any higher or better light than that of a trade, but feels a pride in believing it to be part of his high vocation, (albeit he is to live by ministering to the relief of disease), to do all that in him lies for the *protection* of the public health. He knows that no department of human knowledge furnishes its votaries with such powerful means of benefiting their fellow-men as the science of medicine; and he owns a solemn obligation to use these means, not merely in the ordinary exercise of his art, when called upon, for remuneration or otherwise, to cope with disease and death, but as much, or more, in suggesting and aiding, without fee or reward, measures of good for the prevention of disease, and in instructing, warning, approving, denouncing, whatever habits or practices injurious to health come within his ken, or other occasions for his salutary offices arise. It is thus that a high-minded member of the profession feels that his calling is one entitled to public respect and gratitude; and it is from realizing this lofty idea of his profession, that he comes also to entertain a sentiment of true and chivalrous loyalty to it, so as to resent, as a personal injury, the unworthy conduct of any of its members, through which stain and discredit may attach to it. And need I ask if it be possible for our profession to maintain in public esteem the high and honourable character with which it is invested by all who love it, when those whose position should make them foremost in guarding it, with jealous watchfulness, from every mean and sordid taint, either actively contribute, or passively and supinely allow their influence to be prostituted, to the support of a pestilential knavery, which lives by deluding the unhappy victims of disease, and batters on the credulity of those whose sanguine hopes make them a too easy prey for the cupidity and wickedness of the quack.

But it was not my object to occupy your valuable space with general remarks of the sort into which I have been betrayed. All this has been better done by yourself and other contributors to your pages. I designed simply to thank you for what you have done, and to contribute my mite of evidence towards the establishment of your case. Medical men in the provinces will rejoice to find that you are not confining your castigations to the delinquents of the metropolis, but have begun to visit with special notice offenders of the same sort in the country. Nor is it of small moment that this should be done, as there is too much reason to believe that the degrading taint of patronizing quackery attaches to a large number of provincial practitioners; and though their influence is less extensive than that of a Bright or a Locock, yet is it often far from inconsiderable even in point of extent, while within the limits of their respective circles it is very powerful for good or evil. You published, last week, the name of a physician of Bristol, as one who had lent the sanction of his certificate to an itinerant cure of stammering. I send you now an advertisement, cut out of a provincial paper, of “Sydenham’s Pills,” the virtues of which are, as you see, attested by another of the Bristol physicians, and, strange to say, by another physician to the Bristol Infirmary. Surely, it behoves the governors of this institution (if they have any regard to the reputation of their hospital) to look into this. But it is with reference to the public interest alone that I forward the document for publication in *THE LANCET*. Dr. Wallis is, or has been, as I have understood, (and as the advertisement certifies in his behalf,) “in extensive practice in Bristol and Clifton; and if so, there is the greater need that his disclaimer, if he can furnish it, should be put in

forthwith, and that the nostrum, which I find has had for many years the benefit of his recommendation, should enjoy it no longer. If Dr. Wallis fail in doing this, and more,—if he do not punish, or at least publicly demand from the man who has so long, and doubtless profitably, used his name, an equally public renunciation of his fraud, the profession will, at any rate, know how to regard him, though the public may continue to be deluded by his authentication of a quack medicine, good “for all complaints to which the digestive organs are subject”!—Your obedient servant,

May, 1846.

Φιλόκαλος.

* * * The following is the advertisement in question:—

“THE BEST FAMILY MEDICINE.

DR. SYDENHAM’S APERIENT FAMILY PILL OF HEALTH, for both sexes, entirely Vegetable, prepared from the prescription of that eminent physician, Dr. Sydenham, who was justly styled the Father of Modern Medicine. A most valuable remedy for Bilious and Liver Complaints, Indigestion, Headach, Giddiness, Loss of Appetite, Flatulency, Gout, Rheumatism, Heartburn, Spasms, Lowness of Spirits, Costiveness, &c.

These celebrated Family Pills have been faithfully dispensed by the present proprietor for more than thirty years, and have obtained from all grades of the community a character and reputation which no medicine of a similar nature can pretend to. Dr. Sydenham’s Pills, being entirely free from Calomel, and a most happy combination of vegetable matter, require no confinement or alteration of diet during their use. Moderate exercise increases their good effects. They may be taken at any time when costive or uneasy in the stomach or bowels; and Sydenham’s Pills should be taken by persons of all ages when in this state, as they assist digestion, correct excesses of the table, give a healthy action to the stomach, remove most of the complaints to which the digestive organs are subject, and will lead to health and a cheerful old age.

Families and the proprietors of boarding-schools should never be without a supply of this valuable family medicine, as Sydenham’s Pills may be resorted to with the greatest safety and success on the first appearance of indisposition, and by adopting this course many serious and too often fatal attacks will be entirely prevented.

The following is the opinion of an eminent Physician practising extensively in Bristol and Clifton:—

‘I have examined the composition of Dr. Sydenham’s Pills, and consider them as a very valuable remedy in all complaints to which the digestive organs are subject, especially Bilious affections, and an innumerable variety of diseases which are the consequences of an irregular and imperfect action of the organs of digestion.

G. WALLIS, M.D.’

The high opinion entertained of Sydenham’s Family Pills by many of the most eminent of the Faculty in present practice, as well as the number of testimonials the proprietor is constantly receiving from persons of the highest respectability and standing in society, who have been materially benefited by their use, renders any eulogium on their merits superfluous, and must convince the most sceptical of the superior properties of this valuable established medicine, acknowledged by thousands as the best, safest, and most effectual Family Medicine now before the public.”

Small Boxes 1s. 1½d. and 2s. 9d.; Family Boxes 4s. 6d. and 11s. On the Family Boxes there is considerable saving.

PROFESSOR MURPHY’S REMARKS ON THE PRACTICE OF THE LATE PROFESSOR DAVIS, AND THE USE OF THE FORCEPS.

To the Editor of THE LANCET.

SIR,—I have just read, with no little surprise, some remarks by Dr. J. Hall Davis, in the last number of your journal, (*THE LANCET*, May 23rd.) In a contribution to the practice of midwifery, Dr. Davis observes, “I am led to these remarks (on a case Dr. Davis details) by a statement, in the form of an opinion, which has made its appearance in a work recently published by Professor Murphy, of University College, whether based upon opportunities for forming a correct judgment or not, we shall see,—that his respected predecessor, the late Professor Davis, was disposed to advocate a boldness in the use of the forceps, by which, from his mode of expressing himself, we are to infer that he was not sufficiently cautious in his admonitions against their abuse, and too frequently

employed them himself." After disproving, at some length, this assumed assertion of mine, Dr. Davis further observes, "That the reflection which has by Professor Murphy been cast upon the memory of his predecessor in the chair, is entirely without foundation, and therefore unjust, I can further truly maintain, from my personal knowledge of what he did in his practice during twelve years, up to his lamented decease in December, 1841, and from direct information which I have from one who can speak to his practice from the year 1814. From that source I learn, that in three-fourths of the cases to which he was requested to bring his forceps, he had either found them unnecessary,—a further trial of the natural powers, or a judicious treatment, other than instrumental, in certain cases of a depletive kind; sometimes the simple use of the catheter for the relief of the bladder, or the exhibition of a clyster, having brought labour speedily and satisfactorily to a conclusion—or, Nature being unequal to her task, by reason of deficiency of space, the power in question was absolutely contraindicated, and therefore not employed, in consequence of impaction of the presenting head." Again, after some further details of the late Professor Davis's exertions in the improvement of his profession, Dr. J. H. Davis concludes, "In these remarks, which I have thus made upon the opinion expressed by Dr. Murphy on the professional practice and teaching of his predecessor, the only object which I have had in view, has been the performance of an act of strict justice to the memory of my late parent and teacher, &c. &c."

The warmth of filial affection, which resents with energy the least, the most equivocal, stigma on the memory of a parent, must always command respect. I feel it a duty, therefore, to Dr. J. H. Davis, to disclaim any intention of casting the slightest reflection on the opinions of his late father; nor can I perceive by what ingenuity of criticism the only passage in my lectures to which I think allusion is made, can be tortured into such a meaning. Being anxious to prove that dangerous use is frequently made of the forceps, I was at once opposed by the difficulty of deficient evidence, unsuccessful cases not being generally recorded. I endeavoured to supply this desideratum, by quoting, from the most experienced authorities, evidence to show the necessity they felt, to caution the profession against the improper application of this instrument, thus evidently proving their experience of this abuse. For this purpose, at page 159, I stated that—"Many evidences might be quoted to this effect. We shall direct your attention to a few of them. Your late respected Professor, Dr. Davis, paid a great deal of attention to the subject of instrumental labours, and was disposed to advocate a much bolder use of the forceps than I should recommend, nevertheless, he candidly admits, 'that of all the instruments used in the practice of midwifery, those of the present class (the forceps) are unquestionably the most dangerous to the mother, inasmuch as in all cases where the forceps are used, the maternal tissues are more or less liable to confusion. All the fangs and framework of the instrument are made of tempered steel; and let them be ever so well covered and defended, they will still retain a great degree of hardness, calculated to bruise and fret the soft and lining texture which might be interposed between their covered surface and the walls of the pelvis.'" I had thus quoted Dr. Davis as an authority, protesting against the abuse that may be made of the instrument; nor can I perceive how the reader could infer from the above passage, that "Professor Davis was not sufficiently cautious in his admonitions against their abuse, and too frequently employed them himself." From the tenor of Professor Davis's observations on the use of the forceps, I concluded that he sometimes applied them when the head was impacted in the pelvis, a much bolder use than I should recommend. I am happy to find, however, that in this I was mistaken, and have his son's testimony that Dr. Davis thought that the forceps was contraindicated, and therefore not employed, in consequence of impaction of the presenting head." Thus, the late professor's authority, on the point which I was anxious to prove, is even more to the purpose than I had supposed. I beg therefore to repeat, that neither in my published lectures, nor before my class, have I ever mentioned the name of my predecessor, otherwise than with respect.

With regard to other topics introduced into Dr. Davis's contribution, I have already sufficiently expressed myself, to render further discussion unnecessary. I shall therefore decline to comment on his observations.

I am, Sir, &c.,

EDWARD W. MURPHY.

Henrietta-street, Cavendish-square, May 25, 1846.

THE PROJECTED NATIONAL INSTITUTE.

To the Editor of THE LANCET.

SIR,—After giving, in your last number, the notification of the Committee of the National Association of Practitioners in Medicine, Surgery, and Midwifery, that it is not intended by the said Association to merge the three branches of the medical profession into one faculty of medicine, to the disparagement or subversion of the existing Colleges, you ask, in the simplicity of your soul, "What then is to be the National Institute of Medicine, Surgery, and Midwifery?" As this question may, perhaps prove a poser to the wiseacres of the Committee, I will, as a volunteer, come to the rescue, and answer for them—not only the National Institute of Medicine, Surgery, and Midwifery, but the whole of that intricate and vexata questio, medical reform, will prove to be vox et præterea nihil. I am, Sir, your obedient servant,

May, 1846.

TIE.

TREATMENT OF TETANUS BY ACONITE.

(MR. NEWTON'S REPLY TO MR. LANG.)

To the Editor of THE LANCET.

SIR,—I find, in the number of THE LANCET for May 16th, that the "Case of Tetanus in which Aconite was used," contributed by me, has excited a communication from Henry Lang, Esq., in which great critical acumen is displayed.

It will be as well, in the first place, to premise, that the heading of my paper was not affixed to it by me, but by the editor of THE LANCET; so that I think it will not be necessary to inquire into the suppositions suggested by its perusal. I do not, however, see much to cavil at in the title of the paper. Mr. Lang proceeds to recite the prescription, in which tincture of tobacco and solution of morphia are combined with tincture of aconite, and then gravely inquires, "How could he (Mr. Newton) suppose for a moment, that any one agent, in such a jumble of stimulants and narcotics, should produce its usual therapeutic effects?" Which is the stimulant, Mr. Lang? Is it aconite, tobacco, or the morphia? Or is the combination stimulant? I am afraid that if Mr. Lang acts upon his own notions of the properties of remedies, he will be a somewhat dangerous practitioner.

I cannot concur in the propriety of designating "a jumble," a combination into which enter three articles of the Materia Medica, each of which has been recommended in the treatment of tetanus, each being selected on account of its physiological and its presumed therapeutic action. Whether you give tobacco, morphia, or aconite, you strive to allay the convulsive efforts, from which your patient is in danger of being exhausted. If Mr. Lang sees a "jumble" here, there can be no lack of charity in surmising that he must look nearer home for its cause; and I sincerely hope that he will succeed in removing it. I have, however, little sympathy with these very scientific prescribers, who, whilst they assume a monopoly of knowledge, endeavour to make every prescription the epitome of a theory. An eminent physician, recently dead, was frequently assailed with the charge of prescribing incompatibles; and his answer, that he cared not what he prescribed, as long as he did good, contains a truth which time and experience will bring to every teachable man.

Mr. Lang next notices an apparent contradiction; but if he had been ingenuous, or had I expected the favour of a commentator so subtle and clever, it would not have happened. After quoting my statement, that tobacco is the best remedy, and the qualifying remark that the case in question forbade its use, he inquires, "Why did he (Mr. Newton) administer it?" I did not administer it under the impression that the morphia or the aconite would modify its action. I gave it in the dose and form mentioned, because the broken-down constitution of my patient would not, in my opinion, permit me to administer the tobacco enema, so as to procure a decided and palpable effect; and I consequently thought it better to give it in this form, than not at all. The reason stated was plain and obvious. Here, then, is the grand discrepancy which Mr. Lang has discovered.

Mr. Lang, in the concluding part of his contribution, speaks to me, *ex cathedra*, as to the proper way of observing the effects of remedies. I have to observe that, in my recent remarks, I merely stated that aconite was given in a case of traumatic tetanus, and had failed. I drew the most guarded inference from the result of the case; and if Mr. Lang must teach, he will be obliged to extend his studies beyond the range he has so kindly sketched. After acquiring a thorough elementary knowledge of the actions of medicines in health

and disease, maturing and fixing his views of remedies in combination, and laying aside the bad habit of "syllable-pecking," and captious criticism, I have no doubt he will be fitted for the task. When Mr. Lang prescribes opium and calomel, does he quibble with himself about the modifying influence of the calomel upon the opium? Can he calculate the exact share which ipecacuanha, in the compound powder of that name, exerts in producing diaphoresis? Mr. Lang seems lost in idle theory, he is totally *in nubibus*. I should really like to see a *Materia Medica* written upon his principles; but I am afraid that at present he is going too fast ahead.

Mr. Lang states that this remedy—viz., aconite, "might prove of great benefit." Perhaps it might. And if Mr. Lang had brought to its consideration any practical knowledge, anything save the bare avowal of an opinion founded upon no less a circumstance than a possibility, he would have been entitled to some attention. Of this, however, it is sinning against Nature to complain; for Mr. Lang verifies the sarcastic remark of the poet, that critics require no qualifications, they are "ready-made."

Newcastle, May, 1846.

SHELL-LESS EGGS.

To the Editor of THE LANCET.

SIR,—A very severe domestic affliction has prevented until now, my noticing a letter recorded in THE LANCET of the 2nd instant, relative to my paper upon the egg of the common fowl. As that paper was devoted exclusively to "the structure and hatching of the egg," I cannot discover how you and your intelligent correspondent have misunderstood it. In no part of my statement have I made any remark upon the causes of shell-less eggs, except what had a reference to my subject, and could be applied to the practical treatment of the human being; and every one of my statements was founded upon reiterated inquiries. I have one or two preparations of "shell-less eggs" being "not yolk-less." I am, Sir, your obedient servant,

D. Top.

Upper Fitzroy-street, Fitzroy-square, May, 1846.

To the Editor of THE LANCET.

SIR,—Your correspondent signing himself D. S. E., says, at p. 507, "From some cause that I am not well able to determine, my fowls are very liable to drop eggs without shells;" and, further on, writes, "Although not positively able to account for the phenomenon, I am of opinion, that confined locality, dampness, absence of pure air, and want of such salutary ingredients as fowls can find at discretion in the fields, may assist in causing the frequent occurrence of this derangement."

Many years ago I had frequently observed the same fact, and from knowing the principal ingredients that enter into the composition of egg-shells, I had no difficulty in supplying the proper remedy—viz., chalk, or old mortar, with brick rubbish. After fowls have been confined for some time in wooden out-houses, and kept fed upon barley and water, their ordinary food, and then suffered to go at large, and watched, with what avidity they will be found to seek for old lime, chalk, and vegetables! And these substances should be supplied as regularly and freely to the imprisoned birds, as corn and water, when they will do well. Pigeons lay but few eggs, and, therefore require but very little chalk, or old lime; but, still, if this be not supplied to them, how destructive they prove to the mortar of your house-tops! Pigeons kept in confinement require to have supplied to them, clay, sand, and fine gravel, kept moist with urine. I am, Sir, yours, &c.

Princes-street, May, 1846.

J. H. HORNE.

To the Editor of THE LANCET.

SIR,—Your correspondent D. S. E. makes some remarks in THE LANCET of May 2nd, on the subject of shell-less eggs, remarking, and very correctly, that Mr. Tod is in error in supposing that such eggs lack the yolk also. Such eggs are neither the result of disease nor of preternatural formation, nor can they, indeed, be considered as abortions; their production depends upon an absence of calcareous or cretaceous matter in the body of the hen bird, mostly from their being kept in situations where they have no access to such elements; but were portions of chalk or some such matter scattered about, the birds would take these in with their food, and convert them into shells for their eggs. Indeed, egg-shells themselves may be made, over and over again, to serve, so to speak, the same purpose; and if broken up, and thrown to the fowls,

it will be found that they will be devoured with great avidity, and almost in preference to other food, when the birds have been long deprived of this necessary material; so true is it that Nature has implanted in all those instincts which are necessary, not only for self-preservation, but also for the continuance of the species. Perhaps D. S. E. will try the remedy here suggested, and communicate the result. Believe me, Sir, yours,

JOHN CHIPPENDALE.

Great Queen-street, Lincoln's-inn, May, 1846.

MEDICAL NEWS,

FACTS, NOTICES, AND REMARKS.

STATE OF MEDICAL CHARITIES IN CORK.—The governors and medical officers of the charitable institutions of Cork assembled recently, for taking into consideration the state of the medical charities of that city; the Mayor in the chair; and on this occasion, it was remarked that the Blind Asylum of Cork, a most useful charity, was almost shut up, in consequence of not being sustained by the public. The North Infirmary, a noble institution, which had accommodation for one hundred and twenty beds, had not now more than fifty beds in it; the South Infirmary was similarly circumstanced; and the Dispensary was in debt to a large amount. A great proportion of the patients received into the infirmaries were county patients; and the citizens of Cork were paying for strangers who came from other places. Among the resolutions were,—

"That the maintenance of the infirmaries, fever hospitals, and dispensaries of Ireland, should be paid by the funds raised upon the principle of poor-rate; and that the public medical institutions should be allocated in defined districts, managed by properly constituted local boards, and placed under such general regulations as may enable them to give efficient relief to the sick poor of the country."

"That while it is advisable that a general control should be exercised by government authorities over the public medical institutions, we consider it absolutely necessary that such control and inspection should be vested in respectable and responsible members of the medical profession."

Other propositions of a more local nature were carried; and finally it was proposed by Dr. Popham, Physician, North Infirmary; seconded by Dr. Power, Physician, Lunatic Asylum; and resolved—

"That petitions to both Houses of Parliament be prepared, embodying the above resolutions; the one to the House of Lords to be entrusted to the Earl of Bandon, and the petition to the Commons to be transmitted to the city representatives."

CANADIAN MEDICAL BILL.—The Attorney-General of Canada having introduced to the legislature of that country a Bill for the Regulation of Medicine, we should feel particularly obliged if any friend in Canada would forward the Bill to us by an early packet. We extract the following from a recent Montreal paper:—

Medical Bill.—Attorney-General SMITH introduced a Bill to Regulate the Study of Medicine. He said it was a very important measure, and trusted that, as he had obtained the valuable assistance of hon. members of the medical profession and others in support of a similar Bill last year, the same consideration would be extended to him in the present instance. He was prevented by circumstances from carrying through the measure of last session, but hoped that the Bill now submitted would become law.

MR. BALDWIN should like to have time to communicate with some of the faculty in Toronto.

Attorney-General SMITH was willing to allow any time that the learned member might require. He (the Attorney-General) would fix Friday next (April 24th) for the second reading, and if further delay were necessary, he would of course assent to it.

THE BIRMINGHAM GENERAL HOSPITAL.—A public meeting of the inhabitants of Birmingham, upwards of five thousand in number, convened by public invitation, at the Town Hall, on the 19th instant, to take into consideration the abuses of public charities, especially the General Hospital in that town, passed, with but two dissentients, a declaration, containing, among others, the following avowals:—

The people of Birmingham deplore the long-continued complaints of mismanagement of the General Hospital, especially in regard to the selection of its most important officers, the physicians and surgeons. They view, with astonishment, the

refusal of the Board of Management of the General Hospital to entertain the earnest and respectful request of the people of Birmingham, as expressed by them, in August last, for inquiring into sundry grave charges of corruption and abuse. They are strongly of opinion that a charity which the benevolent and humane have long supported with great munificence should be above all suspicion of abuse; and they urge upon the governors the necessity of a thorough investigation, as indispensable to the restoration of public confidence, and the success of the ensuing Musical Festival.—And, in full confidence that the heads of the church will maintain the standard of ecclesiastical discipline, as contained in the canons, they present unto the bishop of the diocese, and the archbishop of the province, the Reverend Peyton Blakiston, an ordained priest of the Church of England, who is officiating as a physician of the General Hospital, and otherwise unlawfully using himself as a layman.

(Signed) THOMAS GUTTERIDGE.

Town Hall, Birmingham, May 19, 1846.

KING'S-COLLEGE HOSPITAL.—The annual festival, in commemoration of the establishment of this hospital, and to receive subscriptions in aid of the funds by which it is supported, was celebrated, on Saturday, in the great hall of the Freemasons' Tavern, Great Queen-street. The chair was taken, shortly after six o'clock, by the Earl of Eldon, supported by a very numerous company of gentlemen, amongst whom were some of the professors of the College, and many eminent persons connected with the medical profession. Mr. T. Cooke, assisted by Messrs. Leffler, Hawkins, and Hatton, arranged the musical entertainment, which was of the best character, both in the vocal and instrumental parts. Mr. Toole acted as toast-master, and exerted himself in his usual effective manner. The loyal and patriotic toasts having been honoured by the company, and followed by appropriate glees, &c., the Chairman gave the toast "Success to the Hospital," which was received with great cheering. His Lordship then went into a history of the institution, the manner in which it had been carried out, the benefits it had conferred, and the excellence of its economy, and concluded by calling on the company to be liberal in the support they were about to afford to it.—The amount of subscriptions was understood to exceed 1000*l*. From the printed report, it appears that a great deal of good has been effected by the establishment of this hospital. During the last year, 1845, 1,266 were received within the hospital, besides a vast number of out-patients relieved. The vigorous and combined exertions of the benevolent are still requisite, to render the hospital as useful as it ought to be, the great increase of population, and other causes, operating to an increased demand on its funds.

SOUTH-LONDON DISPENSARY.—The subscribers to this institution celebrated their annual festival, on Friday se'nnight, in the usual manner, at the London Tavern, Bishopsgate-street. The company, consisting of about sixty gentlemen, over whom Mr. E. Antrobus, M.P., presided, and amongst whom were Mr. Kemble, M.P., Mr. T. Hawes, and many firm friends of the institution, sat down, at six o'clock, to an excellent dinner, provided by Messrs. Bath and Breach. Mr. N. J. Sporie, assisted by Mrs. A. Newton, Miss O'Connor, Mr. Kenny, and Mr. F. Smith, conducted the musical arrangements; and Mr. Toole, as usual, acted as toast-master. The customary loyal and appropriate toasts and healths were drunk with the honours, and the chairman and several other gentlemen addressed the meeting. The subscription amounted to nearly 300*l*. The address, drawn up by Mr. J. Meymott, the secretary, states that more than 25,000 patients have been relieved since the establishment of the Dispensary, and 4,323 within the year ending Christmas, 1843; and calculating from the five months subsequent to that period, the annual number relieved, to Christmas, 1844, will have been upwards of 5,000. The great increase of population in the districts in the centre of which this institution is established, has greatly increased the demands upon it for relief, and consequently the funds have had heavy expenses to defray.

MIDWIVES' MIDWIFERY, LEEDS.—SUSPECTED DEATH FROM THE IGNORANCE OF A MIDWIFE.—An inquest was held lately, at the Court-house, Leeds, before Abraham Horsfall, Esq., to inquire into the causes which led to the death of a young married woman, named Martha Flockton, residing in Tulip-street, Leylands, who died the preceding evening, about an hour after being delivered of a male child. There was a rumour that her death had been caused entirely from the ignorance of the midwife who attended her; but the evidence given at the inquest by Mr. Ward, surgeon, who

was called in by the nurse, on discovering that she was not able to manage the case, which was said to be one of peculiar difficulty, though it showed a want of skill, exhibited no proof of neglect or inattention on the part of the midwife. She received an excellent character from the witnesses called, and her experience in such matters was attested by the surgeon, who had frequently met with her, and considered her a safe midwife to follow. It was stated that she had "practised" thirty-five years, and from Thursday night week to last Wednesday night, she had been called in to no less than eleven cases of labour. The jury returned a verdict of—"Died in childbed from natural causes."—*Leeds Mercury*.

* * Mr. Ward ought to publish the details of this case, or he will stand in a much worse position than the nurse.—*Ed. L.*

THE ERUPTION OF 1846.—The Royal Society has long been a volcano, ready to burst forth. For the last fifteen years, especially, there have been much intestinal rumbling, and continual smoke, with occasional flashes of fire. But ever memorable will be the eruption of 1846: preceded and announced by thunder and earthquake, it has at length burst out with fury, overwhelming all in its mighty progress; its flames are seen—its ashes spread far and wide; whilst its lava has flowed in hot streams, burning and consuming man and beast—the unjust judge and the false accuser together; and the cry of all—the feeble cry—has been, "How can we escape?"—the hearts of the wicked quailing for fear!

As the storm purifies the atmosphere, so, it is hoped, will this explosion expel much dross—ashes, scoriae, and pumice; whilst stillness and quietness succeed, with only the remembrance of the terrible and purifying scene. But let all henceforth beware of the too-well-merited fate of Pompeii. We regret the lot of one only, and that one is PLINY.

"YE KEN FU' WEEL WHA THIS COMES FRA."

The decoration of the Legion of Honour has been conferred on Dr. Oliffe, by his Majesty the King of the French, a distinction seldom granted to other than Frenchmen.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, May 22nd, 1846:—R. S. Tate, T. Brown, J. Wright, W. Deebie, S. Gibbons, A. C. Gibson, G. King, A. J. J. Chitty, J. G. Bailey, T. Devlin, and J. Dwyer.

CORRESPONDENTS.

The *Glasgow Courier* has reached us, but the friend who has forwarded it has afforded us no means of judging what difference there exists between the quackish peculiarities of the Dr. Allison whose nostrums are advertised in the paper, and those of any other quack. Dr. Allison is announced as "late F.R.C. of Physicians." Out of what college was he turned? and on what account? The "Apothecary Halls" where his trash is vended are, we suppose, self-instituted shops, and not incorporated institutions of any kind. As for the advertisements of Brodie and Co., and Perry and Co., alas! they are to be found in every newspaper read by gulls and fools in the three kingdoms. How far legislation can be made to affect them we know not, at present, but the subject is continually under our notice.—The object of the correspondent who has forwarded the *Manchester Guardian* of May 27th, we cannot, after carefully examining that paper, discover by any paragraph or token.

Notice shall be taken of the letter of Mr. Harding next week.

Mr. L. F. Cameron.—Dissection is not ostensibly practised or allowed in Paris during the summer months, owing to the heat. Subjects may, however, be obtained for operations from the prosectors of the dissecting establishments of Clamart and the Ecole Pratique, and the surgical regions may be hastily dissected. The subjects are only allowed to remain on the tables for two or three days.

To the Editor.—SIR: Of the advertisement referred to in the article headed "QUACKERY," in p. 582 of your journal for this day, I know no more than the "PROVINCIAL PRACTITIONER" who has thought proper to address you regarding it; and whether the *nostrum* vaunted, be as of mine, or as of my late uncle, the name has been used without the countenance or sanction of either. I am, Sir, your obedient servant,
Northampton, May, 1846. WM. KERR.

Mr. Acton's paper, in continuation of his series, shall be inserted in the next LANCET.

ERRATUM.—In the last week's number, p. 582, second column, fourteenth line from the top, for "pins," read "pons."

Communications have been received from—Dr. Letheby; Mr. C. J. Gibb, (Newcastle-on-Tyne); Mr. Cousins; Dr. Taylor; Mr. Burne, (Macclesfield); Mr. Acton; Dr. Haskins, (Sydney); Dr. Ormerod; Mr. Clark, (Kensington); Mr. Harding; Mr. R. Davis, (Worship-square); Jus; A Foreign Subscriber; J. A. W.; and Cymro.

CLINICAL LECTURES

ON THE

PRINCIPAL FORMS OF INSANITY,

DELIVERED IN THE MIDDLESEX LUNATIC-ASYLUM
AT HANWELL.

BY JOHN CONOLLY, M.D.,

PHYSICIAN TO THE ASYLUM.

LECTURE XVIII.

Description of chronic forms of insanity concluded: imbecility ensuing on mania, on melancholia, on general paralysis, and on epilepsy; congenital imbecility; idiocy; dementia; climacteric decline of mental power; insanity in aged persons.

We have to-day taken a final survey of the patients of this vast asylum, as far as regards the observation of the various forms of mental impairment manifested in our numerous chronic and incurable cases of insanity. You have again noticed some of our patients who are continually maniacal and excited; several who are excited from time to time, with intervals of more or less tranquillity; many who, with recurrent excitement, entertain recurrent delusions; more who entertain delusions quietly, and seem in most matters to be quite sane. You have noticed the painful prolixity of others, in whom all the mental energy seems to be concentrated on the organs of speech—a very common phenomenon in the insane, whose love of talking, and whose capricious management of the voice, are very remarkable. They talk with a vehemence which absolutely confuses the hearer, overwhelm him with emphasis, and exhaust him with a succession of topics which, if he could bear the infliction, would be suggested to the morbid mind of the speaker from the rising-up of the sun to its going down. Once more you have listened to the marvellous incoherence which marks a still more advanced stage of mental impairment; and you have again noticed the various degrees of mental lesion which are classed under the general head of imbecility. Lastly, the final stage of all, in this "eventful history," has been observed by you in the cases of entire dementia.

In not a few of our younger patients, I have, in the course of these lectures, pointed out to you examples of an imbecility of mind supervening on a short attack of maniacal excitement. Our female wards present several of such examples:—M. M—, in ward No. 12; M. S—, and S. H—, in ward No. 1; M. V—, in the laundry; L. S—, in No. 5; J. M—, in No. 12,—all young women, seem to have fallen into a hopeless state of weakness of mind, after an attack of maniacal excitement of short duration. The state of each is very variable; but in all there is an oppression and a gradual declension of the faculties: all are more or less inattentive to what passes around them—silent, slovenly, and idle; one or two of them have delusions; and all are liable to fits of irritability, which careful management restrains on this side of violence. Although indisposed to join in any conversation, the moving lips often indicate that these patients are talking to themselves. Some of them fancy they are spoken to by persons unseen: delusive notions of all kinds spring up in their minds. "I sometimes think," said one of my patients, "that I am a pickle-jar, and sometimes a butcher's dog; and sometimes I feel wicked, and think I must go and drown myself." Young persons of education, who have fallen into this state, have intervals of painful consciousness, and cry bitterly, bewailing their alteration, and anxiously asking for an explanation of it.

I have already observed to you, that in all the cases of recent mania, but especially in young women, our hope of early recovery is mingled with an anxious apprehension of the termination of the case in this form of mental impairment. The faculties in some cases entirely recover strength. Temporary debility of the brain may be the real and only cause of the malady. I have known it induced in delicate women by menorrhagia and by miscarriages: the mind was brought into a state in which everything was indifferent to the patient; and an inability was felt to decide upon any one thing in preference to anything else, or to refrain from yielding to the opinions of others. The sense of reality is described as being lost, and the patient imagines herself to be dead, all her relations to the external world being weakened. In some cases, the body and the mind recover strength together; but in too many instances, successive attempts at recovery are followed by renewed oppression, and all hope of restoration

No. 1188.

gradually disappears. In the male wards, J. G—, in ward No. 9, and P. M—, in ward No. 7, present examples of this form of malady, tending to dementia, which is only a greater degree of mental privation. The dull state to which patients are reduced in the various stages of this declension frequently causes these cases to be classed under the head of melancholia; but the depression is not occasioned in these patients by sadness or despondency—it is the depression arising from diminished power. Imbecility may, however, supervene on melancholia, as well as on mania. The first melancholy state often depends on impairment of the energy of some portion of the brain; and the patient falls, without any paroxysms of excitement, into entire mental feebleness. There is something like an attempt at restoration visible from time to time even in the worst cases: the faculties seem to be partially re-animated, sometimes for a few hours, or for a day; and these returns of excitement and power occur with something like regular intervals. But all strong impressions, any physical or mental shock, powerful stimulants, or even strong doses of purgative medicine, make the weakness of the faculties more conspicuous, and the declension more rapid.

Among our numerous male patients who are affected with the form of paralysis described in previous lectures, you must have observed that the mind is variously impaired. In some of these cases the distress of the patient is greatest when the impairment is least. In the midst of his usual occupations, a slight paralytic attack has occurred, of which he has been scarcely conscious, or which he has not noticed at all. But to every observer he is seen to be an altered man. He has the appearance of a man who has been drinking; his speech is faltering, and he walks unsteadily. For a time he persists in attempts to go on with his work, unconscious of the blunders he commits; and at length he is removed to an asylum. Remembering most of the transactions which have formerly occupied his attention, and retaining his family and social attachments, he cannot comprehend why he has been removed from home, and is often irritable and angry on account of the supposed injustice done to him. He even fancies himself fitter for business than he was before, and calculates the great loss he sustains by being debarred from his customary employment. Every morning he requests to be supplied with pen, ink, and paper, and he writes letters, perhaps very well expressed, referring to past undertakings, making statements of accounts, and, from partial loss of memory, claiming money as due which has long been paid. The same letter will be written by some patients thus affected again and again, week after week, for months, and nearly word for word each time; but neither in the letters, nor in conversation, is any incoherence for a time exhibited. Subsequently, the usual exaltation of ideas in these paralytic cases supervenes on this first and fatal impairment, the patient being, even from the first, disqualified for all future efficient exertion. More extensive delusions follow; prolixity passes into incoherence, and the imbecility of the mind extends onward to the dementia in which life closes.

But among both our male and female patients, there are many in whom the impairment of mind, although irreparable, remains slight for many years, if the patients are sheltered from turmoil and anxiety. They read, write, talk, and even reason correctly, on ordinary subjects, but are yet incapable of such continued application of the faculties as would secure them a livelihood, or of such order and propriety of conduct as would render their being at large compatible with the comfort of their friends, or with their own safety, or the security of their property. In private cases it is not always easy to determine the necessity of secluding such patients in asylums; but by referring every case to this test, the security of the patient, or his property, or the security of his friends or others, a general rule may be obtained, and acted upon with confidence.

Among our epileptic cases, you have opportunities of observing all possible gradations of impairment of mind, from that which is so slight as scarcely to be perceptible to ordinary observation, to the complete obliteration of all the intellectual faculties. But on these cases, already so fully described, it is unnecessary now to dwell.

Every asylum is, to some extent, made a place of retreat for such unfortunate persons as have been born with inefficient faculties of the understanding. This congenital imbecility exists in various degrees, and is distinct from the congenital defect which is termed idiocy. Of 231 imbecile patients in the asylum, including various impairments of mind, only fifteen are congenital cases, and about 200 of the cases are combined with general paralysis or epilepsy. Of 136 cases of dementia, none are congenital; and 126 are combined with epilepsy or

paralysis. We have only fourteen male and seven female idiots in the asylum, and in four of these the defect is combined with epilepsy.

In every congenital case you will find external signs of defect, in the shape of the head,—in the expression of the countenance,—and in the movement of the limbs and of the muscles in general. But no two cases are exactly alike. Each congenital imbecile person, and each idiot, has a distinct character, and the observation of these poor patients would repay a closer attention than they usually obtain. Idiocy is always a congenital defect of mental capacity. However various in character or degree, it always incapacitates the individual for social relations. In some idiots certain intellectual faculties, affections, or propensities, are active, and others seem to have no existence. The propensities are commonly more active in these unfortunate beings than any of the higher faculties, and bring them towards the rank of the lower animals. The lowest idiot is often seen to be contentious, or amatory, or fond of making acquisitions of imaginary value; his desire for food is usually great and indiscriminate; those less completely idiotic exhibit vanity and cunning; but they never seem to attain the higher faculties or qualities of benevolence or veneration. Their perceptions are generally feeble; and of the faculties, by which man forms ideas, and communicates them to others, observes the order of phenomena, and reasons upon them, they are, of course, almost wholly deficient. In that "large discourse, looking before and after," they are utterly wanting.

The manner in which the faculty of speech is modified in the various forms of impairment of mind, is worthy of remark; for in the insane, even more strikingly than in the sane, the tone of the voice is a kind of index of the mind, and the mode of speaking peculiar to the mental character. The long and loud talking, and the bursts of voice, of patients affected either with acute or chronic mania; the low whisperings of the melancholic; and the utter silence of those who have fallen into the state of dementia; have been witnessed by you in all your visits to the asylum. The power of using this important gift is also always defective, to a greater or less extent, in persons of congenital imbecility of mind; less, probably, in many cases, from defective organization of the organs of speech, than from the mental incapacity to learn the uses of speech, or to connect words with their limited ideas and perceptions. There are two sisters, M. and J. W.—, in wards 12 and 13, who have been imbecile from birth; both of them evidently hear and also understand much that is said; but neither of them can speak. R. S.—, a stout girl, who is very industrious in the laundry, came to us at twelve years of age, and has been imbecile from birth. She has learned to speak a few words, and appears to understand nearly everything that is said to her. In the male ward No. 1, you have seen many imbecile patients, and all those on the male side of the house who are idiotic; and very few of them speak, except those whose imbecility has supervened on mania or melancholia. Yet I do not doubt that many of these patients might be taught to understand and employ artificial and natural signs for ideas, and by that means have the exercise of all their intellectual faculties much enlarged. I am mortified to be unable to impress this important truth upon you by examples, such as you might reasonably expect to be furnished in the largest lunatic asylum in the world; but the suppression of the schools at this asylum has prevented the progress of one of the most interesting of psychological experiments, some of the results of which would, I think, have been found worthy to rank with those of the attempts so happily applied to the instruction of the deaf, the dumb, and the blind. In this instance, as in many others, the views of the medical officers were over-ruled, in consequence of the superior influence of those incapable of appreciating the attempt, but more able to mislead the authorities to whom the medical officers must necessarily yield; and a great design has been, I will not say frustrated, but, at least, deferred. But for this, we might have rivalled the successful benevolence of the founders of the school for the imbecile and idiotic at the Bicêtre, and have followed, although at humble distance, the steps of Dr. Howe, of Boston, Massachusetts, whose philosophical care, dictated by the warmest humanity, has achieved, in the case of Laura Bridgman, the miracle of evolving a human soul from a living and breathing tomb, to which sight, hearing, smell, and speech, were things without existence, and all the surrounding world was but a world of surfaces more or less hard, and more or less uneven, and more or less warm, without colour, without odour, and without sound.

It is important, in relation to medical jurisprudence, to re-

collect that idiocy and imbecility may, in some instances, chiefly affect the moral faculties. You have seen that this is true of the diseases of the mind; but that it is true of many congenital cases is sometimes forgotten, although it is a truth which has long been known to medical observers, and has been illustrated and elucidated, and placed beyond dispute, in the works of the most distinguished phrenological writers. Dr. Rush, so long ago as 1786, in a paper read to the American Philosophical Society, pointed out that what was called the moral faculty or moral sense was influenced, no less than the faculty of the intellect, by physical causes. He remarked that the state of the brain as to consistency was as much connected with the strength and progress of the moral faculty in children as it was with their intellectual powers; that the intellectual faculty was associated with a certain size of the brain and a peculiar cast of features; and that the moral faculty was associated with certain qualities of figure and temperament. He observed that the moral qualities, like those of the mind, were often hereditary, and that there were as remarkable instances of the defects of moral susceptibility as of intellectual capacity; adducing the instance of Servin, whose character is drawn by the Duc de Sully, and in whom, with various and extraordinary mental and bodily endowments, there appeared to be a complete moral incapacity, almost every crime blending in his compound character with every accomplishment and every kind of skill. On the other hand, Dr. Rush remarked, that the moral faculty might be conspicuously present, although the intellectual faculties were very feeble; and related, that he knew a man who discovered no one mark of reason, yet spent his whole life in acts of benevolence. From these views and other observations of a like kind, few observers will now be found to dissent, daily experience showing modifications of character and temper which can in no other way be explained; sometimes congenital, sometimes resulting from temporary illness or from permanent disease;—industry, honesty, truthfulness, delicacy, being impaired, in some cases, as undeniably as the memory, the judgment, the speech, or the power of locomotion in others. We have all met with individuals who, without any remarkable deficiency of intellect, pass their lives in folly, imprudence, or dishonesty, avowing their faults, yet not repenting, and not improving; being destitute of an adequate sense of right and wrong. Insensible themselves to the consequences of their conduct, they usually bring sorrow, and not unfrequently shame, upon their friends. In such cases, there is as real a deficiency of moral feeling, or of conscientiousness, as in other cases there is of sight or hearing; or, as in others, of enthusiasm, or of courage, or of a sense of harmony, or a capacity for appreciating the higher efforts of art. In all these cases it is probable that the cause is of the same kind—a defective organization, or energy, or sensibility of some portion of the brain.

Dr. Prichard, who does not assent to the phrenological doctrine of the division of the brain into separate organs, for several qualities of the intellect, or affections, or propensities, is yet of opinion that many cases of insanity consist in a simple disorder of the moral feelings, without intellectual disturbance. Several authors support this opinion; although I can scarcely admit the existence of such cases in the strict sense in which they are asserted to exist by these eminent physicians, having never, myself, met with a case in which the moral deficiency, however prominent, was not accompanied by a degree of intellectual infirmity, by a want of power of accurate attention, comparison, and judgment, or by a too-easily excited imagination. But that, in many cases, the defect of the moral faculties is greater than that existing in the common faculties of the understanding is clearly established by observation.

The character of Edward Oxford, who was brought to trial for firing a pistol at the Queen in the park, appeared to me to be one of this kind, and one of those cases in which the usual tests applied to those suspected of insanity afforded very little information, and the usual investigations of lawyers, and even of doctors, would fail to discover the real state of the mind. He was a youth of feeble intellect, but cherished no particular delusions, and in any ordinary occupation exhibited eccentricity and a love of mischief rather than deficiency of understanding. He could count a hundred or a thousand, and do a sum in addition, or simple multiplication, as well as other persons of his age and condition. But his real deficiency was in the power to apprehend moral obligations. He seemed to be without affections or feelings, indifferent to everything, and for that reason, unable to distinguish right from wrong. He was more imbecile as regarded the sentiments than the intellect. But his peculiar deficiency was very obvious, even in his appearance, in the expression of his countenance, and in

the form of the anterior and upper portions of his head. In his manner it was more strikingly expressed than in his words, which were, however, vague and unexpressive. The difficulty of determining where the responsibility of a human being ends, does not affect the truth, that the sense of right and wrong may be naturally defective, and the intellect too feeble to restrain morbid impulses. This foolish young man, instigated by the silliest love of notoriety, such as could only exist in an imbecile brain, fired a pistol at the sovereign, not loaded with ball, and not intended to injure her Majesty, but solely to make himself the hero of the newspapers. It was impossible to impress him with the least sense of the disloyal and shocking outrage of which he had been guilty, or of the indignation felt by the public, or the grief which he had occasioned his widowed mother, and an only sister, or the dangerous position in which he was himself placed. On the evening before his trial, he was not only indifferent as to what the morning might bring, but seemed to forget all about it; and when questioned in relation to the probable events of the next day, appeared to make an effort to recollect his situation before he answered. There was no appearance of affected indifference about him, but every indication of total insensibility. His replies evinced no kind of cunning or simulation, but mere frivolity and mental weakness. During the whole of a two-days' trial, he never exhibited the smallest sign of apprehension or anxiety; and when his former master detailed his tricks as a pot-boy, no one in the court was so overcome with laughter as he. At the trying moment when the jury returned to their box to deliver their verdict, there was no countenance so free from anxiety as his, or apparently so free from thought; and when he was acquitted on the ground of insanity, he heard the important announcement as if he was not in any way concerned in it.

Long observation has convinced me that there are many unhappy individuals in society whose faulty characters are connected with some disturbance or interruption of the development of the fetal or infant brain. In some of these individuals, with much talent, and many engaging qualities, there is a moral eccentricity, wondered at by happier organizations, but fatal to their own fortunes; in others, it leads to actions which society cannot tolerate, and agrees to punish. The mother of Edward Oxford appeared to have been subjected during her pregnancy to the almost fiendish persecution of a husband unquestionably mad. I am satisfied, from my knowledge of the private history of many persons manifesting peculiarities of character associated with a slight deficiency of mental power, that such an explanation is not very uncommon.

On the ultimate stage of mental oppression which we term dementia, a few observations only are necessary. You have seen several of such cases in our male ward No. 1, and one most striking case in ward No. 9, the subject of it being a young sailor, J. C—, who came to the asylum three years ago; and was then a fine active man, highly maniacal. He now stands in one place nearly all the day long, silent, motionless, and manifesting no sign of intelligence. The state of dementia is, in fact, a condition of stupor or general depression of the faculties, in which the patient exhibits no affections, no intellectual faculties, and no active propensities. It is a state which sometimes supervenes early and suddenly, but it is usually the last in the train of mental disorders, coming on after mania or melancholia, which have existed at least two or more years. You see patients who have arrived at this stage of malady, sitting or standing in odd attitudes in particular corners, or in some chosen spot, to which they resort whenever they can. They look pale and unhealthy; their pulse is feeble, but they eat well, and live many years. You will find expressive representations of patients thus affected in the twelfth, thirteenth, fourteenth, and fifteenth plates, attached to M. Esquirol's work, and will almost conclude, from the mere appearance of the patients, that, to use M. Esquirol's language, "the patient in dementia imagines nothing, supposes nothing, has few or no ideas; he wills nothing, he determines nothing—he yields."

However well the brain is developed, and however well organized, its functions, obeying the general laws of life, are still limited to a period, which differs much in different individuals. There are not a few patients in the house who have become insane soon after fifty years of age, the energy of the brain giving way perceptibly, sometimes with a short-lived agitation, and becoming so reduced as even to disqualify the patient for application to his ordinary labour. When a man of the labouring classes becomes thus incapacitated for work, if he is fortunate enough to be sent to an asylum where he is kindly treated, his irritability soon subsides, and he

falls into a state of indolent content, in which he lives, with very little further change, for years. If his apparent amendment makes his family desirous to have him at home again, or if he becomes impatient of remaining quiet, a few weeks of liberty usually cause a great alteration for the worse; and he is brought back to us with apparent satisfaction to himself. In persons of the educated classes of society, the failure is yet more striking, and perhaps more frequent, as the functions of the brain habitually exercised are more comprehensive and more appreciable; and in these instances we may perceive, not only that the brain begins to lose its activity at different periods in different individuals, but that different portions of it fail before the rest; the failure being still the beginning of changes of which the end is death. Many brains of great activity in early life are found not capable of sustaining unremitting exertion to the ordinary term of man's existence. As early as forty, but more commonly a few years later, an individual possessed of such a brain begins to complain of lassitude after the mental labours of the day which are customary to him. At the same time, other mental changes may be observed by those intimate with him. He becomes, according to his temperament, or the predominance or want of ideality, or of conscientiousness, or of hope or some other faculty, timid, desponding, and self-accusing, or speculative, extravagant, and visionary, beyond what has been at all usual with him. The indications of these changes may at first be very slight. Rest, or change, travelling, and variety, may suspend the progress of decline for several years, and great care may ward off the most troublesome symptoms until the faculties fade more naturally in old age. The medical adviser is in these cases resorted to on account of the growing languor of the bodily and mental functions, which interferes with the continuance of successful exertions in the business of life; and such obvious means of relief as I have mentioned are usually adopted. But ordinarily, the patient returns eagerly to his labours as soon as he feels some return of power; prompted, perhaps, by the painful necessity of toiling, and of dying that he may live; by a dread of poverty, or a sense of duty, or by mere worldly ambition. In a few years more the symptoms return, and bring others in their train; and the brain becomes manifestly unfit for continued exertion. The lamentable change now becomes visible in a more serious form. In some instances, there is a simple loss of power, without confusion of thought, except when attempts are made to do what cannot be done; and in others, all the different forms of mental weakness supervene, down to complete torpor or imbecility. Short paroxysms of violence, or of despair, are by no means uncommon. The patient has fits of painful consciousness of his state, and sometimes a strong disposition to suicide rises up in his mind. He becomes subject to incurable despondency, represents himself as having lived in vain, or as being brought to ruin, and will justify his views very calmly, and with much ingenuity, as if some part of the brain which should suggest opposite views, or detect fallacies, were asleep, or paralyzed, or already dead. Sometimes inexplicable and distressing changes are noticed in the moral character; a disregard of veracity, an unwonted avarice, a suspicion of all about him, a craving for stimulants, or an untimely and unbecoming passion for the sex.

The bodily symptoms which accompany the early steps of this serious mental change are, in many cases, so transient and variable, as scarcely to be duly estimated. Occasional attacks of headach or indigestion, with vertigo, and restless nights, are complained of, but are not much regarded. A marked alteration may, however, be often noticed in the patient's figure, which is recollected by the friends after the mental malady has declared itself. The bodily change alone would merely be regarded as climacteric, but for the accompanying alteration of the patient's habits.

Examples of complete recovery from this state may, I have no doubt, be adduced, and eminent instances of persons who are supposed to have occasionally felt the dangerous exhaustion and irritability incident to an over-tasked intellect, and, by timely care, have regained mental spirit and strength. But it is much more frequent to find those whose educated faculties should at least do them the service of protecting them from grievous errors, the most prone to fail to "discern of the coming of years," and to forget that "age will not be defied."

Women are not exempt from the form of mental malady and decline just described; but as their intellectual life is commonly less active than that of men, the change does not attract so much observation when it occurs in them. Symptoms of general debility—as paleness, thinness, a failing appetite for food, a very feeble pulse, are frequently found accom-

panied with religious despondency, and an apprehension of ruin. The patient neglects her dress, almost starves herself, and thinks she has always been wicked and hypocritical, and has become an outcast from redemption; or, if of a more hopeful character, thinks she has had revelations from Heaven, and, although inclined to denounce, as lost, several friends whom she formerly regarded, enjoys a most happy anticipation of her own future state. There is often but a slight mental impairment, interfering little with the daily habits, but irremediable; and sometimes the slight restraint imposed upon extravagance or fanaticism, in a house for the insane, becomes necessary for the protection of the patient's property, or for her comfort and that of her friends, although her ordinary conversation betrays very little indication of a failing mind.

Of all the peculiarities which I have thought it necessary to mention, we have an aggravation in cases of senile insanity,—a form of malady which appears not only in persons who have always had a feeble mental and bodily constitution, rendered now more feeble by advancing years, but which too often affords a melancholy illustration of the little that man can do by "taking thought;" appearing in those whose bodily health, carefully preserved by a diet and regimen only somewhat too scrupulous, has prolonged life beyond its natural term, and seemed to endow them with a vigour and activity that defy the assaults of age. In them the mind sometimes dies long before the body; and violent mania, or "mere oblivion," make their death prayed for by all who have loved and revered them.

The diminution of nervous power in active brains, without insanity, seems to be plainly perceptible to all observers of themselves as life advances. The illustrious Jenner, arrived at his seventy-second year, says, in a letter to Dr. Worthington, published in Dr. Baron's life of him, "I rise in the morning tolerably active, and disposed to work with mind and muscle;"—"though I boast of my strength in a morning, yet evening seems to come before its time. My afternoon is all evening; and my evening midnight." One of the most vigorous of living poetical writers, addressing Robert Southey, not long before the sudden mental decline of that great writer afforded a striking illustration of his reflections, exclaims,—

"We hurry to the river we must cross,
And swifter downward every footstep wends.
Happy who reach it ere they count the loss
Of half their faculties and half their friends!"

And such seems to be the fate of man. All depressing circumstances accumulate on his declining years. His memory is filled with the images of the dead. Not sorrow alone, or solitude and abandonment, but derangement of the declining faculties, may steal on the calmest years of old age. The business and all the aspirations of by-gone years may have been long avoided, or cheerfully resigned; and yet, from the stores of past impressions, laid up in the mysterious chambers of the brain, may arise ideas and images capable of agitating and disturbing the feeble frame as if with a cruel dream. Former engagements will seem to be renewed, and all the bustle, and anxiety, and unquiet passions of active life revived. The aged gentleman, who has sought repose from the vain shadow in which for many years he walked, starts from his slumbers, hastens with tottering steps to commence an imaginary journey, chides the delay of his servants and his carriage, and exhausts himself with labours all in vain. Sudden restlessness recurs in the silent hours of the night, and the whole house is made wretched by the unnatural excitements and rage of a frantic, helpless old man. He declares that his house is surrounded by assassins, and in his faithful servants he only sees plunderers and robbers. After some months, this state is happily succeeded by a degree of insensibility; and life draws more gently to its close. But sometimes these unhappy agitations continue to the hour of death.

Less violent, but scarcely less pitiable delusions are often seen in elderly persons, who were of sane mind, until life began evidently to decline. The knowledge of familiar places and faces is lost; they think the profits of a laborious and provident life are wasted, and that their food is poisoned; and they vindicate all these delusions with all the energy left to those who are actually tottering on the brink of the grave. It is humiliating to know that even from the passion of love, in its most sentimental form, the disordered brain of the old is not secure. Esquirol mentions curious examples of this at the age of sixty-four, and even at the age of eighty, the subjects being women. The younger lady (sixty-four) was a widow of lively imagination, but in whose character no sensuality existed. She fell in love with a student of medicine, twenty-three years of age, who lived in her house. Her whole conduct became that of a love-sick girl; she was

agitated, excited, gay, sorrowful, impatient, and extravagant; formed schemes for the future, imagined various obstacles, and various forms of happy life, and, in short, gave up her whole mind to an attachment for a worthless young man, who ridiculed, despised, cheated, and deserted her. In other respects she conducted herself rationally; but she was unmoved by the pleasantries of her neighbours, and the jests of her servants. She became sleepless, lost her appetite, fell into melancholia, and died. The elder lady (eighty) fell desperately in love with a young gentleman distinguished in the revolution of 1830, and persuaded herself that her love was returned, and that her youth was restored, with all its physical functions. She took the utmost pains with her toilette; made imaginary assignations with her lover; took provisions with her into the fields, expecting that he would come and partake of them; thought she heard his voice; addressed him as if she saw him, or sought for him everywhere. After some months the brain became progressively weaker, and, in a year, she fell into a state of dementia, still continuing to speak when alone, and, in a low voice, often pronouncing the yet beloved name.

I knew a retired man of business, of tranquil life and easy fortune, who, as well as his attached wife, had attained the age of eighty years. Both became affected with senile insanity. Both were occasionally violent. Neither seemed to recognise the other. The old lady was the most restless: she did not know her own house; and would insist, at night, upon being taken home; so that her family were obliged to put her into a chair, and let her be drawn round the drive, and brought into the house again, which satisfied her. She knew all her friends and relatives, except her husband, whom she always treated as a stranger, speaking of her husband as of one absent. After dining with him, she would give orders to the servants to prepare Mr. —'s dinner, meaning her husband, as he would probably, she said, return rather late.

It is needless to add to these melancholy pictures; and I do not mean to say any more respecting the chronic forms of insanity. You have had opportunities of seeing numerous examples of all the forms of mental disorder which I have mentioned, in their acute or chronic form, in their tranquil or agitated state; mania, acute and chronic, with delusions or with paroxysms; melancholia; incoherence; imbecility; dementia; idiocy; and many of these in combination with epilepsy or paralysis. These are the forms of mental malady which you will most frequently meet with. Asylums for the insane are filled with patients, all of whom are so affected as plainly to be ranged in some one of these classes, however much their malady may differ in its causes, or in degree. In county asylums, the incurable patients remaining, the chronic forms of insanity are met with in the greatest number, and all the arrangements and regulations of an asylum must have a continual reference to them. On the comfort or discomfort resulting to them, the whole character of the asylum, either as a retreat, or as a place of cure, entirely depends. In all of these forms of infirmity and distraction, with the exception of the very lowest depths of idiocy and dementia, you may observe that some intelligence is yet spared, and some affections yet exist. Even in silent, apathetic, motionless patients, in a state of dementia, there is sometimes a visible emotion manifested when they are visited by their friends. They do not embrace them or speak to them, but their falling tears show that some remnant of former sensibilities remains deep in the oppressed heart even of these poor creatures, of whose recovery no expectation survives in those who loved them best, and who hoped the longest. Upon these remains of intelligence and feeling we base all our treatment; and it is this which makes a consideration of the construction and government of a lunatic asylum an important part of the study of the treatment of the insane. To this comprehensive subject, therefore, the remaining lectures of this course will be devoted.

FOREIGN DEPARTMENT.

M. HELOT ON SYPHILITIC AFFECTION OF THE TESTIS.

It is not necessary to go far back without finding the greatest confusion among authors who have treated of syphilitic affections of the testis. Orchitis, symptomatic of syphilis, has not only been confounded with gonorrhoeal enlargement of the testicle, but likewise with cancerous and scrofulous affections of that organ; its existence, even, has been denied by some writers.

We look in vain for any account of it in the earliest authors on venereal diseases. Ambrose Paré, who borrowed

his description from Thierry de Héry, is silent on the subject. Astruc, who considered gonorrhœa and syphilis as one and the same complaint, distinguished two varieties of venereal tumour of the testicle; the first he considered depended upon a suppressed gonorrhœal affection, the second he thought was due to a concealed syphilitic complaint coming on most frequently without gonorrhœa. This same author recommends similar treatment for these two affections, although he considers the first variety as the less serious. He admits its termination by resolution, suppuration, or cancerous degeneration.

Pott says, "there is a venereal affection of the testicle independent of gonorrhœa or other affection of the urethra. It is rarely an original symptom, and I never recollect to have met with a single example which had not been immediately preceded or accompanied by some other symptom evidently venereal; it has not the lancinating pains of scirrhus, and always yields to a well-conducted course of mercury."

John Hunter denies even the existence of the venereal testicle, which Swediam had never observed. He thus expresses himself:—"I would here remark that the coincidence of the swelling of the testicles, and a venereal irritation of the urethra, which is the commencement of the disease, has given rise to the belief, that every swelling of these organs has a syphilitic character; but after what I have said of the nature of this swelling when appertaining to a venereal affection, that is to say, it is nothing else than a sympathetic affection, and after my personal experience, which has never presented to my notice a testicle affected with venereal disease, either local or constitutional, one ought to conclude that such opinion is without any foundation."

Astley Cooper, in his surgical works, established very clearly the distinction between the gonorrhœal orchitis and venereal affection of the testis. The swelling of the testicle, says he, which comes on after gonorrhœa, has nothing venereal about it, and does not require the constitutional action of mercury for its cure; but the virus of gonorrhœa and syphilis differ in their nature as well as in their effects, and the swelling of the testicle in the first case is only sympathetic. Among the organs which the syphilitic virus may attack we must place the eye and the testicle. There are, nevertheless, persons who believe that the testicle is not susceptible of undergoing a constitutional syphilitic alteration, and who smile when one proposes the employment of mercury as a necessary means of cure for that affection; but I have so often seen this organ swollen during the existence of constitutional symptoms of syphilis; I have seen it yield so readily to mercurial treatment, and precisely at the same moment as the other venereal symptoms, that I regard that as an unreasonable opinion which doubts the susceptibility of the testicle to become affected by the venereal virus.

Dupuytren, in his clinical lectures, had likewise recognised the existence of the chronic syphilitic enlargement of the testicle. He drew the attention of surgeons to the complaint, so little known, that it was by no means rare to see operations performed for the removal of these organs, which a well-directed treatment would not fail to cure.

M. Ricord has latterly studied the evolution of the syphilitic affection of the testicle. We will borrow largely from the descriptions which he has furnished of this affection.

Definition.—We understand by venereal testicle, syphilitic testicle, syphilitic sarcocele, &c., that consecutive syphilitic affection of the organ, generally characterized by hypertrophy, with induration of the body of the testis itself, having an essentially chronic course, terminating usually in resolution, more or less complete, and sometimes in atrophy of the gland.

Period of occurrence.—After the definition of the venereal testicle, this affection will be always symptomatic of syphilis, whether the affection may have been at first hereditary, or whether it may have recognised as its cause, a previous direct infection. The venereal testicle is, to a certain extent, a symptom of transition between the secondary and tertiary symptoms, and never shows itself in the first few weeks following the primary symptoms; it seldom appears till six months after primary infection, and very often does not occur until years after. We observe it sometimes during the course of secondary symptoms, which occur late; but most frequently, the syphilitic testicle exists alone, or accompanied with pains in the bones, exostoses, or gummata.

Causes.—M. Ricord, on studying those circumstances which favour the evolution of the venereal testicle, thus expresses himself:—"The causes are those which, exclusive of syphilis, act on the testicle: anything which may, independently of syphilis, bring it into play, can become a cause of sarcocele. We shall presently see that the most frequent and powerful causes of syphilitic sarcocele are the causes of gonorrhœa.

The influence of gonorrhœa on the epididymis, and of the epididymis on the testicle, is such, that a simple gonorrhœa may become the cause of syphilitic sarcocele. It is in these cases that one finds a sort of change in the course of the disease—thus, for example, instead of commencing by the testicle itself, it attacks the epididymis. We repeat, that frequently gonorrhœal epididymitis may become an occasional cause under which syphilitic sarcocele is produced. We are convinced that it is only in cases where peculiar circumstances have acted on the epididymis, or on the testicle, that the complaint develops itself. A fall, or a blow, are so many causes of the evolution of the disease; prolonged continence, or the reverse, venereal excesses, the tuberculous, cancerous, or serofulous diathesis, are so many circumstances aiding the syphilitic diathesis." For my part, I have observed nothing which can justify these statements, made by a gentleman whose talent of observation is well known. Dupuytren distinctly states that the spontaneous development, without any assignable cause, such as contusions, blows, &c., of a tumour in the testicle, ought to make us suspect (particularly if there has been any syphilitic history) the nature of the affection. As to the influence of gonorrhœa or gonorrhœal epididymitis on the venereal testicle, one meets with patients who have had gonorrhœa, either simple or complicated with epididymitis, long before the appearance of sarcocele; and I would not wish to contest, in these cases, the particular predisposition to enlargement which the testicle has contracted under the influence of the syphilitic action; but it often happens that the testicle, which has been affected with the gonorrhœal malady, is not the one that suffers from the syphilitic complaint; and it is not an uncommon occurrence to see the syphilitic testicle occur on the right; whereas the gonorrhœal orchitis had existed on the left, side of the scrotum. At the same time, we may meet with a syphilitic affection of both testicles, not preceded by any gonorrhœal affection.

Symptoms.—Whatever may be the occasional causes tending to produce the syphilitic affection of the testicle, seldom can we observe any symptoms leading us to suppose that the disease is about to attack that organ. Patients are generally ignorant of the period at which the disease with which they are affected began; nevertheless, some may complain of a feeling of uneasiness, which directs their attention to the part, where, however, we are unable to discover anything remarkable.

In by far the majority of cases, the complaint commences without any pain either in the loins or testicle. As we follow the development of this affection, we find it commencing in the following manner:—The affected testicle becomes hard, and increases in size; but it is not by a successive and slow development that it attains that round or pear-shaped tumour comprehending the testis and epididymis, which Sir Astley Cooper and Dupuytren have described. The description which these surgeons have left us relate only to the complete development of the complaint.

How does the tumour, then, attain that development which occasionally increases two or three times its usual volume?

At the commencement of the affection, on one or two points of the surface of the testicle, we feel hard points—we seem to touch cartilage. These little nodules of induration extend, approach one another, unite, and finish by invading the whole organ. These indurated masses sometimes occupy only one side of the testicle; which, on the opposite side, retains its usual elasticity. This partial induration of the organ is easily felt in compressing the gland between the fingers. The induration, thus disposed in layers or zones, is not altogether destitute of regularity, and is not knotted. It would appear that the indurated kernels are altogether in the thickness of the testicle, which has not necessarily lost its shape, and its surface remains pretty regular. When these partial indurated masses have encircled the organ, the testicle presents a uniform hardness, which is attended usually with hypertrophy. We next see the size of the testicle augment, and its previous induration increase, instead of diminishing. This enlargement of the syphilitic testicle, first described by M. Ricord, is not the sole way in which the organ may become affected. Often the alteration may commence at once at all points of the organ—it loses its elasticity and its natural feeling, and becomes at the same time less sensitive when handled. In proportion as the testicle increases in size, the uniform and regular hardness becomes more and more evident, until it loses altogether its elasticity, and no longer possesses its natural suppleness. The swelling—now of a round or pear shape—becomes three or four times as large as the average volume of the gland.

Under certain circumstances, when, at its commencement, the development of the venereal testicle takes on a partial induration at one or two points of its surface; the tumour, when it has attained its full size, may present some irregularities on its surface, which have been supposed to give the characteristic symptoms to the venereal testicle.

In the syphilitic testicle, is the body of the testis alone affected? According to M. Ricord, most frequently the epididymis remains unaffected by the pathological changes undergone by the body of that organ. "When the tumour," says he, "has gained a size three or four times the volume of the natural testicle, if you examine it with attention, you no longer find epididymis—you can alone detect one uniform swelling. During a long period, we ourselves believed that the epididymis underwent the same alteration as the body of the testis itself; but pathological anatomy has taught us that the epididymis remains perfectly sound, only flattened against the organ itself. Not only do we find the epididymis unaffected, but likewise the spermatic cord." This is true in by far the majority of cases; nevertheless, it seems certain that the epididymis and spermatic cord may sometimes undergo changes similar to those met with in the body of the testis. We shall record further on an observation in which we observed a nodule on the epididymis analogous to those kernels of induration which we observe from time to time in the two testes of the same individual. This patient had never suffered from gonorrhœa or inflammatory affection of the epididymis; and resolution of the syphilitic induration equally took place in the epididymis and in the testicle.

Under other circumstances, when the epididymis does not participate at first in the induration of the testicle, do we (as some authors assert) see, after the testicle has undergone a complete induration, the epididymis become similarly affected, then indurated and amalgamated with the testicle, so as to form one tumour, round or pea-shaped? With M. Ricord, we must say we have never witnessed anything which can be said to authorize such an opinion.

M. Ricord has given, as a characteristic sign in syphilitic affection of the testicle, the preservation of the normal volume of the organ. In some cases, according to him, the induration is observed without hypertrophy. We have never observed such a case, but it is true that hypertrophy, which we always find present, has certain limits; thus we have never seen the venereal testicle attain to an enormous size, like other tumours of the testes.

When the organ has acquired a certain volume, it remains stationary during months or years; it is even susceptible, sometimes, of spontaneous diminution, to take on again a still larger increase. Under other circumstances, one sees the enlargement of the testicle suddenly disappear, and some time after a similar swelling will become developed in the other testicle.

According to Dupuytren, "one ought to consider as pathognomonic the disappearance of the enlargement of one or both testicles, and the appearance of a similar tumour on the opposite side. If the patient," says he, "states that the testicle, after having been affected six months, a year, or eighteen months, has regained its natural size, while the other organ is affected, you may have strong suspicion that the nature of the complaint is venereal."

"When one testicle enlarges," says Sir A. Cooper, "the other will be disposed to become affected likewise, and I think, in the majority of cases, the disease attacks the two glands in common." M. Ricord was of the same opinion, but at present he considers the affection of both testicles much less frequent. We have many times seen the simultaneous or successive affection of both organs.

Boyer says, likewise, that the two testicles may become affected at the same time; this circumstance becomes then an additional reason for believing that the affection is venereal.

When the testicle has gained its largest size, it presents the form of a round, cylindrical tumour, of a characteristic hardness, without any elasticity; the finger makes no impression upon it; but to the touch it has a feeling of a mass of cartilage. Whatever dimensions it may attain, it will always preserve its rounded, pear shape, the larger extremity below. The testicle preserves its form in other respects.

The cord is rarely affected; when it becomes enlarged it preserves its regular shape, and presents no uneven appearance. I have never seen it exceed the double or triple volume of the organ. This hypertrophy of the canal is not met with at the commencement of the affection, it only occurs when the tumour has attained a considerable size. Effusion into the tunica vaginalis usually accompanies it. In a large

number of cases, re-absorption of the fluid takes place; in other, but rarer cases, this effusion constitutes a true hydrocele, which requires an operation. When the tunica vaginalis is distended with fluid, it may be well to simply puncture the swelling, as we shall by that means be enabled to know the exact state of the testes. The tumour may commence so gradually that the patient will not, or only at a very late period, observe the affection; it is by chance, as we before observed, that the patient is made acquainted with his complaint.

It has happened to us, in examining the other symptoms of syphilis, to find the testicles affected to a great extent, and the patient unaware of anything amiss with these organs. Handling the testis produces no pain; pressure on any part of the gland will produce no suffering when the entire organ is compromised; and in these cases there is no fear of pain coming on in the gland some time after, as happens when violence has been offered, or pressure made on the testes, in other affections of those glands. This insensibility has been pointed out by Dupuytren as a characteristic symptom.

Pain, when it exists, is not seated in the tumour, but follows the course of the cord up to the lumbar region. M. Ricord says, that in some cases these pains are unbearable, and become much aggravated at night. Whatever be their cause, they are not peculiar to this affection of the testes, as we meet with them in the other forms, together with the nightly exacerbations.

Course and termination.—The duration of the disease is far from determinate; the complaint may last for years; patients have been known to be subject to a syphilitic testicle in this indolent state, for ten and even twenty years. It may terminate in resolution, but, most commonly, this can only be effected by an anti-syphilitic course. Spontaneous cure only takes place in recent cases; when, on the contrary, the disease is far advanced, and of long standing, the enlargement is permanent, and a cure takes place but imperfectly, even when treatment has been judicious. M. Ricord says, in other instances, the testicle may diminish in size, under treatment, until we find atrophy of the gland. The termination of the affection in suppuration has been admitted by the majority of authors, but this is by no means common. Dupuytren did not admit it; and M. Ricord, who considers it remarkably rare, attributes it to the softening of a gummous tumour; he likewise admits the existence of a variety of syphilitic testicle which he has called gummosis. But here is evidently an error, which that surgeon has since acknowledged. The gumma of the testicle ought not to enter into the description of the true syphilitic enlargement. In our thesis, we have accepted this distinction of two varieties, according to M. Ricord; the first, that which we have described, the second, when there is this gumma attended with suppuration; but such a distinction is founded on a misapprehension. We have observed the patient spoken of by M. Ricord in the *Bulletin de Therapeutique*, October, 1840. This patient had an ulcerated tubercular affection of the skin, with pains in the bones; his right testicle was as large as a hen's egg, and presented on its anterior and superior surface an enlargement, which singularly contrasted with the uniformity of the other portions of the testis. This enlargement became an abscess, but the hypertrophy and induration of the testicle disappeared very gradually. The left testicle was also indurated, but in a less degree, and got well by resolution. This patient then presented a double enlargement of the testes, which terminated by resolution, and at the same time, in a gumma, which burst; but these two lesions, distinct in their evolution, course, and termination, and which may occur in the same organ, ought not to be confounded together.

M. Ricord admits that scrofula and cancer may complicate syphilis in such a manner as to modify the course and termination of the syphilitic testicle. This distinguished surgeon admits, with the majority of practitioners, that the complaint may degenerate into cancerous affection. On this subject, he relates the following case:—"We had in our wards a man who had gone through all the stages of syphilis, and who presented a syphilitic testicle. Cured of syphilis, and of his syphilitic sarcocele, he returned to our wards six months after quitting the hospital, suffering from a new tumour in the scrotum. This tumour consisted of encephaloid disease of the testicle. We removed the gland, but the patient had a relapse of disease, and died." This case, reported by M. Ricord, does not prove the degeneration of the venereal testicle into cancer, for the patient was cured of the syphilitic testicle six months before a cancer commenced; there can be supposed, in this case, no relation or bond of union between these two affections. But can a syphilitic testicle degenerate into scrofula or cancerous disease? It is one of those matters that facts have

hitherto failed in establishing, and we think the weight of evidence tends to the contrary opinion—namely, that the two affections remain distinct from their commencement until their termination.

UNIVERSITY COLLEGE HOSPITAL.

CONTRIBUTIONS TO CLINICAL MEDICINE.

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LATENT PERICARDITIS, WITH PLEURO-PNEUMONIA.

CASE 35.—A man, aged thirty-two, after "catching cold," had cough with dyspnoea; three weeks later, pains in the chest, followed by dropsy of the legs; admitted, after two months, with great dyspnoea, anasarca, and signs of enlargement of the heart; death within twenty-four hours.—Morbid appearances, with remarks: Universal and rather soft adhesions of the pericardium; lymph upon the endocardium, with roughness of its surface; valves healthy; great dilatation, with some hypertrophy of left ventricle only; date of the cardiac inflammations; distinction between dilatation with hypertrophy, and hypertrophy with dilatation; causes and mechanism of the dilatation; cause of small aorta and feeble pulse; mode of death, by failure of the power of the left ventricle; much of the history of the disease legible in the morbid appearances; symptoms; pericarditis latent; signs of adhesion; of the dilatation with hypertrophy; of the endocarditis; bellows murmur, without valvular disease; its cause; effusion into right pleura; less into left; paleness and dryness of right lung; causes of the hydrothorax; signs; intercostal depressions not changed; no difference in movements of ribs; liver enlarged and diseased; spleen enlarged; causes; signs; kidneys enlarged; probably affected with Bright's disease; anasarca, its extent, seat, and causes.—Causes: 1, of the renal and hepatic disease, the former probably anterior to the cardiac disease; 2, of the cardiac inflammations.—Treatment: the pericarditis, being undiscovered, was left to Nature; appreciation of the consequences; treatment after admission.

GEORGE K—, aged thirty-two, admitted Tuesday, Feb. 11th, 1845, about the middle height, of rather slender make; a carpenter for the last seventeen years; is married, and has one child; takes about three pints of beer daily, and gets tipsy occasionally; has always had enough food, and of good quality, and sufficient clothing; has been in London three years, during which time he has lived in an open part of Camden-town; his father is alive, aged seventy-three, and has been subject to rheumatism; his mother is seventy-one years old, has enjoyed good health, and has never had rheumatism.

He had never any illness before the present one; he was never bulky, but always pretty strong. About a fortnight before last Christmas he "caught a cold," he had a cough, with a little expectoration and dyspnoea; he attributes the attack to working in draughts; has been constantly in the habit of getting wet; he has done no work since, but has never kept his bed. Three weeks since he was attacked with pain in the chest. A week ago, his feet and legs began to swell, and at the same time he had a dull heavy pain in the loins. Has been under medical treatment for the last month, and constantly getting worse.

Symptoms on admission.—Complains much of prostration of strength, but has not lost much flesh; skin dry; is unable to lie upon the back; he generally lies upon one side, and is easiest when propped up in bed; there is anasarca swelling of the lower extremities and depending parts of the trunk, but none in the face or upper extremities; sleeps little; countenance anxious; cheeks and lips pale and somewhat livid; jugular veins much distended; the dyspnoea is the most urgent symptom; respirations very frequent and shallow; the diaphragm and ribs move almost equally, and both sides of the chest alike; the intercostal depressions are distinctly visible, but not so deep as usual, and there is no difference between those of the two sides. There is a sense of tightness and uneasiness, but no acute pain, across the front of the chest, on both sides inferiorly; cough frequent and troublesome; expectoration scanty, thin, and colourless; he has palpitations occasionally.

Physical Signs.—**Lungs:** Some dullness on percussion under the right clavicle, and also on the lower part of both sides, both in front and laterally; some muco-crepitant rhonchus in front of the chest on both sides, but less inferiorly than under

the clavicles; behind, the sound on percussion is duller generally on the right side than on the left; the lower part of both sides is the duller, and the upper part duller than the middle; the respiratory murmur on both sides, inferiorly, is loud, harsh, and somewhat bronchial, and there is a slight admixture of muco-crepitant rhonchus; the vocal vibrations, as felt by the hand, are about equal on both sides, but stronger above than below.—**Heart:** The apex of the heart is felt in the space between the sixth and seventh ribs; the impulse is stronger than natural, and is felt over much too large a space; an indistinct systolic murmur is heard over the apex, and, therefore, several inches below, and in the same vertical line with the nipple; the cardiac dullness on percussion is complete only as high as the fourth rib on the left side, but there is a less amount of dullness up to the level of the third rib. Pulse about 120; very small and undulating; each beat is hardly perceptible, and seems to run into the succeeding one; tongue slightly furred; appetite bad; occasional thirst; bowels regular; some tenderness of the abdomen; the liver can be felt below the ribs, giving a sense of resistance to the hand applied over the epigastrium; the thin margin can be felt within an inch and a half of the umbilicus, and, by percussion, the organ is found to reach upwards to a level with the lower end of the sternum. Eight ounces of blood to be taken by cupping between the scapulae; a draught to be taken every three or four hours, containing half a drachm of spirit of sulphuric ether, five grains of carbonate of ammonia, three drops of oil of cajuput, and an ounce and a half of camphor mixture.

Feb. 12th.—About seven o'clock last evening he became much worse; the breathing was more hurried, the pulse scarcely perceptible at the wrist, and the face and lips more livid. Being seen by the house-physician, he was ordered to have a sinapism applied to the chest, and to take the medicine more frequently. He continued to sink gradually, and died at five A.M. to-day.

Inspection of the body, eight hours after death.—Not much emaciation; considerable oedema of the legs. The head was not examined, (the friends objecting).—**Chest:** Some old adhesions of the right pleura over the upper lobe of the lung, and also between the lobes; about fourteen ounces of serum in its cavity; very slight old adhesions of the left pleura; none to the pericardium; from four to six ounces of serum in its cavity.—**Right lung** diminished in volume, and pale in colour; the substance of it contained less air and blood than usual, and very little serum; the texture was brittle, but such portions of the lung as were tested were found to float in water.—**Left lung** of the full size; contained much serosity, and a good deal of air and blood; it was brittle, and some portions were found to sink in water; the mucous membrane of the bronchi in both lungs was of a red colour in the large tubes, but pale in the smaller ones. Weight of the right lung, twenty-one ounces and a half avoirdupois; and of the left, twenty-four ounces.—**Heart:** The anterior surface of the heart was uncovered by the lungs to a great extent, and the organ, as a whole, was found to be much enlarged; the anterior surface measured six and a half or seven inches in its transverse diameter, and the length was somewhat less; the pericardium was universally adherent; the adhesions were close and easily torn, yet the uniting medium was not perfectly soft; the false membrane was of a red colour, and in some parts two or three lines in thickness; over the posterior and lateral surfaces of the left ventricle, about the base, a layer of rather soft lymph could be readily detached; the subjacent serous membrane was thickened, and this or the subserous tissue was redder than usual.—**Left ventricle:** The cavity was enormously dilated, its internal circumference being nine inches near the base, and the length, from the attachment of the sigmoid valves to the apex, four inches; the walls were not distinctly thickened—they measured eight lines at the base, and one line and a half at the apex; the columnæ carneæ were not thicker than usual; the endocardium was very much thickened and opaque, especially over one of the columnæ carneæ of the mitral valve and the ventricular surface near to it; to the thickened part near the apex was attached a layer of fibrine, less dense than that in an aneurismal sac; some portions of this substance were red, and adhered more closely than the rest; and on detaching them, the endocardium beneath was found to have lost its smooth, shining aspect; mitral valve healthy; the orifice dilated, since it admitted four fingers; aortic valves healthy.—**Right ventricle:** Walls of the ordinary thickness; the cavity appeared to be not more than one-third the size of that of the left ventricle; its length measured four inches, and its circumference four inches and three quarters; endocardium and valves healthy; the tricuspid orifice admitted three fingers rather too freely;

both auricles were rather large; foramen ovale closed; aorta and pulmonary artery healthy; circumference of the aorta, (opposite to the free border of the sigmoid valves), three inches, and of the pulmonary artery, three inches eleven lines.—*Blood*: The left ventricle contained a large soft coagulum, consisting chiefly, but not wholly, of black blood; a small coagulum, chiefly fibrinous, in the right ventricle; weight of the heart, free of blood, twenty-one ounces and three quarters avoirdupois.—*Abdomen*: Peritonæum healthy; no effusion of serum; stomach and intestines healthy externally; they were not opened.—*Liver* enlarged, especially the right lobe; surface smooth; colour paler than ordinary, and had a yellowish tint, both internally and externally; a good deal of blood escaped from the divided vessels; weight, sixty-five ounces and a half avoirdupois.—*Spleen* larger than usual, deep-coloured, and brittle; weight, five ounces avoirdupois.—*Kidneys*: Left, considerably increased in volume; capsule firmly adherent; on tearing it off, portions of the cortical substance adhered to it, and deep rents were also made in the substance of the organ; surface paler than natural; the kidney being divided, the cortical substance was seen to be thicker than usual, and paler than the tubular; the substance was too easily lacerable; no deposit of foreign matter visible to the naked eye; pelvis healthy. The right kidney exhibited the same appearances, but was smaller than the left. Weight of the left, seven ounces; of the right, five ounces and a half.—*Urinary bladder* contracted and empty.

SUMMARY OF THE CASE, WITH REMARKS.

Symptoms, morbid appearances, and diagnosis.—I saw this patient only once, for he died within twenty-four hours after being admitted into the hospital. From the examination which I was able to make, I came to the conclusion that the man had great hypertrophy, with dilatation of the left ventricle of the heart, with perhaps some mitral-valve disease; some effusion into the pleuræ, chiefly the right; bronchitis, and enlargement of the liver. The symptoms and grounds of diagnosis of these several affections will, however, be most profitably discussed in connexion with the appearances found after death.

Heart, morbid appearances and pathology.—1. The pericarditis was evidently of recent date. The adhesions were not so perfectly soft as they are found to be in a case which has terminated fatally within a week or ten days from the commencement of the inflammation, but the uniting medium was much softer and more deeply coloured than in cases of adhesion of long standing.

2. There had been inflammation of the lining membrane also, not, as is more usual, about the valves, but in the body of the ventricle. Perhaps the considerable thickening and opacity of the membrane may be indicative of former inflammation, but other appearances must be referred to a recent endocarditis. Such appearances are, the coloured fibrinous matter adherent to the lining membrane, and the loss of smoothness, and of the natural shining aspect of this tissue at the points of adhesion. Whether this fibrine had been secreted by the inflamed membrane, or had been deposited from the blood, in consequence of some modification of the properties of this fluid, or of the affinities or other relations naturally existing between it and the endocardium, cannot perhaps be determined in the present case.

3. There was enormous dilatation, of the left ventricle almost exclusively; and this increase in its dimensions was found to be in the circumference of the ventricle chiefly, the length being much less affected. The walls retained their natural thickness, and therefore the hypertrophy, although absolutely considerable, was yet of trifling amount in comparison with the dilatation. The dilatation constituted the leading feature of the disease, and the hypertrophy was only subordinate. The case would therefore be more accurately designated as one of great dilatation with hypertrophy, than as one of great hypertrophy with dilatation.

4. What was the cause of the dilatation with hypertrophy, and of the preponderance of the dilatation? It seems to me probable that the pericarditis was the main cause, aided, perhaps, by the endocarditis. Several circumstances support this view, besides the absence of any other obvious cause. We know that inflammation of the pericardium leads to hypertrophy. The adhesions of the pericardium would probably interfere with the free contraction of the ventricle. The muscular tissue may have been somewhat softened at the same time by the inflammation. Hence, the propelling power of the heart being diminished, the blood would accumulate, and this accumulation would co-operate with any softening of the muscular texture in producing a permanent dilatation, as

well as an amount of it disproportioned to the hypertrophy. The left ventricle might be so much more dilated than the right, in consequence of the greater resistance opposed to its contractions, and the consequently greater demand for power. (See remarks on case No. 30.) The mitral orifice would dilate with the ventricle, and probably permit regurgitation. This, with the accumulation of blood in the ventricle, would lead to an accumulation in the auricles and lungs; yet none of the other cavities were much dilated, or, at least, not permanently so. This fact seems to imply that the whole disease of the heart was recent, for accumulation of blood in the auricles and right ventricle, when habitual, and of considerable duration, always leads to hypertrophy with dilatation.

5. The small size of the aorta, compared with that of the pulmonary artery, proves that the former vessel had been imperfectly filled; partly, perhaps, owing to regurgitation through the mitral valve, but chiefly to the weakness of the left ventricle; whilst the latter would be distended through the obstruction to the pulmonary circulation. Hence the explanation of the small, faltering pulse, during life.

6. We may further see the mode in which death was brought about. The dilatation and feebleness of the left ventricle, and the consequent accumulation of blood in it, gradually reached that point when the organ could no longer propel the blood to an extent sufficient to support life. Accordingly, after death, the left ventricle was found full of blood, much fuller than the right, which is just the reverse of what occurs in asphyxia. It is an example of death arising from a gradual failure in the power of the left ventricle of the heart.

7. The case furnishes an interesting illustration of the fact, that we can often read many circumstances in the history of a disease by a comparison of the morbid appearances alone. Apart altogether from the history obtained during life, we learn here that the whole affection was recent; in what organ, and in what part of it, the disease began; what was the order of succession in which the structural changes found had occurred; the mechanism of their production, and the mode in which the fatal termination was brought about.

Symptoms.—1. The pericarditis, although intense and universal, seems never to have been suspected during life. The disease had run its course, and terminated in adhesions, no doubt before the patient came into the hospital. There had been some pain in "the chest," which may have been caused by the pericarditis. When this disease began cannot be exactly determined. Supposing it to have been the first of the thoracic affections, it must have appeared about two months before the fatal termination.

2. The adhesions of the pericardium may, perhaps, explain one or two of the signs observed—e. g., the position of the apex of the heart. This was lower than usual, (between the sixth and seventh ribs,) and at the same time not so far to the left side as is usual in simple enlargement of the heart. When the volume of the heart is increased, and the pericardium is free from adhesions, the additional space which the organ requires is generally obtained by the apex extending itself towards the left side. The base of the heart in many cases hardly rises above its healthy level, and the apex may not be much, and very often it is not at all, lower than in health. If, however, by adhesions of the pericardium, the apex be prevented, by moving towards the left side, the increased space must be obtained either by the elevation of the base of the organ, or by the depression of the apex, or by both in different degrees, according to the physical circumstances of each individual case. (See Case 30, and the remarks.)

3. An undulatory movement might have been expected to be visible in the cardiac region in these circumstances. No mention is made of it. If it did not exist, the absence of it is probably to be ascribed to the great feebleness of the heart's contractions.

4. The symptoms of the great dilatation, with hypertrophy and consequent obstruction of the circulation, were, the greatly-increased space over which the impulse was felt, and the corresponding extent of dullness on percussion; the low position of the apex; the feeble and undulatory, yet frequent, pulse; perhaps the sense of tightness in the lower part of the chest, and much of the dyspnoea, which was aggravated by lying upon the back, and by a low position in the bed; the pallid, yet slightly livid, face, and distended jugular veins. The natural sounds of the heart must, doubtless, have been diminished, but if so, the fact has not been recorded.

5. To what cause must we ascribe the feeble systolic murmur heard at the apex of the heart? There was, probably, regurgitation through the mitral orifice; but this, when the valve is healthy, as in the present case, does not usually give

rise to a murmur. The regurgitating current would have to pass over the portion of endocardium in the ventricle itself, which was rendered rough by the deposition or exudation of lymph. This seems to be the only cause, and is probably an adequate one, for the production of so feeble a murmur.

6. There was no sign of the acute endocarditis, besides the murmur just named, and, therefore, no sign by which this inflammation could be distinguished from old valvular disease.

Lungs.—1. The fluid in the pleura was, of course, due to the obstruction in the heart and the resulting venous engorgement. I think I have observed in most such cases, as in this, that the effusion was greater in the right pleura than in the left.

2. The right lung exhibited the dry and exsanguine appearances usually resulting from the mechanical compression of it by serum in the pleura.

3. The signs and symptoms belonging to the lungs are sufficiently detailed in the history, and they correspond with the appearances found after death. The dulness was greatest on the right side; but there was a little at the apex of the right lung, for which there was nothing to account but the increased compactness of its tissue, produced by the pressure of the serum. The intercostal depressions were not effaced, and there was no difference between those of the two sides. The vocal vibrations, as felt by the hand, were stronger above than below. The respiration was somewhat bronchial over the upper part of the chest, without any disease of the texture of the lung. There was no difference in the movements of the two sides, and the signs of bronchitis were most observable above where there was least fluid found.

Liver and spleen.—The liver and spleen were both enlarged, especially the former. The enlargement of the liver might be due to the engorgement of the venous system alone, or there might be, in addition, those changes of structure which constitute cirrhosis in an early stage. This supposition agrees with the colour of the organ. The enlargement was detected during life by the protrusion of the liver downwards. This protrusion, however, was increased by a slight displacement of the organ by the pressure of fluid in the right pleura.

Kidneys.—The kidneys were very obviously diseased, but the exact nature of the disease cannot now be determined. The volume was increased, especially of the cortical substance, and of the left kidney. The structure was likewise altered, but in what way I believe the microscope alone could determine, and this was not employed. The appearances to the naked eye were exactly the same as in various kidneys which have been found, under the microscope, to exhibit changes of structure which have hitherto been generally regarded as indicative of one of the forms of Bright's disease. The patient died so soon after admission, that no opportunity was afforded of examining the urine.

Dropsy.—Besides the hydrothorax, already noticed, there was dropsy of the cellular tissue of the lower extremities, and depending parts of the trunk, but none of the upper extremities or face. These are the characters of dropsy from chest disease, rather than from renal disease. The two would probably co-operate in its production, and the dropsy was moderate only in amount, perhaps because the chief cause of it; the cardiac disease was of short duration.

Causes.—1. The renal and hepatic disease might arise from habitual exposure to cold, and from frequently getting wet, together with a certain amount of intemperance in drinking, all of which are referred to in the history.

2. It is probable that the renal disease was of longer standing than that of the heart, and, therefore, that the latter had nothing to do with the production of the former.

3. *Of the pericarditis and endocarditis.*—The patient had never had any rheumatism to which these affections could be referred. He ascribed the illness to working in draughts of air; but whether the cardiac inflammations began then, or only the bronchitis, is uncertain. Viewing this case in connexion with others, I am disposed to think it most likely that the disease of the kidneys was the great cause of the inflammations in question, and that if there were any other cause, such as exposure to cold air, its influence was of secondary importance. There is no reason to suppose that the man had been more exposed to cold about the time when the pericarditis appeared, than he had been for some time previously.

Treatment.—1. As the pericarditis had never been discovered, so it was never treated; the disease ran its natural course. What was the result? We have seen reason to think that this inflammation was the cause of death. Is the fatal result, then, to be ascribed to the absence of treatment? I think such a conclusion, whether true or false, is not warranted by the facts. Death was produced indirectly, only by

the pericarditis. Dilatation, and perhaps softening of the left ventricle, with consequent loss of the power required to carry on the circulation, were the immediate results. Are these results less frequent in cases of pericarditis treated secundum artem, than in those left to nature? Perhaps they are; and it is, *a priori*, reasonable to believe that they are; but we are still waiting for the proof. Cases and figures have yet to be adduced, and without these, bold assertions will have very little weight. If the case had been treated, it might, and probably would, have been argued, that because there were universal adhesions of the pericardium, and because all other signs of inflammation had almost vanished, therefore the most favourable termination of the inflammation had occurred, and the best cure had been effected of which the nature of the case admitted.

In the hospital, we had to treat, not the pericarditis, but the organic disease of the heart and its results. The power of the heart was evidently deficient, as was shown by the pulse, and there was at the same time a great accumulation of blood in the veins. These circumstances suggested the means which were employed—viz., stimulants (ammonia and ether) to sustain the heart's power, and a small abstraction of blood by cupping, with a view to relieve the great venous turgescence.

CUMBERLAND INFIRMARY, CARLISLE.

Cases reported by W. B. PAGE, Esq., Surgeon to the Infirmary.

CONCUSSION OF THE RETINA.—SUDDEN AND COMPLETE AMAUROSIS, CONTINUING NEARLY SIX WEEKS.—RECOVERY.

JOSEPH L—, aged thirty, an agricultural labourer, admitted into the Cumberland Infirmary, Dec. 17th, with amaurosis of the right eye, produced by a blow. He had lost the sight of the left eye from organic disease, which he states came on gradually two or three years since, unattended with pain, and without any obvious cause. There is now capsular cataract, which renders it impossible to discover that diseased state which probably exists posterior to the lens, he being unable to distinguish light from darkness.

On the 10th of November, a man with whom he was disputing, struck him violently with his fist upon the right eye; he was nearly knocked down by the force of the blow, and a slight wound was inflicted over the outer angle of the orbit. At the moment the blow was received, he saw a brilliant flash of light in the injured eye; but immediately afterwards, the organ was found to be totally insensible to light. This state of total darkness continued, with but little variation, until the period of his admission, when he was just able to distinguish night from day, but perfectly incapable of seeing anything. For a few days after the injury, he had a slight pain in the head, and he has occasionally observed *muscæ volitantes*, although to no very great extent.

When admitted, he entered the room with the vacant stare peculiar to amaurotic patients; the pupil was dilated and insensible, but there was no visible alteration in the appearance of the eye. The sudden and complete amaurosis which resulted from the injury was sufficient of itself to render the prognosis exceedingly doubtful, and when to this was added the length of time which had elapsed since the receipt of the blow, there appeared but little probability that any treatment which might be adopted would be attended with a beneficial result. The circumstance of the opposite eye having been lost, while it lessened the chance of recovery, rendered it of vast importance to the patient that no means should be left untried. It was resolved to administer mercury until the system became slightly affected by it, and to keep up its effect for some time, and also to abstract blood occasionally by cupping, in such quantities, and at such intervals, as the state of the patient, and the benefits resulting from it, seemed to warrant; carrying it to such an extent as to relieve any local congestion, without materially lessening the powers of the patient.

Accordingly, on the following day, Dec. 18th, he was ordered to be cupped on the right temple to six ounces; to take five grains of blue pill three times a day, and to be put on milk diet. The next day he stated that he could distinguish light from darkness more plainly than he had hitherto done, although he was still unable to point out in what part of the ward the windows were situated.

23rd.—The breath has a slight mercurial tæst. He is able to see the hand if held up between the eye and the light, and to count the number of fingers. Cupping to be repeated to eight ounces, behind the mastoid process.

25th.—The gums being slightly affected, the blue pill was ordered to be given only twice a day.

30th.—The system being now evidently under the influence of mercury to as great an extent as appeared desirable, the blue pill was ordered to be given at night only. The sight has continued uninterruptedly and rapidly to improve, inasmuch that he is able to distinguish one object from another, as a pencil-case from a pocket-knife. Ordered to be cupped to six ounces.

Jan. 4th.—Is able to read some large printed letters on a board in the ward, when held close to the eyes.

14th.—Can now make out the ordinary type of an octavo volume, although with some difficulty. Little obvious improvement now took place until the

26th.—When he was ordered cupping to four ounces.

Feb. 3rd.—The cupping having been apparently attended with much benefit, it was repeated.

12th.—Was again cupped. He was then able to read with comparative ease.

18th.—Discharged, being able to see perfectly.

A month afterwards, this patient came to the hospital as desired; from the time he left, he has been employed in ploughing. He can read the smallest type; in short, the sight of the eye is fully restored.

ON THE

ACTION OF AMMONIA IN HOOPING-COUGH.

By R. H. ALLNATT, M.D., London.

IN the review of Dr. Aberle's work on "Tussis Convulsiva," (THE LANCET, present volume, p. 551.) allusion is made to the treatment adopted by Dr. Wachtl, of Vienna, who recommends the employment of the ammoniated tincture of cochineal; and you ask, "how far might the ammonia contribute towards the good effect of the mixture?"

The immediate cause of the spasmodic action of the glottis, which occurs in this disorder, after the febrile action has, to a certain degree, subsided, appears to me to arise from morbid irritability of the stomach, which engenders an irritating secretion; which secretion, involving the bronchial tubes, trachea, and fauces, spurs their exhalant vessels to inordinate action. The excretions of the stomach, in this stage of the disease, if tested, will be found, almost invariably, to be of extreme acidity, sometimes so intense, as to excoriate in their passage the oesophagus, and roughen the teeth, as effectually as would a dose of dilute hydrochloric acid. Emetics, so greatly extolled for their virtues in subduing the paroxysms of hooping cough, act as temporary alleviants, by ridding the stomach of its acrid secretion; but the relief is transient, because the organ speedily resumes its disordered action. Many years ago, during a temporary visit at a populous town in the west of England, while the hooping-cough raged as an endemic to an alarming extent, many children falling victims to its attacks, I had an opportunity of testing the merits of practice founded upon the views I have here taken, and the result fully justified my anticipations, as the cases, however urgent, were rapidly and permanently relieved.

Dr. Wachtl, by his ammoniacal mixture, is stated to have "cured nine cases in from three to eleven days," and I fully believe the assertion to be quite consistent with truth. The liquor ammoniac, the active ingredient of the formula, neutralized, in some degree, the acid matter with which it came in contact, and hence arose the benefit; but we have other alkalies, less stimulating in their action, and much more effectual, than ammonia.

After preliminary purgation with calomel, (conjoined with antimony, if the febrile symptoms run high,) and an occasional emetic to clear the stomach, nothing in my experience is so efficacious as small and repeated doses of the carbonate of potassa. The following combination has been extensively distributed to the poor in seasons when hooping-cough has raged as an epidemic, and I can attest the almost invariable success which has attended its administration—what portion of the merit is due to the cochineal I do not know:—Take of carbonate of potassa, one drachm; cochineal, ten grains; boiling water, half-a-pint. For an infant, one teaspoonful to be taken thrice daily, the dose increased according to age.

In violent cases, much benefit will often accrue from the simultaneous employment of the following liniment, which is to be well rubbed, morning and night, over the whole course of the spine:—Hartshorn, and oil of amber, of each half an ounce. Mix for a liniment.

Suffolk-place, Pall Mall East, May, 1846.

LIABILITIES OF THE MUSCLE IN DISEASE.

AMONG the most frequent and remarkable, are the effects of restless, irregular contraction, that follow in the fibre, from habitual excess in the use of fermented liquors, the delirium tremens of modern nosology. Great exception has been taken to this compound phrase, which, nevertheless, is wide and true, expressing, as it does in this disorder, the intimate relation, by symptoms, between the cerebral and the self-motive functions—the close, constant, and mutual dependence of mind and muscle. Here, in the King's ward (May 18th) is an instance of the disease in question,—severe, well marked for the most part, but incomplete, for the muscles are at rest,—delirium tremens without the tremor,—a solecism in language,—in practice, as you see, a fact. This it is to make the patient our teacher—this is bed-side physic. Clinical medicine is in this way especially corrective, by what it misses or denies. It remarks, in the contest of symptoms, on all which they want to be complete. How often have we verified this method of study in our wards! Acute rheumatism, or gout, prevailing in the system for days together, constitutional but not arthritic,—idiopathic erysipelas, not acknowledged as such, because not yet determined by swelling, redness, and vesication, to the skin; scarlet fever of approved character and severity, catching and caught, yet undistinguished by a rash.

The patient, (E. N—, of middle age, a confirmed drunkard,) when we first saw him in the surgeons' ward, the day before yesterday, (May 16th,) had been without sleep for many successive nights. His manner was much excited, and he was passing everything under him as he lay in bed; at the same time, he declared himself perfectly well, and was repeatedly asking for his clothes, that he might get up and go home to his wife. This afternoon, as you see, in manner and appearance, he is comparatively well, having been quiet, with sleep, for the last two nights; he is, however, still under the influence of the disorder, being unable, as he assures us, to command either the rectum or the bladder in the regulation of their excretory functions. I attribute the improvement in this man's condition principally to a suppository of one grain of extract of opium, with ten grains of extract of gentian, twice administered since our last visit. He had previously swallowed twenty minims of laudanum in an ammoniated saline draught, every six hours, from May 7th to May 16th, with no relief, but rather with aggravation of all his symptoms. On the latter day, he commenced taking a draught—compound spirit of sulphuric ether, a drachm; compound tincture of camphor, two drachms; sesquicarbonate of ammonia, six minims, in pimento water—at the same interval of six hours; so that he has taken considerably less opium in the last forty-eight hours than in any similar period of time during his illness.

In this, as in other inveterate cases of delirium tremens, it would seem that the nervous sympathies of the stomach were exhausted, and its absorbing faculties impaired, by the continual reaction of beer and alcohol upon its living surface. Opium, it is notorious, may, in such cases, be swallowed in very large doses, and for weeks in succession, with no effect that can be appreciated on the muscular or other symptoms of the patient. It is, indeed, as if the stomach supplied from its own secretions an antidote to the drug. Surely, then, with such open evidence of perverted function in the great organ of assimilation, it is but in common sense that we should apply our specifics—if such there be—to other surfaces, and in other ways,—to the skin, the lungs, or the rectum,—by inunction, inhalation, or suppository. If this be theory, there is no harm in it; and it is, moreover, confirmed by sufficient experience. In my practice out of this hospital, I have obtained, in many instances, the best effects from opium, used in contact with the bowel, when no good came from it as a draught or pill in the stomach. And the suggestion may be of practical use in the treatment of the more violent forms of muscular disorder, by which, as in hydrophobia, deglutition is prevented. In a case of traumatic tetanus, to which, while under the care of Mr. W. Scott, of Bromley, I was summoned late on a winter night in 1844, it was agreed between us that the opium, which up to that period had been in various ways administered, should thenceforward be entirely discontinued—that the port wine, sherry, and brandy, already prescribed, should be given, as before, in large and frequent quantities, and that suppositories of quinine, camphor, and ammonia, should be repeatedly introduced to the lower bowel. The case was of the worst kind, and did well. We kept the stomach for the wine, employing the rectum for the physic. On a careful review of all the circumstances, I attribute this patient's recovery, in great measure, to the continued use of the tonic and

stimulant suppositories. An account of this highly-interesting case, drawn up by Mr. W. Scott, was read before the Medico-Chirurgical Society, in the spring of 1845, and from its practical value might well have been published in their Transactions.

On May the 19th, this man was free from all urgent symptoms, sleeping well, and with full control of his rectum and bladder.

May, 1846.

J. A. W.

ON CAPSULAR CATARACT.

By F. H. BRETT, Esq., F.R.C.S., late Superintendent of the Eye Infirmary, Calcutta; Surgeon to the Western Institution for Diseases of the Eye.

SOME months since, I observed a communication in *THE LANCET*, announcing a novel method of operating for cataract, as practised by M. Sichel, an ophthalmic surgeon of Paris—viz., that of making an incision through the sclerotica and choroid, followed by the introduction of a hook, as adapted to capsular cataracts. In the third volume of the *India Journal of Medical and Physical Science* for 1837, I published an account of this operation, with a drawing of the instruments and mode of operating. The method suggested itself to me without the knowledge of any surgeon having previously adopted it. Subsequent experience has taught me to abandon this operation; and as truth, unbiassed by any favourite theory, is the object which I have in view in making this communication, I am anxious that inexperienced operators may not be misled by this “novel mode of operating.” I never practised it but on two occasions, and those only where the capsular cataracts were small, so that the incision into the sclerotica and sub-jacent coats of the eye was not very extensive. I have made the incision transversely—i. e., at right angles to the direction of the fibres of the recti muscles; and perpendicularly—i. e., in a parallel direction to that of the fibres of the recti muscles. In both cases, the vitreous humour is apt to escape in considerable quantity. But there is this further disadvantage in the latter method—that not only are the sclerotic and choroid wounded, but, from the incision extending much further back, the sensible retina, the membrana Jacobi, and the ciliary nerves, are likewise injured. It is therefore a most hazardous operation, and not to be depended on even under the most experienced and skilful hands.

During a recent visit to Paris, I ascertained that this operation is not generally approved of at the French metropolis. It cannot be denied, that in all operations posterior to the cornea and iris, whether with the needle or by incision, most important and delicate structures are injured. Besides the sclerotic, and the vascular choroid coats, the minute filaments of the ciliary nerves are wounded, and deep-seated inflammatory action is not unfrequently set up, even in the simple operation for “displacement” of the opaque lens; whereas the cornea is wounded by a clean incision with comparative impunity. We constantly observe, in ophthalmic practice, that wounds and accidents to the cornea inflicted by sharp instruments, when judiciously treated, are not dangerous: they heal by first intention, without involving the transparency of this structure. With still greater impunity, under skilful hands, guided by scientific principles, can wounds be designedly inflicted on this part, and this not only once, but repeatedly. It may therefore properly be asked, *cui bono* such dangerous measures—such penetration of vitally important structures by the posterior operation. A minute flat needle, very sharp at its point and edges to the extent of one line, introduced through the cornea near its margin, or anywhere outside of the circumference of the most dilated pupil, can be readily carried through the aqueous chamber to the opaque capsule, (or to a capsulo-lenticular cataract, where the lens is either soft or fluid.) A slight rotatory motion is then effected; and on withdrawing the needle, what is the consequence? The aqueous humour escapes, and the shreds of capsule, as well as any flocculent or softer portions of the lens, immediately protrude forward into the anterior chamber; the pupil is preserved in a state of dilatation by the unguentum belladonnæ. Other remaining shreds of capsule retract behind the iris; the sharpness of the needle is adequate to dividing the toughest capsules. Such an operation may be repeated twice, thrice, or as often as requisite, with a certainty of ultimate, often of speedy success, and little or no injury to the visual organ. Let us therefore hear no more of these posterior operations of extraction—“*craignez de vous tromper; mais ne craignez jamais de laisser voir aux autres que vous avez été trompé*”

Dorset-street, Portman-square, May 1846.

CASE OF LARGE STRANGULATED INGUINAL HERNIA.—OPERATION.—RECOVERY.

By THOMAS BOURNE, Esq., Surgeon, Radstock, near Bath.

DANIEL R—, of Radstock, aged seventy, formerly a sailor, and who was at the battle of Trafalgar, where he was severely wounded in the head, states that he has had paralysis of the right side for fourteen years, and been the subject of a large reducible inguinal hernia of the same side for thirty-six years.

On Saturday, April 19th, at seven p.m., I was sent for to see him, when I found him suffering from all the symptoms of strangulation. I applied the taxis about a quarter of an hour, and this failing, I had him placed in a warm bath, where I employed it again; afterwards a tobacco enema was administered, without success. As fecal vomiting had taken place, and all the symptoms were becoming more aggravated, I urgently advised an operation, to which the patient and his friends soon consented.

At midnight, having made the preliminary arrangements, I commenced by making an incision from the upper part of the swelling, carrying it down to the lower part. Having carefully cut through the coverings, I reached the sac, which I divided above and below, and found a large quantity of thickened omentum adherent to it, requiring considerable force for its separation; this accomplished, I felt for the stricture, which was found to be at the abdominal ring. Having passed my finger to this situation, I divided it with a blunt-pointed bistoury, cutting directly upwards. The bowel had a favourable appearance, and was at once returned. Sutures and plaster were applied to the wound; an opiate was afterwards given, and the patient placed in bed.

19th.—Slept a little during the night; bowels opened twice; he is somewhat feverish.

20th.—Has passed a good night; there is slight tenderness on pressing the abdomen. To have a dose of castor-oil and a saline mixture; low diet. Bowels have acted rather freely.

21st.—Has had rather a restless night; face flushed; tongue furred; pulse quick; bowels opened once; no abdominal tenderness.

22nd.—Slept well; the wound has been dressed, and looks favourable; there is less fever. To continue the saline mixture and low diet.

23rd.—There is great enlargement of the scrotum, and the upper part of the wound discharges pus; one of the sutures to be removed, a poultice applied to the wound, and a spirit-lotion to the scrotum; to have a more liberal diet.

24th.—Passed a good night; bowels have been opened; the wound and scrotum look better; appetite improving.

25th.—From this date up to the present period (May 6th, 1846) the symptoms have been of a favourable character; the wound has nearly healed; the bowels have acted regularly, and the appetite continued good.

Remarks.—This case is interesting on account of the very large size of the hernia, which became strangulated in a patient who had been paralysed for fourteen years; and the firm and old adhesions of thickened omentum to the sac precluded all hope of relief, excepting by an operation, which he bore well, and which terminated favourably.

Radstock, near Bath, May, 1846.

CONTRIBUTIONS TO THE PATHOLOGY, DIAGNOSIS, AND TREATMENT, OF VENEREAL DISEASES.

By WILLIAM ACTON, ESQ.

SURGEON TO THE ISLINGTON DISPENSARY, AND FORMERLY EXTERNE TO THE VENEREAL HOSPITALS OF PARIS.

ON THE EMPLOYMENT OF NITRATE OF SILVER IN THE TREATMENT OF ULCERS ON THE GENITAL ORGANS.

Cases in which nitrate of silver should not be employed; can caustic drive the disease into the system? Is the salt capable of producing bubo? Considerations on the necessity for general treatment; mercury objected to, and the opinions of its advocates considered; on the inutility of sarsaparilla and iodide of potassium.

In my last paper I attempted to lay down as a general rule, that all sores on the genital organs should be treated with caustic; in my present communication I propose speaking of the counter-indications to that treatment.

Experiments on a large scale clearly show that after a score

has existed three days, no means we can take will invariably succeed in preventing the constitution becoming contaminated; up to that period, however, we may consider that the disease is completely under our control, if the preceding directions have been followed. Although, then, we cannot absolutely promise our patient freedom from secondary symptoms after that time, still, in nine cases out of ten, we may reasonably hope that they will not follow; and therefore, so far as local and general measures are considered, cauterization is most desirable and needed; still, with all these indications calling for its use, circumstances may be present which counter-indicate the employment of caustic.

In the first rank stands acute inflammation. Experience proves here, as elsewhere, that although nitrate of silver may be useful in allaying irritability, and in curing subacute inflammations, its employment in acute inflammatory attacks is very doubtful, or, at most, useful in but a very few instances; and though surgeons may derive great benefit from its employment in chronic ophthalmia, in scrofulous constitutions, and in subacute inflammation of the urethra, few, if any, ever recommend it in acute affections of these organs, unless in the single exception of erysipelatous affections of the skin, in which it has been, like many other applications, much vaunted, and subsequently laid aside. When chancres are attended with acute inflammation, caustic will be worse than useless; experiments prove that phagedena destroys the virus, and they likewise show us that caustic increases instead of allaying inflammation; therefore, when present, recourse must be had to opium, rather than to nitrate of silver, as I shall attempt to show on some subsequent occasion.

But it is not alone in acute inflammatory chancres that we must lay aside the use of caustic; we should never apply the salt when previous applications have irritated the sores, or we might continue its use *ad infinitum*, without healing the ulcer.

On April 12th, 1846, a gentleman who had previously suffered from chancres, and experienced the benefit of cauterization, had connexion with a suspected female, and observing an excoriation the next morning, himself applied nitrate of silver most plentifully; the eschar fell in twenty-four hours, and, the patient states, a quantity of pus escaped; he thought it necessary to burn it a second time, and applied the caustic freely; in two days, feeling alarmed at the pain and redness, he called on me. A pustule, exactly similar to those delineated as following inoculation in the atlas of my work on venereal diseases, appeared on the penis; the white pellicle was surrounded with an inflamed areola, and there was some pain. I felt pretty well convinced that this was the result of irritation alone. I prescribed water-dressing, and the pustule healed in a few days. Now this is one of a large class of cases where diagnosis is difficult, and which are often seen in private practice, arising from irritating applications. A few days, however, generally clear up any doubts a surgeon may have; for if it be the result of irritation, the pustule heals; if of chancre, the disease loses no time in progressing, and the surgeon has the certainty of treating a venereal sore, instead of one of these simple irritated excoriations, which I have more than once seen submitted to a course of mercury, under the supposition that the patient has a virulent disease.

Another counter-indication to caustic is induration of a sore; the surgeon should never cauterize a genuine Hunterian chancre, or one attended with induration; if he does, he will cause great pain, the sore will become irritable, and gangrene will often follow, as I have observed in several instances. Cauterization of such sores shows great ignorance of the objects and aim of the employment of nitrate of silver, as well as of induration; for as these sores secrete but little, we have scarcely any virus to destroy. If it were our object to destroy the mass of induration, we must have recourse to a much stronger and deeper caustic than nitrate of silver, such as Vienna paste; but even destroying the induration would be of no good, as experience shows that where it exists, the constitution is already contaminated, and if removed, we should have no criteria to go by of the state of the system, until secondary symptoms break out. The ulceration on indurated sores depends on the hardening impeding the cicatrix forming, and to remove this, absorption must be brought about by mercury, as I shall hereafter show, in speaking of indurated chancres. From these considerations, then, I never employ caustic where there is induration, and I do not find patients complaining as they are said to have done formerly, that destroying chancres with caustic produces secondary symptoms, from driving the disease into the system, a charge it is well to avoid, however impossible such a thing is believed to be by well-educated persons.

During the course of treatment, a patient will occasionally complain of vague pains in the groin, in some cases shooting down the cord; the finger can, however, detect no tenderness or enlargement in this situation, and we may generally set down these cases to irritation of the extremities of the nerves, which will disappear as soon as the irritation ceases. In my own practice, the occurrence of bubo is very unusual, and when observed, follows usually in persons who have suffered previously from swellings in the groin: in these instances every precaution must be taken to avoid their reappearance, by enjoining rest; but I have great doubt if low diet is necessary, although a recumbent position is highly desirable, and on the first appearance of swelling or heat in the groin, leeches and cold applications must be resorted to.

Bubo, let it be remembered, depends not so much on the treatment as on the situation of the sore, as I have elsewhere stated.*

In the local treatment of uncomplicated chancres, I have found these simple means the best adapted to a speedy cure; and I must protest loudly against any general or constitutional treatment being employed, provided the health be good; in such cases the patient need not observe any restriction as to diet, but it is better to abstain from horse-exercise, or violent excitement of any kind.

But must no mercury be given to expedite the cure and prevent secondary symptoms? The result of numerous cases treated during the last five years, and which still remain under my observation, induces me to believe that mercury is by no means necessary either in expediting the cure, or in preventing secondary symptoms, as without it, the local cure is rapid, and secondary symptoms do not occur, except in such feeble proportions that they should not enter into our calculations. It is true, the exceptional cases may injure the reputation of the surgeon, and he may be told that had the patient taken mercury, constitutional infection would not have followed; but in nine out of ten other cases, the patient will justly extol the merits of his surgeon, who has spared him a course of mercury, which immunity from constitutional disease proves to have been unnecessary; and I cannot lead myself to approve from expediency, what I believe to be scientifically wrong and unnecessary, or to sanction the treatment of those who may assert that every chancre or sore on the penis should be treated with mercury, on the plea that if secondary symptoms follow, the surgeon at least cannot be blamed, and the treatment without mercury called in question. I hope there are few practitioners who will lend themselves to this system of special pleading; if there be, they will find, to their cost, that they give mercury where none is required, and give an insufficient quantity in cases calling for its administration. There is another large class of practitioners, however, who give mercury in almost all sores appearing on the genital organs, on the same principle that I have recommended the application of nitrate of silver—namely, that perhaps the sore is not specific, but in the absence of any absolute diagnostic sign, they wish to be on the safe side, and guard the patient from secondary symptoms. Did mercury act like nitrate of silver, and confine its effects to the local influence on sores, this idea would be tenable; but to effect the purpose, the sore must be acted on through the constitution; and will any surgeon assert this can be done nine times in ten with impunity, particularly when experiments prove that in these nine cases recourse to mercury is unnecessary, and when employed, gives no absolute guarantee against secondary symptoms, as the recorded cases of these mercurialists prove. We further meet, in private practice, with another class of extremely well-educated surgeons, who believe that mercury should be given in most primary sores, and in the very earliest stages; and they prescribe it from a deep conviction that mercury thus given prevents absorption of the virus into the system; or if it does not prevent this, causes at least the absorption of the antidote at the same time, and in consequence the disease will not (say they) be followed by secondary symptoms. This school has, however, assumed as proven several points which experience by no means sanctions or corroborates. For instance, I know not any series of experiments to show that mercury will prevent absorption; on the contrary, mercury is by many believed to hasten this process, and as such, it is largely given. The belief in its acting as an antidote in the circulation seems founded on no facts whatever that I can discover. If it be pretended, when mercury is given in the earliest stages, and no secondary symptoms follow, that the immunity depends upon the treatment, no conclusion can, I think, be more impotent; for these gentlemen seem

* Practical Treatise on Venereal Diseases, by Wm. Acton, p. 248.

to forget that in nine cases out of ten the same thing will happen where mercury has been altogether abstained from, and they have thus attributed to their remedy what is the natural course of the disease, apparently through not having seen syphilis running through its entire course unchecked by mercury; for how few, (except, perhaps, the army surgeons,) brought up and educated in the metropolis, have watched one hundred cases which were not treated with mercury. When they, therefore, see cases treated with mercury not followed by secondary symptoms, they have concluded that mercury has prevented these, whereas, the records of hospitals and private practitioners, who treat cases without mercury, prove that the same effects follow the non-mercurial treatment, and its advocates have the high satisfaction of believing they have saved nine out of ten of their patients by a course of mercury. Let it, however, clearly be understood, that these observations apply exclusively to the unindurated chancre. This sore requires a peculiar treatment, both local and general, as I may have occasion to show in a future communication; and much of the diversity of treatment, as well as course of disease, depends upon authors not regarding the marked distinction attending the course of the indurated, as compared with the simple ulcer. Almost all surgeons are unanimous upon the inutility of iodide of potassium in simple ulcers, and few now prescribe sarsaparilla; in fact, the treatment of uncomplicated cases of chancre is now purely local. Experiments have indicated this, and experience has sanctioned it, to the almost entire exclusion of all other treatment.

Queen Anne-street, Cavendish-square, May, 1846.

REVIEWS.

Medical Notes on China. By JOHN WILSON, M.D., F.R.S., Inspector of Naval Hospitals and Fleets. London: Churchill, Princes-street, Soho. 1846. pp. 267.

WHEN the *Minden* was fitted out, in the spring of 1842, as a hospital-ship, and sent to China, the chief medical post was entrusted to Dr. Wilson. The present volume of medical notes is compiled chiefly from his experience on board the *Minden* in the Chinese Seas, and at Chusan, Amoy, and Hong-kong.

We may briefly mention that the diseases so fatal to the British troops on the coast of China, were, remittent and intermittent fever, dysentery, what he terms anomalous flux, and sloughing ulcer. These diseases were most severe in 1843, and the number of persons attacked in this year would seem to have depended on accidental causes, the year 1844 being comparatively healthy. In the treatment there is nothing to call for particular attention excepting the use of buchu in the dysentery and flux. Of this remedy two ounces of the infusion were given two or three times a day in the chronic forms of dysentery, attended with wasting discharges, periodic fever, with tendency to dropsical effusion, and, as the writer adds, "in such cases it did good service." Dr. Wilson is anxious not to fix too high a value upon this remedy, and he sums up its claims as follows:—"Buchu will certainly not cure, or tend to cure, many cases of chronic flux; but in those which have been specified, and, it is thought, with sufficient precision, it will act beneficially, for the most part, and will often, with the co-operation of other means, lead, though slowly, to health, when other courses of treatment would fail. This, which is sufficient credit, is claimed for it, but nothing more." This is the therapeutic fact of the book.

In pathology we have described, in the treatise, what Dr. Wilson terms "flux," an epidemic disease, to be called neither dysentery nor diarrhoea. This disease, in its severest forms, commenced with vertigo, loss of muscular power, with jactitation, drunken expression of countenance, dilated pupils, and mental torpor. The pulse quickly became rapid, feeble, fluttering, and often intermittent; there was also profuse sweating and loss of animal heat in the extremities; sometimes, vomitings of bilious matter, sometimes purging; great thirst; a white soft tongue; livid lips, and a dusky hue of the countenance, sometimes extending to the

whole surface. These symptoms rapidly passed on to dissolution in the worst cases. This is the pathological fact of the book: the relation of this special form of disease with intermittent and remittent fever, chronic dysentery, and sloughing ulcers, is pointed out in the course of the work.

Scattered up and down in the work are numerous interesting facts, relating to general subjects, on the habits and manners of the Chinese people. Some of the most prominent of these we shall briefly refer to.

The *Minden* was fitted up with a ventilating apparatus under the direction of Dr. Reid. Dr. Wilson speaks of it approvingly, as having been simple, of having done its work well, and of continuing perfect for three years in its machinery after daily use during that time.

Dr. Wilson remarks on the frequency of scrofula, ophthalmic diseases, and elephantiasis, among the Chinese. The following is an interesting passage relating to the Chinese pedal mutilation.

"Through the kindness of the surgeon of the *Belleisle*, who obtained the preparation at Chin-Keang-foo, the subject, with a great many others, having destroyed herself, the writer had an opportunity of examining the mutilated foot of a Chinese woman dissected, but with its natural articulations remaining, so that the bones retained the position they had occupied during life. It is that of a person from twenty to thirty years of age, and appears to have been of the ordinary artificial form, and nearly, though perhaps rather over, the average size; certainly the writer has seen several considerably smaller. Its extreme length is four inches and a half.

"The process by which the curtailment and deformation are accomplished is, of course, pressure, but the manner in which it is applied, judging by the different accounts given of it, is not always the same. It must be forcible, and far greater than can be obtained from bandages, which are worn at all periods of life, and long after the growth of the foot is fully arrested, which is probably, in most instances, before the girl is five years old. The principal effects of the treatment are, to prevent the proper development of the parts, distort the organization, and in great measure destroy the functions of the foot. The extended sweep of the ankle, as well as the more limited motion of the metatarsal joints, is lost, the articulating surfaces being firmly ankylosed.

"In the preparation just seen, the os calcis, instead of its natural broad base, and posterior rough projection, has a conical form downwards, and slopes forward from the leg, so that a straight line projected beyond the foot, from the inner aspect of the tibia, falls not before, but behind, the extremity of the bone. The bones of all the toes, except the great one, are bent under the metatarsal, at their points of junction, lying parallel to, and in close contact, with them. The natural arch of the foot is much deepened by pressure applied to its extreme points, and the forced elevation of the tarsal, and tarsal extremities of the metatarsal bones. Its depth in the present instance, measured from the inferior aspect of the bones, is fully two inches. Its depth of arch, in reference to the length of the foot, looked at as a skeleton, and without regard to its use, does not, it must be owned, give it an unsightly appearance. But the arch is not seen without dissection. It is so filled with fatty matter, that the sole is a flat surface; and the foot of a Chinese woman, in this respect, bears no resemblance to that of the Arabian, which, when helped a little by imagination perhaps, allows the brook to flow through its hollow without wetting it. It more resembles, indeed it much resembles, from its short, stumped, wedge-like form, that kind of club in which the foot is generally turned inwards.

"That a whole race should take so much trouble, inflicting and undergoing so much pain, to deface and damage the body, is strange. It is the most universal and curious kind of mutilation practised in any country, and shows how dangerous it is to permit fashion leagued with false notions of beauty to tamper with the wholesome operations of nature. There is little doubt that the practice began at first, in a small way, and with slight results, in the desire of doing what they might, by artificial contrivances, to help in the formation of a small well-arched female foot, and that it crept on with increasing force, though by scarcely perceptible movements, till it reached its present universal extent, and power of, at once, destroying the beauty of the organ, and all but annihilating its functions. While the foot is stunted and crippled, the leg wastes, loses its symmetrical roundness and waving outline

and, though other parts of the body are still in a state of vigorous growth, shrinks and withers like a palsied limb. It need scarcely be added that such a condition of the lower extremities must interfere materially with the power of locomotion. Walking is difficult and painful, the gait being uncertain and waddling: the maimed object totters, is in continual danger of falling, and beyond short distances, in girlhood gladly avails herself of the help of a stick. Yet all this is done and suffered, sacrificing at once beauty and usefulness in the absurd ambition of completing nature's operations, and surpassing the scheme of creative wisdom."

"A leaky ship is a healthy ship," according to the nautical proverb. Dr. Wilson refers to the fact, that the *Apollo* frigate, during the whole of her voyage from England, and her stay in China, remained comparatively free from the diseases affecting the crews of the other ships. The only peculiarity in the sanatory management of the *Apollo* would seem to have been the frequent letting in and pumping out of water. This was done three or four times a week, or even daily, when the temperature was very high. Dryness is considered the great desideratum on ship-board; but Dr. Wilson supposes, that as absolute dryness is next to impossible in ships at sea, it would be better that the surfaces should be thoroughly wetted, as by the letting in of water, than allowed to remain in a semi-humid state, with constant evaporation, and the evolution of gaseous products.

An interesting notice is given of the Chinese medical missions, and the author is inclined to attribute great influence to them as a means of introducing European civilization among the celestials. Missions have already been established at Canton, Hong-Kong, and Shanghai, and others are in contemplation for Ningho, Amoy, and Foo-Choo-Foo. These missionaries practise medicine and surgery gratuitously, and they undertake to teach those of the Chinese who may be willing to devote themselves to the study of medicine. Large numbers are treated at the hospital at Hong-Kong; those who can subsist of themselves do, those who cannot are supported from the funds of the hospital while under treatment. Dr. Wilson appropriately remarks, that it is at this hospital "everything which benevolence can accomplish is effected for the patients, and thence, a large proportion of those admitted return to their native towns and hamlets to tell their neighbours what the strangers have done for them. They have to speak only of benefits received. Their cherished habits are not violently attacked; their superstitious follies and pagan perversions were not made the subjects of ridicule or contemptuous pity, but they were led to their abandonment by showing them a better system of things, and proving its vast superiority through its practical results. Persons who went in wasted, maimed, or blind, came out with renovated vigour or restored sight. Can the Chinese continue long to resist such teaching?" It is indeed a beautiful subject for contemplation,—three or four medical emissaries, setting themselves down at the verge of this enormous empire, holding in their hands the choicest blessings of civilization, attempting to quicken the inertia of the hundreds of millions of China with the active humanity of our profession. Already does the system bear fruit. Dr. Wilson saw one young man who had learnt the structure of the eye, and the diseases and treatment of this organ, perform the operation for cataract and other ophthalmic operations with great adroitness. Dr. Wilson remarks, "he will soon return to his native place, near Canton, to display the fruits of what he gained at Hong-Kong. Others will follow, to penetrate further and further into the country, till the whole empire, it is hoped, shall be pervaded by those real reformers and benefactors of their fellow men."

There is a chapter on the state of the practice of medicine among the Chinese, by no means creditable to this ingenious people. Medicine is in a state of the greatest darkness; operative surgery, beyond a few punctures and inconsiderable operations, has no existence. Their great forte is in the number of their drugs. The druggist is, in fact, at the head

of the profession. This is a necessary consequence of the low state of the medical art. Hereafter we do not doubt that scientific medicine may receive some assistance from the Chinese armamentarium medicum. Had our space permitted, we should have liked to have given Dr. Wilson's descriptions of the druggists' shop, of the surgical instruments, and their modes of practice, but we must refer our readers to the work itself. The extraordinary people of whom it so largely treats, are, indeed, a remarkable mixture of ignorance and subtlety. For generation and generation they have practised inoculation, a modern practice with us at the centre of civilization, while they have no knowledge of the uses of bloodletting, and have the greatest horror of the practice.

In conclusion, we need not say the present work is animated by a spirit of genuine philanthropy, and that its professional ability is highly respectable. It is in every sense most creditable to its author.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

APRIL 28.—DR. BURROWS IN THE CHAIR.

ON THE CAPACITY OF THE LUNGS, AND ON THE RESPIRATORY MOVEMENTS, WITH THE VIEW OF ESTABLISHING A PRECISE AND EASY METHOD OF DETECTING DISEASE BY THE SPIROMETER. By JOHN HUTCHINSON, Esq.

(Presented by Dr. CURSHAM.)

AFTER giving an introduction to the subject by a history of respiration, from the earliest period to the present, with an account of what researches have hitherto been instituted upon this inquiry, the author commenced by dividing the different portions of respired air under certain heads, without which, the subject of respiration becomes very complicated and difficult of expression. He remarks—"The latitude of movement performed by the walls and floor of the chest, to maintain a constant current of air through the air-cells of the lungs, admits of three common degrees of expression:—1. Extreme expansion, or enlargement; 2. Extreme contraction, or diminution; 3. An intermediate or quiescent state.

"These divisions necessarily superinduce a difference in the quantity of air respectively drawn in or thrown out of the lungs." These movements or portions of air he described, for perspicuity, under five heads:—

1. Residual air; 2. Reserve air; 3. Breathing air; 4. Complemental air; 5. Vital capacity.

This division was clearly illustrated by different diagrams, and may be expressed best in the author's own language:—

"It is well known that the lungs are not capable of being emptied by the most violent muscular effort; therefore, at all times, as long as the lungs maintain their natural structure during life or death, a certain quantity of air remains in these organs, which is termed 'residual air,' and over which we have no control.

"Reserve air.—The gentle respiratory movement regulating the ordinary breathing, is an intermediate effort between extreme voluntary thoracic contraction and dilatation, and hence it is that a portion of air always remains in the lungs after the gentle expiration, which may be thrown out if required; to it I have applied the name 'reserve air.'

"3. Breathing air.—That portion required to perform the ordinary gentle inspiration and expiration, which we term 'breathing air.'

"4. Complemental air.—That portion which can at will be drawn into the lungs by a violent exertion, beyond the moderate effort of ordinary breathing, which constitutes the deepest possible inspiration, is only occasionally added if required; to this we apply the term 'complemental air.'

"5. Vital capacity in all these three latter divisions combined, being the greatest voluntary expiration, following the deepest inspiration, to which I apply the term 'vital capacity.'

"These divisions differ in their character. The residual air is independent of the will, and always in the chest. The reserve air, to use a simile, is a 'tenant at will.' The breathing air constantly passing out and in the chest. The complemental air, seldom in the chest, and when it is, only so for a brief period. The connexion of these with diagnosis in disease here followed, and the whole subject of the paper resolved itself under the following heads:—1. The quantity of air expelled from the lungs in connexion with other physical observations on the human frame. 2. The absolute capacity of the thorax, cubic and superficial measurements. 3. The respiratory movements and motility of the chest. 4. The

inspiratory and expiratory muscular power. 5. The elastic power of the ribs, and the voluntary muscular respiratory power. 6. The function of the intercostal muscles. 7. General and practical deductions in reference to detecting disease in man.

Each of these subjects were fully treated, and much valuable information, both for the physician and the physiologist, will be there found, but which we must here pass over, and simply add, that Mr. Hutchinson has examined upwards of 2000 cases with reference to respiration, and that the quantity of air exhaled from the lungs is affected by four circumstances, —height, weight, age, and disease. By height, in the arithmetic progression of eight cubic inches for every inch of height. By weight, nearly in the ratio of one cubic inch for every pound to eleven stone, and then decrease nearly in the same rotation up to fourteen stone. By age (from thirty-five to sixty-five), a decrease of rather more than one cubic inch per year.

Under the second head, much curious and new matter appeared in relation to the actual capacity of the thorax and the vital capacity, and the relative size of the chest to the body. Under the third head, the respiratory movements of the sexes, and relative movements in health and disease, as measured by the spirometer. Under the fourth head, the muscular power in relation to health. Under the fifth head, entirely new considerations of the combined forces of elastic or involuntary power, and muscular or voluntary respiratory power. Under the sixth head, the intercostal muscles being true expiratory muscles. Lastly, general and practical deductions.

Here Mr. Hutchinson gave many interesting cases of the spirometer detecting phthisis pulmonalis, before the ordinary means now in vogue, and many other subjects relative to the application of his instrument to disease generally in the human frame, which he demonstrates as very broadly marked by twenty-five or thirty per cent. Mr. Hutchinson's spirometer was exhibited before the Society, and its methods of application explained.

Dr. TAYLOR considered the Society much indebted to Mr. Hutchinson for the laborious investigations which he had undertaken, and now submitted to them with such ample illustrations. From the fact that an abstract only of this paper could be read, and from the novelty and the variety of the views submitted to them, it could not be expected that the members could appreciate at once the true value of the observations of the author. The importance of the results arrived at could not be doubted, if they should turn out to be true; but the results of an investigation so entirely original ought to be received with due caution, until they have been confirmed by other observers. Some very curious results arrived at by Mr. Hutchinson, might be adduced, to show the great importance, in a science like medicine, of our being guided by observation alone; for although they are not inconsistent with any known principles, they are very different from the conclusions at which we should have arrived by *a priori* speculation; such, for instance, is the law that the quantity of air which can be expired bears but little relation to the girth of the thorax, but is influenced mainly by the height of the individual.

Perhaps the most important fact discovered is this—viz., that if the height of the individual be known, the number of cubic inches of air which he is able to expire in the healthy state can be calculated with tolerable accuracy. The principle of this calculation is founded upon a great number of observations, and we have just had the fairest and most convincing proof of its correctness. The gentleman who has just now offered himself to be experimented upon, has actually expired within a cubic inch of the quantity of air calculated beforehand.

The application of this principle in the diagnosis of disease is most important. Mr. Hutchinson has found that persons who are the subjects of phthisis, expire a quantity of air very much less than they ought to do if healthy. In one interesting case (that of Freeman), the quantity of air expired when he was in health was actually measured, and the experiment being repeated some time after, this man was found to expire ninety cubic inches less than on the first occasion; at this time no disease in the lungs had been detected by two experienced auscultators; the man, however, was not in good health, and some months afterwards he died of phthisis, as proved by post-mortem inspection. I myself (said Dr. Taylor) examined a number of consumptive patients by Mr. Hutchinson's apparatus; I have found them to expire much less air than, by calculation, they ought to do if in health. Another singular and very important result is this, that the quantity of air which a man can expire is not necessarily proportioned to the

absolute size of his lungs or the number of cubic inches of space in his chest. We have seen, in the casts exhibited, that the lungs of one man who expired a large quantity of air were actually much smaller than the lungs of another man who expired a far less quantity. Mr. Hutchinson believes that the quantity expired depends less upon the size of the chest or lungs than upon the mobility of the thoracic walls. The diminished quantity of air expired in phthisis seems to result less from the space occupied by the tubercular deposit than from the restriction which is in some way imposed upon the thoracic movements. The bulk of the tubercular deposit in one case was only equal to one cubic inch, whilst the diminution in the quantity of expired air was forty-seven cubic inches. Hence, by this apparatus, it may turn out to be possible for us to distinguish phthisis at an earlier period than by any other means, and this has been actually proved in one of the instances adduced.

The same principle, however, complicates very much the application of Mr. Hutchinson's results in the differential diagnosis of disease. Many diseases, without the chest as well as within it, may limit the respiratory movements and so lessen the quantity of air expired. So that, for the present, a great diminution of the expired air can only be considered to indicate the existence of disease somewhere: the seat and nature of this disease must be determined by other means, unless further investigation shall render the indications of the spirometer more precise than they are at present. As much has been accomplished in this direction as we could look for from one individual, and in a limited time. Mr. Hutchinson has done enough to make it incumbent upon physicians generally to prosecute the investigation, so as to lead to the confirmation or invalidation of his views, as well as to their extension and limitation in particular cases. In the hospital to which I am attached, one of the spirometers has been purchased, and a certain number of observations have been made, which, as far as they go, quite confirm those of Mr. Hutchinson.

A great advantage in the use of the spirometer in disease of the chest is this, that comparatively little education is required for it. The practice of auscultation requires a long education and constant application; the spirometer may be used, for the purposes to which it is applicable, with very little previous study. Hence the importance of the instrument, as pointed out by the author, to army and navy surgeons, to insurance companies, and in private practice generally.

After the paper had been read, Mr. Hutchinson illustrated the method of making an examination. Taking himself as an example, he observed, that though his chest was small, (thirty-three inches in circumference,) yet, according to his mere height, his vital capacity was 260 cubic inches; noting, at the same time, that the person being examined should hold himself as erect as possible, the least inclination of the head causing a difference in the quantity of air expired. A Fellow of the Society having complied with the request to come forward and submit himself to experiment, his height was found to be five feet five inches, and, accordingly, the quantity of air he could expel should, by the tables, be 206 cubic inches. The gentleman then breathed into the spirometer, and actually produced 205 cubic inches, which, making allowance for temperature, made it 206 cubic inches. This was so satisfactory, as to leave no doubt on the mind that these tables must have been calculated with care, and upon an extensive number of cases. Many questions were put to the author upon the different subjects of which the voluminous paper treated.

Dr. CHOWNE requested to know whether any explanation could be given for the following curious phenomenon, which was strikingly opposite, touching the relation of the chest to the respiratory power,—Why the mere height bore so strict a relation to vital capacity, and not to the size of the chest?

Mr. HUTCHINSON, in reply, observed, that he had found this hitherto inexplicable. It was a fact, that the taller a man, the more air he could expel from his lungs; and he considered that this quantity was directly dependent upon the extent of thoracic and abdominal mobility, and not upon the actual capacity of the cavity of the thorax. He referred to a series of casts taken from the chest—the heart and lungs having been first removed, and their space filled up with plaster of Paris. He exhibited one cast, taken under most favourable circumstances: the individual while living, and apparently in health, he had measured; his vital capacity, making correction for temperature, is 251 cubic inches; while the actual cubic space in his chest for the organs of respiration was only 248 cubic inches, being three inches less than the actual quantity breathed; therefore this marked a respiratory mobility exceeding the actual capacity of the thorax. Therefore,

while the spirometer measures the vital capacity, it becomes at the same time a measurer of the mobility of the parts concerned in the breathing act. Now to measure the mobility is to determine the respiratory movement, which he illustrated by drawings, as extending over the whole trunk of the body down to below the knees; therefore whatever interfered in these parts to prevent the range of movement, would, at the same time, be indicated upon the spirometer, and collateral observation would determine more minutely the locality affected. He could not here omit mentioning another circumstance which militated against an opinion prevalent at this day. It was commonly believed that adhesion of the pleura prevented the free movements of the chest; but this he believed was not the case, for he had found that in the instance just mentioned, where the mobility exceeded the actual thoracic cavity, there was no part of the pleura pulmonalis but was firmly adherent to the pleura costalis. So much was this the case, that the heart and lungs could not be weighed separately, their structure being totally destroyed in removing them. Here was a mobility exceeding by three cubic inches the actual space allotted for the heart and lungs, with the parietes and floor of the chest firmly adhering to the lungs. He believed that the latent movement of the ribs was so little, or the latent movement between the contents of the chest and its boundaries so limited, that no adhesion interfered with the respiratory actions. This was worthy of attention, the contrary opinion appearing to prevail at present.

Mr. Hutchinson pointed to a cast of a chest measuring 457 cubic inches, while 202 cubic inches of air only could be exhaled; or not one half of the space allotted for the organs. This man was corpulent, and only 5 feet 8 inches in height; therefore his mobility was mechanically impeded. Why this mobility increased with height, he felt as much at a loss to account for as he had on the first day he commenced the investigation. But he was confident it was so, as upwards of 2000 cases went to prove it.

Mr. Hutchinson then pointed to a curiously-interesting table, where all the heights, increasing in the arithmetical rotation of inch by inch, between five and six feet, were drawn by scale, and upon these the relative depth and breadth of the chest, so that the whole proportion of the frame was exhibited. The thoracic cavity was seen not to increase in any visible relation with the increasing height; the taller men here exhibiting smaller chests in all dimensions than the shorter. Moreover, it was remarkable to observe how shallow the chest was, the average depth, from the apex of the lungs to the diaphragm, being only from seven and a half to eight and a half inches; and that the shortest men, (five feet four,) who could blow least, had the deepest chest of all the other heights. The absolute length of the back also appeared to have nothing to do with the question, for he had taken the sitting height and the standing height, which averaged three feet, whatever was the standing height; and that men whose standing height was many inches shorter than others, who sit taller, and yet blow less out of the lungs. Here Mr. Hutchinson said he must quit this part of the subject, "for years have I studied to determine this question, but in vain."

Mr. Hutchinson was asked upon what grounds he imagined that the chest in deep expiration did not enlarge by the diaphragm descending? this being the present and general opinion of physiologists. He replied, that he had invariably found, in health, that when a man stood and made a deep inspiration, the movements were as described by the diagram already referred to—viz., that the chest, in this violent effort, enlarged its dimensions almost entirely by the ribs; the sternum advanced, the ribs and shoulders were elevated, the abdomen receded, compressing the abdominal viscera; the lateral enlargement of the chest was very small, chiefly increasing in the antero-posterior diameter. Now, he considered himself at a loss to conceive how the diaphragm could descend and the abdominal muscles recede; the point of the recti muscles, in deep inspiration, would be found as posterior to the point of these muscles in ordinary breathing; therefore the diaphragm must be pushed up, and it was perfectly possible to conceive the diaphragm to enlarge its circumference without descending; for the convulsion of this muscle was such that its area was nearly quadruple that of the sectional area of the chest. The ordinary breathing in men was entirely abdominal or diaphragmatic, but the contrary in deep breathing. The chest appeared to have two ways of enlarging,—one by its diaphragm, and the other by its ribs; but these did not act in concert, either by the one or the other separately. This observation must not be made in the recumbent position, for then the back of the body becomes fixed, and thus medical men might be led into an error in examining the breathing

movement of a patient in bed, when the very position altered their motions. From a knowledge of this, he was inclined to believe that this fixing of the back in the recumbent position caused patients labouring under dyspnoea to prefer the erect position for breathing.

The breathing in women differed from men only in one respect, their ordinary breathing being chiefly costal and not abdominal. Whether this was to allow for gestation or not he could not say; he thought there was some doubt of its being caused by the peculiarities of their costume.

Mr. Hutchinson was then asked by Mr. Ayston whether there was any relation between the respiratory power and the respiratory quantity in vital capacity? To which he replied, there was a certain indirect relation. It was seen that the vital capacity increased with mere height; but by another instrument exhibited before the Society, that the inspiratory power was greatest at the height of five feet eight inches, and decreases in regular progression as the height increases; and that the men of five feet eight inches could elevate by the true inspiratory muscles, a column of three inches of mercury, equal, in some cases,—depending upon the size of the chest,—to many hundreds of pounds' resistance to their muscles, whereas the six-foot men could only raise two inches and a half, and that the expiratory power was one-third higher, but not from the muscular power, but the elastic power, of the ribs being here introduced, which is not so in the inspiratory act. This inspiratory power, he considered, indicated the *vis vitæ* of the individual more than the expiratory power, which was affected by vocation. An elaborate series of calculations were contained in the paper upon the elastic power and the muscular contractile power alternating in every inspiration and expiration. But this question cannot, in justice to the author, be abridged, therefore the paper must be consulted, as this is a question for the closet. This elastic power has hitherto been very slightly treated by physiologists, and the circumstances under which Mr. Hutchinson determined his views are so rare and conclusive, and we may say impossible of being obtained again, that they demand the full inspection and consideration of the physiologist. But this much may be added, that Mr. Hutchinson considers the inspiratory act as demanding a muscular power to resist an elastic power of many hundreds of pounds—that is, a direct resistance to vital energy, with no counterbalance power.

Mr. Hutchinson was asked whether he had examined any men of remarkably small stature, whose height, as they sit, is not so remarkable as their standing height?

He replied that he had, in the course of his observations, sought out the giant and the dwarf. He then handed a spirited sketch of a human being, whose height was under thirty inches—Don Francisco, aged forty-two. This little gentleman had a vital capacity of fifty-six cubic inches. He then exhibited the shade of the hand of Mr. Randall, seven feet high, the span of whose hand was nearly thirteen inches, and the length of his foot thirteen inches and a half. He had a vital capacity of 464 cubic inches, at 60°, which, if calculated at 98°, the temperature of the body, must bring it nearly to 500 cubic inches!

MEDICAL SOCIETY OF LONDON.

MAY 4, 1846.—MR. DENDY, PRESIDENT.

REMARKABLE CASE OF PURPURA.

DR. CLUTTERBUCK had lately seen an extraordinary case of purpura, which, from the extent of the disease, might almost be called "morbis niger." The patient was a Belgian, 19 or 20 years of age, and a few days before the appearances on the skin presented themselves, was afflicted with pains in the limbs; the surface then became studded with purple spots, which shortly spread over the entire surface of the body. The patient was inclined to doze, but was sensible when roused. The affected parts were painful to the touch, but gave no evidence of increase of heat, and there was no swelling. There had been nothing in the habits or mode of life of the patient to explain the unusual disease which presented itself. He had never been so attacked before. The mouth inside was affected with livid spots. The treatment at first had been that usually employed for scurvy, as vegetable acids, &c.; but this failing to afford relief, and free acid being found in the urine, alkalies were substituted, and he (Dr. Clutterbuck) believed with good effect. He had, however, only seen the case for a few minutes, and could not speak more authoritatively respecting it; he had seen it merely as a curiosity, which it certainly was. In a subsequent part of the evening, in answer to various questions, Dr. Clutterbuck said that the disease began

in the legs and more distant parts; it first appeared in the shape of elevated, hard, inflamed pimples, about as large as peppercorns, and these spread laterally, until the entire surface became one black mass. The pulse was feeble, the patient lay prostrate, and exhibited the usual symptoms of low spotted fever.

The PRESIDENT remarked that the headach in this case tended to show that the disease was associated with venous congestion, as supposed by Dr. Hartry, and others. Upon this principle, that practitioner had employed bleeding and drastic purgatives with the best effect. Connected with this congestion, no doubt there was some change in the circulating fluid itself, the crisis of which had been broken up, so that it became like the mere *liquor sanguinis*.

In reference to the nature of purpura generally, Mr. HILTON had recently found it associated with a low condition of the system and a reduced quantity of the blood. Treatment to improve this condition was usually beneficial. He had seen, however, one or two cases in which there was a large quantity of blood in the system. These were benefited by depletion, generally, but were the exceptions to the rule.

Mr. ROBERTS did not believe there was any analogy between purpura and scurvy; in purpura there was no sponginess of the gums.

Mr. DENDY made some remarks, to show that apparently opposite modes of treatment, as adopted by various practitioners in this disease with equal success, might be explained, by the fact of these modes tending to produce the same result—viz., an improved state of the secretions, by which the general health was improved.

A Member mentioned some cases that were cured by small repeated bloodlettings, which tended to show, as the President had formerly remarked, that the disease depended on congestion.

Dr. L. STEWART mentioned a case of malignant small-pox which proved fatal in thirty-eight hours. The pock did not mature, and the entire surface assumed a purple hue like that present in purpura.

Mr. BARLOW believed that facts were against the suggestion that purpura depended on venous congestion, inasmuch as anasarca and other results of obstructions to the veins were not associated with purpura.

After some remarks from various members on certain terms used in describing disease, the meeting was adjourned.

INADEQUACY OF THE PAYMENT TO MEDICAL WITNESSES FOR ATTENDING AT TRIALS IN CRIMINAL COURTS.

To the Editor of THE LANCET.

SIR,—Seeing an article in THE LANCET of the 25th of April, headed, "Non-payment of Medical Men for Medico-legal Investigations," I beg to send to you the following narrative. Many other medical men have most probably experienced similar injustice.

I was called to view the body of a murdered man, (riding a considerable distance,) for which I was not paid a farthing. On another day, I attended before the coroner, wasting a whole day, for which I was paid 1*l.* 1*s.* I may with truth say, that I lost, during that day, double the fee I received; for as I had, at this particular time, no assistant to attend my patients for me, I suffered the consequences. This was annoying and inconvenient enough; but I do not complain chiefly respecting it. Some months afterwards, however, the presumed murderer was taken, and I was compelled to ride to the town where the magistrates sat, receiving 1*l.* 5*s.* 8*d.* for my fee and travelling expenses. This also was bearable; but, in due course, I was subpoena'd to attend the trial. The assizes are held at a distance of twelve long miles from my house, and I was compelled to dangle there six successive days before the matter was concluded. Doubtless many of your readers can speak feelingly of the trouble and annoyance of waiting about criminal courts, going before grand juries and clerks of assize, breathing poisonous air, and finishing with the chance of a good rasping by some unmannerly advocate in a black gown and wig. For the six days, I was paid 6*l.* 14*s.* 4*d.*, which included 1*l.* paid to me with the subpoena—that is, they allowed me 1*l.* 1*s.* a day, and 8*s.* 4*d.* travelling expenses, and I was liable to a fine of 50*l.* if I was absent when called upon. At the same time, I had patients whom I was compelled to see daily, so that I had to ride twenty-four miles a day, in addition to the labour my practice entailed, and there were no coaches or railroad to serve me on this occasion. Medical men do not generally keep more horses than their practice demands; and

I assure you, Sir, that mine were not benefited by being exercised twenty-four miles a day, in addition to their usual work. It must be obvious that, under such a system, not only must medical men be great pecuniary losers; but, putting *£. s. d.* aside, the public must suffer, when the sick are thus violently deprived, for days together, of their doctor. Every one can estimate the importance of medical evidence in a court of justice, and must believe that the giver of it feels the heavy responsibility of his duty; yet he is put to great extremes, suffers losses, and undergoes much fatigue, without any adequate remuneration; although, so important is his evidence, that life or death commonly depends on its issue. What vexed me still more was to find that a physician was allowed *double fees*! This is ridiculously unjust,—not that the physician has 2*l.* 2*s.* a day, but that the surgeon has only half this sum; although, by being taken from his practice, he might lose in one day more than an M.D. would forfeit in a week. In the country, generally speaking, the M.D. does not make a fortune by his practice.

I enclose my card, in authentication of my communication; and I hope, Sir, that you will make an effort to claim justice for us in these matters.—I remain, your obedient servant,

April, 1846.

A. S.

EMPLOYMENT OF CAJEPUT.—LEECH-BITES.

To the Editor of THE LANCET.

SIR,—As a subscriber to your excellent journal of more than sixteen years' standing, and having been permitted, through your urbanity, to publish in THE LANCET several of my lucubrations, I trust you will not think me intrusive in making a remark upon the case at Charing-Cross Hospital, entitled, "Ulcer of the Leg treated with Cajeput," and upon the "Treatment of Hæmorrhage from Leech-bites," published in the number of the 23rd of May.

On reading the heading to the article, "Case of Ulcer, accompanied with Varicose Veins of the Leg, treated with Cajeput," I concluded that the cajeput had been applied externally; but, on reading further, I found that the vaunted remedy had been administered internally, and that the usual treatment for varicose veins with ulceration, rest and cooling applications had been resorted to, in conjunction with the *internal* administration of "cajeput." Now, as cajeput is a powerful diffusible stimulant, and as the man had been accustomed to "drink largely of rum," it appears to me that rum, brandy, or any other stimulant, properly administered, would have answered the same purpose as cajeput, and would have been as fairly entitled to the heading, "Case of Ulcer, accompanied with Varicose Veins of the Leg, treated with Rum and Brandy," or other stimulants, as the medicine in question. The plain statement of the case appears to me to be, that John C—, aged thirty-two, had severe ulcer of the leg, arising from varicose veins and impaired constitution; that he was treated in the usual way—i. e., entire rest in bed, and the constant application of some cooling dressing; that, as he "had been accustomed to drink largely of rum," it was deemed expedient and proper for him to have a *stimulant* continued; that cajeput, as a powerful diffusible stimulant, was tried, and it had the desired effect.

Such, I conceive, Sir, would have been the fairest way of making out the case, and not the puffing off of cajeput as a remedy for ulcered leg and varicose veins. If your journal were read only by the profession, I should not have deemed the case worth notice; but as I know it is extensively read by the non-professional world, I am fearful lest an evil might arise from the false colouring given to medicines, which, when not thoroughly understood, might do considerable mischief.

Again, in "the Case of Hæmorrhage from Leech-bites," it appears to me very odd that so much trouble should be expended in seeking for remedies to put a stop to a dangerous bleeding from so small an orifice, and that so many remedies should be vaunted as specifics when they so frequently fail; and I believe much injury is often permitted to take place, especially in infants, by trusting to them. Why not "take the bull by the horns" at once! What I always do in such cases is this. I obtain a fine needle, bend it slightly, then pinch up the skin, and pass the needle through it, bringing the lips of the wound together, and leaving the needle in the skin; I then wind some fine silk or cotton around the wound, underneath the needle, and allow it to remain until all further fear of bleeding is over. This is a remedy always at hand, and I have never known it to fail.—I am, Sir, your obedient and faithful servant,

Bournemouth, May, 1846.

E. V. MAINWARING.

THE LANCET.

LONDON, SATURDAY, JUNE 6, 1846.

ON Friday, May the 29th, Mr. WAKLEY gave notice, in the House of Commons, that on Tuesday, June the 9th, he would move for leave to bring in "A BILL to amend and consolidate the laws for regulating the PRACTICE OF MEDICINE in the United Kingdom of Great Britain and Ireland."

The positions of notices of motion are obtained by "ballot," and, unfortunately, Mr. WAKLEY's stands fourth on the list, the three previous motions having reference to the "Record Office,"—to an inquiry into the "General Operation of the Poor Law,"—and to the "Agricultural condition of certain of our Colonies."

The House, therefore, on that night, will be pretty well physicked without the interference of the "regular" doctors. It is now evident that the motion cannot be made on Tuesday. Other "ballots" must, in a few days, decide its position. The motion for the introduction of the *fourth* Bill of Sir JAMES GRAHAM was not made, last year, until the 28th of July. That was a very late period.

If the NEW BILL be on the table of the House in the course of a fortnight or three weeks, and if it should be supported, heartily and generally, by the profession, no insurmountable obstacle would oppose its passing into a law in the present Session of Parliament.

Several of our correspondents have suggested that the Bill should be read at a public meeting of the profession *before* it is laid on the table of the HOUSE OF COMMONS, and that then, if it be adopted by the meeting, a DEPUTATION should be appointed on the spot to wait on Sir JAMES GRAHAM, and solicit him to take charge of the measure, as the BILL both of the PROFESSION and the GOVERNMENT.

If this course is to be taken, the MEDICAL SOCIETIES ought *immediately* to take the requisite steps for convening a GENERAL MEETING of the profession in this metropolis.

THERE may be a disposition in some quarters to treat the disturbances which are agitating the Royal Society as a purely medical quarrel, apart and separate from the business of general science. This is undoubtedly wrong. The agitation is not personal, nor professional, but scientific, involving the honourable conduct of the Society towards Physiological Science. This section—which includes anatomy, the only direct branch of medical knowledge recognised at the Royal Society, with medical men as its representatives—has always held a sufficiently prominent place in the Society, to make its due recognition, and the honourable behaviour of those who are intrusted with the care of the physiological department, a matter of the highest importance. If we look to the origin of the Royal Society, we find the names of GLISSON, ENT, WILLIS, CROONE, WHISTLER, NEEDHAM, and MERRET, the chief physicians of the age, honourably distinguished among its founders; if we look to its Presidents, we find the dignity of medicine well upborne by Sir HANS SLOANE and Sir JOHN PRINGLE; and if we look to the constitution of the Society at the present time, it will be found that the representatives of medicine outnumber those of any other department

of natural knowledge, about one-fifth of the whole number of the fellows being of the medical profession. Such are the facts; and, therefore, the well or ill doing of the medical section can never be of slight import to the Society itself, or to the Faculty of medicine at large. Those individuals, who, by suspicious or dishonourable dealings, or by their natural insignificance, bring discredit upon medicine within the precincts of the highest repository of science, well deserve reprehension and disgrace at the hands of both the Society and the Profession.

Let us examine the present constitution of the medical department of the Council, and the Physiological Committee. The members of this Committee, the medical members, must be scrutinized under several aspects. They are, or ought to represent, the profession, and in so far as they are distinguished, or undistinguished, by scientific attainments, so must the profession, in some measure, rise or fall in the estimation of the republic of science. In the second place, a seat in the Council, or a seat at the Physiological Committee, are among the very highest honours to which the scientific portion of the profession can aspire; and it comes, therefore, to be a very important question, whether or not these honourable posts are filled by men who have attained to them by their eminent labours in science, or by any less worthy means. Again, in the hands of the occupiers of these posts is vested the power of dispensing the highest honours of science—the lectureships, the donations, and the medals of the Royal Society; and though theoretically, it is the Royal Society which confers the honour, except in the case of the Royal medal, when the reward is in theory drawn directly from the Sovereign, yet practically these high honours receive lustre or depreciation from the worthiness or unworthiness of the hands from which they actually and potentially proceed to the recipients. All these are cogent reasons why the men fulfilling these posts should be of high scientific probity and desert.

Let us examine how these things really stand. And first we will take the medical members of the Council for the present year; they are, Dr. ROGET, the Senior Secretary; Sir W. BURNETT, one of the Vice-Presidents; and Drs. BOSTOCK, ROYLE, and SHARPEY. The probity of some of them we have had to canvas pretty sharply; but we may ask, what have they separately or collectively done to advance the theory or practice of medicine, or the sciences of anatomy and physiology, which are so especially recognised by the Society. Are they a flattering or even fair reflection of the British medical mind? Are their names well known in the scientific circles of Paris and Berlin, or in the lesser circles of the schools of Germany and Italy? Have they any noble sound to the European or the American ear? And the medical sample of the Council for the present year is by no means more than ordinary. The rotation of the Council moves in a kind of cycle and epicycle; it consists of twenty-one members, of which ten retire annually, and cannot be re-elected the same year. The names of the retiring ten, and of the ten Fellows who are to be elected into the Council, are nominated for retirement and election by the President and Council; and thus, though a change occurs in each separate year, if a cycle of years be taken, the Council remains almost the same, the Secretaries being the chief turners of the wheels.

Let us now turn to the Physiological Committee as at present constituted. This Committee consists of a Chairman, a

Secretary, and nineteen members. We need not enumerate them all. Dr. ROGET tells us that seven constituted one of the "fullest meetings" of the Physiological Committee which has ever taken place; and we will give the names of seven members, who may, of course, at any time, wield the whole power of the Committee. These are, Mr. BISHOP, Dr. BOSTOCK, Dr. CLARK, (of Cambridge,) Mr. CLIFT, Mr. E. FORBES, Mr. R. JONES, and Dr. REES. Mr. BISHOP had been a fellow of the Society six months when he became a member of the Committee. Of Dr. BOSTOCK we would not say one word of disrespect; we esteem him for what he was in his day—an able physiological writer and physician; we regard him for what he is, a venerable man, retired from practice and the active duties of life; but we can neither respect nor revere him as a judge of matters pertaining to physiology in an age which has left his own far behind. For Dr. CLARK, we believe no other point can be advanced than his professorship at Cambridge. Mr. CLIFT, as the attendant and friend of JOHN HUNTER, and as the spirited defender of his great master, when his labours were destroyed by Sir EVERARD HOME, deserves every praise and respect; but nothing can be more absurd than to place him as a judge in zoology and physiology, and nothing can be more foreign to the nature of the man than such an office. Mr. E. FORBES had been a fellow of the Society nine months when he was placed on the Committee. Mr. RYMER JONES was two months older as a fellow when he achieved the same honour. Dr. G. O. REES was more than a year and a half old, on the same computation, when he came to the judicial board. Against these gentlemen, individually, and in their proper sphere, we desire to say nothing. But we would fain ask, do all of them worthily contribute to represent the profession in the judicial department of the Royal Society? Are they all men who should be rewarded for their important contributions to medical science by such a high office, and are they all men who confer additional lustre on the medals and honours, the award of which it is their function to recommend? The Physiological Committee is an eminent judicial body in the Royal Society; on them does the recognition and reward, or the degradation and injury, of scientific discovery pertaining to medicine devolve. Is it right or fitting that some of these should be men advanced to their "childish treble," and others only in the first year of their fellowship? Are our judges in the law taken either from dotage or from barristers in the first year of their call? What distinguished labourer in science would care for a medal, or any other honour, which only carried with it the approval of a majority of such men as those we have named? A student would hardly care for their united testimonial. In future, we will take care to publish the lists of the Council, and the Physiological Committee, after the annual election; and we shall see whether such names as are retained at present will dare to be seen in such undue and unjust elevation.

If we try the Council and Physiological Committee by the canons of the Royal Society itself, their short-comings are sufficiently obvious. The *Philosophical Transactions* are the pride and glory of the Society; their selection of papers for publication is one great function, and the adjudication of the Royal and other medals for these papers is another.

When the Council was first constituted a body for the examination of papers, and for producing written reports on

their merits, it was not only promised that important discoveries should be recognised and properly estimated at once, but it was pronounced that the reports thus emanating from veterans of "European reputation" would often be more valuable than the original contributions themselves. Of this the treatment of the papers of Dr. MARSHALL HALL and Dr. LEE furnishes but a sorry fulfilment.

But the great function of the Physiological and other Committees is to recommend the awards of the medals. In the first instance, after George the Fourth had instituted the Royal medals, ten awards were made before the artists had finished the design for them. Consequently, on the completion of the die, these ten medals were given away together to the following noble persons—Dr. DALTON, Mr. IVORY, Sir HUMPHREY DAVY, Dr. WOLLASTON, Professor STRUVE, Sir CHARLES BELL, Professor MITSCHERLICH, Sir DAVID BREWSTER, and M. BALARD: and in a strain worthy of the great occasion, the President spoke as follows:—

"It will be my first duty, gentlemen, to distribute the ten Royal medals which have been already adjudged during the life-time of his late Majesty, to philosophers who are amongst the most illustrious in this country or in Europe; they form a glorious commencement of a *Philosophical Chivalry*, under whose banners the greatest amongst us might feel proud to be enrolled, and though it may appear presumptuous in me to hope that a constant succession of associates can be found, either at home or abroad, who shall be considered worthy of being ranked with these noble founders of this Order, yet I am confident that the Council of the Royal Society will feel an honourable pride in maintaining the character of the body, whose members are to be constituted by their choice."

As a sad and melancholy commentary on this passage, we have to point to the admission, and the manner of admission, of Mr. NEWPORT and Mr. BECK to the membership of this philosophical Order of Knighthood,—this scientific Legion of Honour, and we have to contemplate the disgraceful rejection of Dr. MARSHALL HALL and Dr. ROBERT LEE!

But besides this injustice as regards the medals, it is worthy of mention, that Dr. HALL and Professor GRANT have been Fellows of the Society for fifteen and ten years respectively, and we have already said that Mr. FORBES, Mr. BISHOP, and Mr. JONES, had not, at the time of their election to the Physiological Committee, been admitted to the Fellowship of the Society for as many months. Yet Dr. HALL and Professor GRANT have neither been on the Council, nor on the Committee, during the whole of their career. Let the profession and the scientific public consider these things,—let them compare the times, and the men, and their labours, and then say whether the present state of things ought to continue,—whether the men of Dr. ROGET's Dispensary shall have the *entrée* of the Society, or whether it shall be turned into a clique for the supremacy of this or that College. Had either Dr. HALL or Dr. GRANT, or any other professional man of inflexible honesty, been either on the Council or on the Physiological Committee, the recent disgraceful transactions, which we have had to recount through so many weeks, would never have occurred: but if Dr. ROGET felt it to be inconvenient to have such men about his path, this was an additional reason for his own secession from an office for which he never possessed those qualities which should be the first requisites in a candidate.

It does not say much for the scientific probity of those who have sat, or those who still sit, on the Council and the Committees, however humble their scientific names, that they

have so long submitted to the rule of this alien secretary, who has long been called, even by his friends and familiars, the Mephistopheles of the Royal Society:

In all these things Dr. ROGER is the really responsible party. He is the undoubted head of the physiological section, such as it is. He alone has been a member of every Council and of every Committee, physiological and otherwise, during the last nineteen years.

But are not nineteen years of place, and salary, and favouritism, enough? Are not ten years of wanton and glaring wrong to physiology sufficient? Are not the honours and offices of the Royal Society brought to a sufficiently low ebb? Now is the time for the noble spirit of Englishmen to awake, and to do right and justice, and redress years of wrong. Shades of NEWTON and of DAVY! let science, and science alone, once more be the sole source of distinction in the ancient scene of your glory, and let those mean vices which have taken her place be driven from the sacred enclosure for ever!

THE readers of this journal must have remarked the Protean forms which Quackery assumes: it would, we feel convinced, be unnecessary here to add one more to the category of offences committed by those who fatten on the credulity of the public, did not the case present a striking instance of their mal-practices so far obscuring diagnosis, as completely to mystify a case which in the commencement was very simple. The instance we allude to will be found reported at page 563 of the present volume of THE LANCET, as follows:—

"The case was stated by Mr. Bryan Galway, who said it was a special action for a sum of *9l. 4s. 7d.* damages by the plaintiff against the defendant, under the following circumstances:—In the month of September, 1844, the plaintiff's wife received a child from the defendant to nurse, at a yearly sum of *4l.* The child had a sore on its mouth, but no particular attention was paid to it. In a few days, the plaintiff's wife became diseased, and she diseased her husband; in fact, all the family became ill. The plaintiff's wife, ascertaining the nature of the disease, returned the child to its parents. The nurse, who was pregnant, was subsequently delivered, and the child then born was also diseased, and in some time after died of it. The disease appeared to fasten on the plaintiff's wife, and to get cured of it she had to go into the hospital of the Cork Union Workhouse. Everything that medical skill could suggest to effect her cure was tried, but ineffectually, for the poor woman is still labouring under the disease. For this injury, the action was brought to recover damages.

Evidence was given to prove the contract; and a quack doctor was called to show that he was to get thirty shillings from the father of the diseased child for the purpose of curing it of the corruptive sores on the body. This fellow called himself a 'herbalist'—a cognomen which appeared to sound not altogether agreeable to the barrister, who remarked, that if he caught one of them 'herbalists' in his criminal court, he would know how to deal with him."

In our report, it is stated that the case had been previously before the same barrister, but was dismissed without prejudice; and we find that Mr. BALDWIN has not yet given any decision.

"It had been previously before the same barrister, but was 'dismissed without prejudice,' a medical gentleman deposing that the disease was not contagious. It was now brought forward, strengthened by testimony of high medical authority, for the purpose of showing that the opinion of that medical witness was fallacious."

The medical practitioner thus alluded to is, we understand, Dr. MACEVERS, and the following subsequent statement by him gives a very different complexion to the case:—

"The father of the child acknowledges that he was affected with syphilis, primary and secondary, some time previous to his marriage, but got perfectly well; his wife is believed to be a most correct person; she has had a second child since, who is in perfect health, and the husband affirms that he has not had sexual intercourse with any but his wife since his marriage. The condition of the defendant's child when sent to nurse, was apparently quite healthy, with the exception of a sore mouth, which, from the description given, appeared to have been of a simple aphthous character, as frequently happens; such a state of mouth in the child will produce irritation about the nipples of nurses; and it appears that the plaintiff, soon after she received the child, did get an ordinary sore nipple, and having heard something whispered of the parents, she took it for granted that she was diseased, and immediately applied to a quack (called in the report, a herbalist), who plied her with his nostrum, the bichloride of mercury, in large quantities, and hence, it is more than probable, arose the train of subsequent symptoms."

This is the true explanation: thus, through the mismanagement of a quack, a poor woman is horribly salivated for a sore nipple, until severe pyralism is produced, and the medical men who are called in, find a difficulty in diagnosing the case. It appears to us quite clear that the action for damages ought to have been brought against the stupid "herbalist," and we question much if the poor plaintiff would not recover; for surely, she should receive some remuneration for her suffering by this mal-praxis; the trial would further clear up the character of the parents, and the country, perhaps, be rid of a medical impostor.

We cannot, however, omit this opportunity of commenting upon the medical evidence, as reported below, inasmuch as it evinces a want of knowledge in the principles of syphilis in children, which we were not prepared to meet with in the present day.

"Dr. O'Connor, physician to the Cork Union Workhouse, was sworn—He said that the plaintiff's wife was six weeks under his care, labouring under syphilis in a secondary degree; a child would convey the disease to the nurse; there was no doubt of that; a child might be born apparently free from that disease, and subsequently break out and communicate it.

Court—Is that opinion general?

Witness—That is the opinion of Sir Astley Cooper, Mr. Colles of Dublin, and the most eminent of the faculty.

Court—Is there any dispute about that now?

Witness—None whatever.

Court—Have you read the treatise of Ricord, the eminent French physician, on that subject?

Witness—I have not. I have read a review of the work, and though Ricord laid it down that secondary symptoms could not communicate the disease in a primary form, he never held that the *secondary disease was not contagious in a similar degree.*

Court—Have you seen the child?

Witness—No; the mother only; and she is not well yet."

Surely in an important case like this, which is likely to regulate future decisions, a medical practitioner might be at least expected, if ignorant of the present state of science, to come prepared by the perusal of authorities, before giving an opinion: he would have found that "there is a dispute." JOHN HUNTER did not believe in these supposed contagious cases; M. RICORD, and more recently Mr. ACROX, in this country, positively deny the contagion of secondary symptoms; and they found their opinions on the negative results derived from numerous experiments in inoculating with the secretions of all forms of secondary symptoms; but the barrister might have seen that the whole question hinges on the diagnosis, and it would appear that neither the child nor the nurse ever had syphilis; and such would have been, probably, the opinions of Drs. O'CONNOR and BULL, had they seen the case before the

plaintiff had been drenched with corrosive sublimate by the "herbalist" impostor.

We cannot close these observations without alluding to the following words by Dr. BULL, one of those who gave such positive evidence of the contagion of secondary syphilis.—"He himself had observed the disease *one hundred times* in nurses who got foundlings to nurse." Is Dr. BULL aware that he is one of those lucky individuals who has seen what no other mortal, Irish or English, ever before witnessed? We beg to inform him that JOHN HUNTER met with a few *supposed* cases, which he details; RICORD alludes to one or two; and others, who have had much greater opportunities than Dr. BULL of seeing syphilis, have rarely witnessed such cases. Might not he find, on comparing these cases, that a hundred was not the exact number? Might not he discover that he has classed as syphilis cases similar to the one reported by Mr. ACTON in THE LANCET for January, 1845, which was *eczema rubrum*? And if he sifts his evidence, and takes into consideration the ignorance of his patients, the inattention to their symptoms, and the occasional immorality of wet nurses, he may pause before he again states that he has met with a *hundred such cases*.

AN ADDRESS

DELIVERED IN

THE ROYAL COLLEGE OF CHEMISTRY,
HANOVER SQUARE,

On Wednesday Evening, June 3.

THE RIGHT HON. THE EARL OF CLARENDON
IN THE CHAIR.

BY JOHN GARDNER, M.D.

THE establishment of this institution, toward which your assistance has been so kindly and liberally afforded, must appear, to every one who fully considers its design and object, one of the most important enterprizes ever contemplated in this country. The dependence of Great Britain for her prosperity on arts and manufactures, based upon physical science, in the absence of all systematic efforts to foster and advance our knowledge of nature and her laws, has often called forth expressions of astonishment. You have determined to terminate this state of things, and to form a school for inducting the student of Nature into a profound acquaintance with chemistry—that branch of natural science which most needs at this time to be studied and promoted, and which is the key to the greatest variety of professions, trades, and economic arts. This being the general design of the Royal College of Chemistry, I am instructed by the Council to place before you, somewhat in detail, although as briefly as possible, the means by which they propose to accomplish it, and to sketch out in outline the several subordinate points amongst which their efforts should be distributed, in order to accomplish their main purpose.

I need not remind you of the popularity of the science of chemistry; you are well aware of the fact, and of its causes, the beauty of its laws and principles, and the attractive character of the experiments usually exhibited to illustrate them. The chemical lecturer commonly commands overflowing audiences, and nothing is more easy of attainment, or more accessible, in this country, than a speculative acquaintance with its leading facts and theories. You know, too, how often it has happened, that amongst the spectators of the brilliant phenomena of chemistry, some have been excited to a love of the science, and a desire to pursue it, and have, by their own efforts, under great difficulties, and after a considerable time, distinguished themselves by becoming original discoverers. A history of the difficulties met with and surmounted by those whose names are eminent in science, would be, perhaps, the most powerful plea for this institution. It is difficult to fix a limit to the achievements of genius, but he who would entrust science to individual effort, must have forgotten that the patient collector of facts, the labourer on details, is as

necessary to progress as the bold propounder of theories; that there must be Maclaurens as well as Newtons in the service of science; and, indeed, we cannot, upon any department of Nature, bring to bear too great a variety of mental character. If, therefore, there were no other reason for instituting a school of practical chemistry than the prospect it affords of smoothing the path of future philosophers, it ought to be sufficient to call forth and sustain our efforts. But there are more immediate and pressing motives. The recent discoveries of chemistry, especially relating to organic matter, are like those of navigators who touch only the shores of new continents—they merely indicate unexplored regions, and point the way for future researches. That the instruments and methods of research recently devised for investigating organic productions should have been so little employed in this country,—as you must admit they have been,—can only be explained by the absence of efficient instruction. No one, in the present day, can oppose the progress of science on the ground of his not being able to discover any use in it. For while it would be difficult to point out any practical application of many beautiful and successful investigations in organic chemistry, instances have been so numerous of most recondite observations, finding a use in promoting the arts, and adding to the comforts of mankind, that such a plea can no longer avail as a subterfuge for ignorance. Who, for example, could have imagined that the experiment of Galvani on the frog, as he watched the jerking of its muscles on the contact of metallic plates, should have brought forth, as it has recently done, the numerous arts of galvanoplastics, electrotyping, electroplating, &c., and have revolutionized some of the best established manufactures of Manchester and Sheffield. Who would stake his reputation on the prediction that the beautiful crystalline bodies, formed by the substitution of chlorine, bromine, iodine, &c., for hydrogen, in organic acids and alkaloïds, by Laurent and Hofmann, shall always remain mere objects of speculative curiosity, and find no use for the benefit of society?

Assuming, then, that you, Gentlemen, are satisfied that the study of Nature and her laws should in every direction be promoted, and that if it be expedient to teach what is already known, together with the principles and methods of research, and to assist further inquirers, it should be done efficiently, and by the best means in our power, I would invite your attention to the practical school of our College.

I think it may be said with safety, that until this College was established, no chemist of any reputation was engaged in this country solely in teaching the science practically. The lectures of professors of colleges and private schools are doubtless admirable means for imparting a general knowledge of the science. Occupying usually an hour daily, it requires a full session of six months to teach the leading facts and theories of inorganic matter, allowing only a few compendious sketches for organic chemistry. The preparation for these lectures, together with other avocations, must necessarily have engaged the whole time of the professors and their assistants. It was impossible for them to establish practical schools. The Apothecaries' Company, (with that desire to advance the education of the profession for which that body has been remarkable,) three or four years ago, added to their curriculum practical chemistry, and the schools, in order to conform to this law, instituted classes, which, during an hour daily, practised the preparation of substances, and the application of tests. A few laboratories were also open for working students,—at a fee of 10% per month; the most frequented of these numbered only six students; but on inquiring of every institution in London, I could not discover one where the whole time and attention of a qualified professor was given to the student, or where practical teaching was pursued systematically.

If an alteration has taken place—if practical schools of chemistry exist, and professors are appointed to devote their whole time and energies to teaching—if the fees now demanded are so moderate as to fill the new laboratories with students, it is to the enlightened Noblemen and Gentlemen who have formed this College that this service to science is to be attributed.

Since this College has been contemplated, too, the Pharmaceutical Society has opened a laboratory for teaching their art in a scientific manner. I mention this, merely to observe, that while it renders unnecessary a department of the College for teaching pharmacy, its objects are totally distinct and different from our own. It is to pure chemistry, and to its application to practical arts, unrepresented by active societies, that this institution is devoted.

The method of study adopted at Giessen having been successful, so many chemists of reputation in this country having studied there, and being accustomed to proclaim this fact in

demanding public confidence, it became a matter of primary importance to ascertain wherein the peculiarities of that school consisted. I am able very distinctly to assign the causes of the pre-eminence of Giessen as a school of chemistry.

In the first place, the reputation of Professor Liebig would attract students, and the liberality of the Hessian government enables the professor to charge fees sufficiently moderate to come within the means of young men from the manufacturing, trading, and professional classes, and to employ qualified assistants to take the burthen of teaching. Secondly, a system of study is pursued, which embraces an initiation into all the manipulations required in the practice of the science, keeps the student's attention constantly on the alert, sharpens his faculties of observation, obliges him to become acquainted with the principles and theories of chemistry, in order to draw correct inferences from the phenomena he creates, and, in one word, acts as a rigid mental discipline, as well as a technical introduction to all the facts at present known. The chemical student there must possess the preliminary qualification of a speculative acquaintance with the science. He then begins a course of experiments with his own hands, which produce the actions or manifestations which are characteristic of every known substance, at least, of all which are of ordinary occurrence. The plan is contained in the little work, entitled, "Outlines of the Course of Qualitative Analysis followed in the Giessen Laboratory," which has lately been presented to the English public.

The student takes potassa, soda, ammonia, baryta, magnesia, lime, alumina, and all the metals and their oxides; and with each he mixes the re-agents, which have, by the consent of chemists, been established as infallibly manifesting their peculiar reactions, and thus detecting with certainty their presence or absence in any given compound. In these experiments he has the constant assistance of a qualified teacher, to guard him against the use of too little or too great proportions of water, spirit, or other solvents—too great or too little heat;—to show him the best manner of manipulating; and to assist him in interpreting the results. These results are certain appearances, mostly addressed to the eye; and consequently, when spoken of as colours more or less vivid—precipitates more or less distinct, &c.—form subjects, beyond any other in the whole range of human knowledge requiring the aid of an experienced teacher to define. The experiments thus to be made amount to many hundreds. When the student becomes familiar with all the phenomena produced by his re-agents with these bodies, and is able to assign the cause,—to give the rationale of the re-actions,—he begins the analyses of unknown substances—that is, of substances unknown to himself, but which are prepared by the Professor, and arranged in order, so as to lead the student, by slow and safe steps, from simple to complex cases. This they call going through the bottles. About twenty liquids, containing each only one base, are first taken; then, as many with one acid and one base; subsequently, two or more bases, two or more acids, and so on until the more complex cases are reached: and in the end, all the inorganic bases, and a number of acids in admixture, are analyzed, to try the student's skill and memory.

So important is this method of study felt to be, that even many men, with a high reputation for scientific knowledge, as soon as they have looked closely at its effects, have at Giessen submitted to go through the drudgery of this systematic course.

When perfectly familiar with qualitative analysis—that is, when possessed of the power, imparted in this course, of detecting the presence or absence of every element in any possible form of mixture or compound,—the student is taught, by a similar system, to separate and estimate the quantities of every individual constituent: this is quantitative analysis; afterwards, the preparation of organic matter, and its analysis by combustion, becomes a comparatively easy step.

The constant presence, the incessant stimulus, and immediate aid, of a qualified instructor, is the corner-stone of this system. It has a parallel only in the custom, at our great English universities, of working with a private tutor when the student aspires to honours in classics or mathematics. Every difficulty, as it is met with, is explained; every fact for which the student feels at a loss is imparted; and his daily labour is definitely marked by the point reached in his onward progress.

In a university education, the information obtained is generally held to be inferior in importance to the discipline of the mind, the attainment of habits of continued attention, and the exercise of the reasoning powers and memory. The deep study of classics and mathematics teaches men *how to learn*, as well as furnishes them with the instruments available on all occasions and on all subjects; and the facility with which the

mixed sciences are acquired by those who have passed successfully through our universities is a matter of common remark.

The study of chemistry, in like manner, when pursued according to the system which I have described, becomes an *ORGANON*—an instrumental means of attaining an intellectual habit and qualification for the observation and interpretation of Nature. He who has thus become an expert analyst, has obtained a power capable of application in any direction for advancing his own knowledge, for practising the useful arts and manufactures, and for extending the boundaries of science.

It is this system which is pursued in the laboratory of the Royal College of Chemistry, and its effects are already beginning to be manifested. A member of our Council, himself accustomed to teach another science, applicable to one of the noblest practical arts, works daily in the laboratory. A few days ago, he expressed to me his admiration of the earnestness, constancy, and zeal, displayed by every student, without exception, and his conviction that the system of teaching adopted, in comparison with others, is the only method of acquiring a satisfactory knowledge of chemistry.

It is obviously too early for us to have any very striking investigations to adduce in proof of the value of our school. I may be allowed, however, to refer to a paper read by one of the students at the last meeting of the Chemical Society, on a purely scientific subject—namely, the phosphates of organic bases, as a contribution to science, which would do no discredit to a veteran. Mr. Nicholson, in that paper, detailed a number of analyses, made with remarkable skill and accuracy. Of course, it is chiefly to practice in analyses that the attention of the more advanced students is now, after only eight months' study, confined. Our professor mentioned to me a trial he made, lately, of three of the students, by giving them for practice the analysis of gunpowder. The numbers which they respectively presented to him were—

1. Nitrate of potass, 79.69 .. Carbon, 13.86 .. Sulphur, 9.45 .. Moisture, 0.
2. Nitrate of potass, 76.91 .. Carbon, 13.17 .. Sulphur, 9.27 .. Moisture, 0.65
3. Nitrate of potass, 76.70 .. Carbon, 13.28 .. Sulphur, 9.47 .. Moisture, 0.65

I select this merely as an illustration of the way in which the students occupy themselves; numberless analyses of various substances are made in this way for practice every day.

In a report presented to the Council, at the close of the first session, the Professor says, that several students will be perfectly qualified to commence, in the next session, the analysis of soils, ashes of plants, and mineral waters; and so far as the present session has elapsed, there has been no relaxation of their labours to frustrate that anticipation.

But you may very reasonably ask, Gentlemen, to what purposes can the knowledge and the skill thus obtained be applied, which shall compensate the supporters of the College for their labours and their money, and which shall avail to the students themselves in their progress in life? To both parts of this question we can return a satisfactory answer. The advancement of science itself, the improvement of arts, the origination of new sources of industry, the illumination of the obscurer parts of physiology and pathology, the increase of our means of remedying diseases, and preserving health, may all be fairly anticipated to flow from a practical school of chemistry. A numerous body of men, qualified in the manner I have described, and scattered throughout this country, cannot fail to produce visible and palpable effects. There is a natural tendency in such knowledge as is definite to propagate and expand. Possessing a clear insight into the laws and phenomena of Nature, combined with manual dexterity, the young chemist will find everywhere around him materials unexamined, and examples of manufacturing industry leading to wealth and rank. Did these ever fail to animate men to exertion?

But we need not dwell on vague anticipations of the future. We hope, under your fostering care, something will be done in our laboratory, to honour the founders of the College, and to commend it to the patronage of a larger number of subscribers, to invoke the aid of other societies, and to secure the favour of the government. It is proposed, as soon as the new laboratories are erected, to commence investigations for scientific and practical purposes. The Council have endeavoured to obtain the co-operation of the Royal Agricultural Society in the pursuit of researches which may benefit the landowner and farmer. The education of chemists capable of analyzing soils, manures, and produce, and of giving safe advice to the agriculturist, for economy, the increase of produce, and to save him from the frauds now so openly practised upon him, would seem sufficient to ensure support from that source. But there are subjects of inquiry which are of immediate and paramount importance for the successful cultivation of land, of such a nature as to require a special

laboratory, concerted efforts, and money to pursue; and we trust that the Royal Agricultural Society will, ere long, lend its assistance towards the institution of these inquiries.

There are great advantages in such a laboratory as we possess, for carrying out investigations; the presence of numbers engaged in the same work, and of the professors, to assist, by advice and suggestions, leads often to success where individuals, by their own solitary exertions, fail. Subjects, too, are supplied and help afforded, the value of which must be felt to be appreciated. It by no means, as I conceive, lessens the merit of the individual who thus seeks assistance; on the contrary, it is most honourable and conducive, both to private and public benefit. We have already indications of fruits of this description. M. Warren De la Rue has worked out, in our poorly-provided temporary laboratory, an investigation on cochineal, which, when published, will add to his already well-earned reputation as a chemist, and it has also furnished him with a new material available for the improvement of his beautiful and interesting art.

It could not fail to be a subject of remark amongst the students, that the chemist is obliged to have recourse to Bohemian glass for his combustion tubes. One of our friends remarked, that he could induce English makers to fabricate such glass if they knew the exact proportion of its ingredients. Upon this hint Mr. Rowney undertook the task of analyzing some specimens of Bohemian glass. Mr. Rowney's accuracy imparts value to the results he has obtained, and it seems very likely that from this point will emanate such improvements in the manufacture of glass as to preclude the necessity of importing from Bohemia.

Gentlemen, these are trifles—this College is but in its embryo state, it has not even reached infancy; but it is difficult to repress our enthusiasm when we recollect what the science of chemistry has done and is now doing, and contemplate the boundless unexplored regions of Nature inviting our industry, and offering us its sure reward.

Look only at the present uses of gas. Our esteemed friend Mr. Lowe tells us that 1000 tons of coal are daily decomposed for the production of gas in the metropolis; that the iron pipes in London alone measure several hundred miles—the extent of the smaller being almost incalculable; that gasometers are now made as large as a house, and that every town and almost village has its gas-works. Consider the trades created, the myriads of men employed in working the mechanism of this vast chemical process—and recollect that it is only in our own time that this branch of industry has been created. To chemistry, too, we are especially indebted for the present cheapness of this beautiful and indispensable light. The applications found for the other products of the decomposition of coal have enabled the manufacturers to reduce its price; it has become one of the most useful instruments of the laboratory, and it will now be employed, we trust, as a means of effecting further discoveries. Will any one affirm that it is impossible to obtain from coal a solid, dry, portable hydrocarbon, capable of being made a substitute for wax and tallow in the fabrication of candles, and so cheap as to supersede animal fat in lighting the humblest cottages?

The point, however, to which I wish to direct your special attention, in reference to our anticipations of advancing the science, is, organic chemistry. The apparatus for organic combustion, the great invention of Professor Liebig, is already almost daily in use in our laboratory. By its means, as you know, the analysis of matter belonging to the animal and vegetable kingdoms—the produce, in some form or other, of the vital force—is effected with greater ease and equal precision with the analysis of a soil or a mineral. The rapidity with which discoveries are being made, and the immense extent of the science, render it almost impossible, except for the professed chemist, to follow and to appreciate its importance. Every now and then, however, some fact is made known, having an immediate application to practical purposes, and indicating how vast a field of inquiry exists in organic nature. Within the last few days, Professor Liebig has announced to us that a residue left in the manufacture of sulphate of quinine is the pure alkaloid itself, merely obscured by its form. The discovery of quinine by Pellatier, in 1820, revolutionized pharmacy. The active principles of the most nauseous drugs can now be isolated from the accompaniments of woody fibre and other inert matters, and exhibited in a concentrated form. This is a blessing which only those who have had to swallow bark in substance can fully understand. During the twenty-six years in which sulphate of quinine has been manufactured, a considerable portion, every year, of the pure alkaloid has been laid aside, and consequently a considerable amount has accumulated. Professor Liebig's

discovery will not only bring this into use, but it will enable the practitioner of medicine to prescribe the pure alkaloid, and to combine it at pleasure with vegetable or other acids, and thus to obviate the objections which are found in practice to lie against the sulphate of quinine, placing at command quinine and a variety of its salts at a price which will not preclude the poorest from its benefit.

A great proportion of the vegetable kingdom still requires to be chemically investigated; of the materials which constitute the animal body, every one, without exception, awaits a new analysis and investigation. Not many months since, Professor Redtenbacher, of Prague, found that taurine, a constituent of bile, which acts a most important part in the animal economy, contains sulphur to the extent of 26 per cent. This element had been previously overlooked, in consequence of what must be considered a defect in the method of analysis by combustion; in that process the oxygen of the analyzed body being estimated by the amount of loss, the equivalent of sulphur being precisely double that of oxygen, its presence did not disturb the calculation of the results. Professor Gregory has remarked, that this observation of Redtenbacher will probably turn out, in its consequences, one of the most important yet made in animal chemistry; and it cannot be doubted, that although our views must be changed in many points, in consequence of it, our knowledge will be extended and rendered more precise and more capable of direct application to physiology and pathology. Already Professor Liebig has found reason to believe that Mulder's protein and oxides of protein exist only in imagination, as sulphur remains combined with the other elements after fibrine and albumen are subjected to Mulder's processes. To extend this inquiry into all the materials of the animal tissues, requires many skilful hands and much labour.

The principle upon which organic investigations are now pursued, is worthy of your serious attention; it is, to subject a substance to the action of heat, of oxidizing and reducing agents, and generally to every influence capable of changing or modifying its composition, to analyze the resulting compounds, to study their mutual relations, and thus to ascertain the true nature of the original matter. This principle was first adopted by Chevreul; its application by Dumas and Boullay to the compound ethers, Professor Liebig says, gave the first impulse to the extraordinary development which chemistry has since then attained. It has created, in fact, a new branch of the science, which it would be of great importance to distinguish by a distinct designation. We are familiar with the distinctions of analytical and synthetical chemistry. Analysis is the separation of a chemical compound into its component parts. Synthesis is the putting together the elements of compounds, and combining them into a chemical union. The formation of water, and of nitric acid, by directly combining their elements, as effected by Mr. Cavendish, are examples of synthesis. Very little has been done in this direction, beyond a few instances illustrative of the safety of depending upon analytical results, in certain cases, as philosophical facts. The only example I recollect of synthetic chemistry applicable to practical purposes is, however, a most brilliant one, made by Gmelin—namely, the formation of artificial ultramarine, by mixing silica, alumina, soda, and sulphur, colourless bodies, to produce that beautiful blue pigment. There is no reason to believe that it is by way of synthesis that Nature produces the many complex substances, termed organic matter. The affinities of inorganic bodies are employed to group together the proper elements, and in the process of constructing the materials required in vegetable and animal organisms, intermediate compounds are formed, which, not being needed in a separate state, are again combined, and ultimately give rise to the substances which are the designed results of the process. Proceeding in the path indicated by Chevreul, these internal forms of organic bodies are detached, recombined, and undergo a variety of metamorphoses, by which the true constitution of the first is revealed, and new complex bodies created, as it were, as truly organic as any of those produced by the vital force. The theory of compound radicals is the general expression of the fact, that very simple forms, consisting of a few equivalents of two or three elements, may be assumed as the basis or rudimental centres of all the varieties of compounds constructed in living organisms. By breaking up the internal structure of these compounds, or by bringing to bear upon them other affinities, that is, by employing certain media in imitation of the way pursued by Nature, many natural productions can be produced artificially, and a great number can be artificially made, exactly analogous to the acids, neutral bodies, and alkaloids found in plants. Of the former kind; that is, of natural productions produced artifi-

cially, several have become of commercial importance: the manufacture of sugar from starch, by the mediation of sulphuric acid; of British gum, also from starch, which has materially affected the commerce of Senegal and the Gambia; and that of valerianic acid, are well-known examples. The process for effecting the first of these transformations will illustrate the action of media. Sugar and starch have the same composition, except that the former contains the elements of two atoms of water more than the latter. To add the water to the starch directly, so as to convert it into sugar, is at present beyond our power. But we know that the vital force, aided by heat, converts starch into sugar. This is the rationale of the process of malting. And a method has been known for some time, of effecting the same purpose; that is, of adding the elements of two atoms of water to the elements of starch, and thereby converting it into sugar. This is done by the long-continued boiling of starch in water acidulated with sulphuric acid. The acid acts as a medium to effect the assumption of the water by the starch, and to transform it into sugar, the acid itself remaining unchanged. The same transformation may be effected on linen rags, and any form of ligneous fibre, thus converting them into sugar. Other natural substances which have been produced artificially possess only scientific interest, as UREA, formic acid, butyric acid, &c. But it by no means follows that these are of no practical use. The formation of butyric acid from starch, threw an important light on the sources of animal fat. Natural urea is a curious and highly interesting substance. The restoration of nitrogenous matter which has served its purposes in the animal economy, to the atmosphere, whence it had been derived by vegetable organisms, requires it to be brought into the same form it had originally, in order to its diffusion through the whole mass of air around our planet—namely, into ammonia. But ammonia would injure the animal tissues. The contrivance by which this difficulty has been evaded, excited the admiration of M. Dumas. "Nature, ever provident," says he, "has caused the animal to secrete urea. Urea is a neutral and inert substance, which can pass through the delicate structure of the kidneys, ureters, and bladder, without irritating or inflaming them. By the addition of two atoms of water, it becomes converted into the carbonate of ammonia. In this form it travels from the earth to the atmosphere, from the atmosphere to the earth in rain and dew, and is thence again served upon, and elaborated by, plants into the forms adapted for animal nourishment."

The manner in which Nature employs the affinities of inorganic bodies as media for the production of organic compounds, is in some cases understood. Thus, for instance, the potass taken up from the soil by plants, has a great affinity for carbonic acid, and by virtue of that affinity fixes it from its gaseous state in the atmosphere. In the juices of the plants it meets with water in a nascent state, as it is separated from its combinations in the organism; this water, or rather its elements, combining with the carbonating potass, converts it into oxalate of potass, or by a further accession of hydrogen, into citric, malic, tartaric, and other acids, sugar, gum, starch, &c., oxygen being set free. Thus the affinity of potass for carbonic acid, &c., is the force which primarily originates the changes essential to these combinations. In like manner, but by processes not at present understood, phosphorus and sulphur, in all probability, mediate the production of materials for building up animal bodies, albumen, fibrine, &c.

Of the latter kind—that is, artificial organic compounds,—several basic bodies or alkaloids have been formed by Laurent, Hofmann, and others, and a very interesting one from the oil of bran, by Professor Fownes, termed by him furfurine. These alkaloids combine with acids, and form series of crystalline salts, as distinct and well-defined as those of the natural organic alkaloids.

The Great Author of Nature seems to have provided laws regulating the affinities of the elements for the creation by our instrumentality of organic bodies, for which no use is found in nature. It is necessary, however, to be cautious in the latter assertion, because it has happened, in at least three or four instances, that such artificial compounds, first formed in the laboratory, have been afterwards discovered to exist in plants or animals.

In the course of the investigation of M. De La Rue, already alluded to, that gentleman discovered a new crystalline substance existing in cochineal, to the extent of about one-third per cent., which appears to be identical with a substance lately described by Liebig, and formed by him by acting on caseine with caustic potass. Salicylic acid, and oxide of methyle, first produced by the decomposition of other organic substances, were afterwards found to coexist in

the oil obtained by distilling the flowers of the *gualtheria procumbens*; and very recently, Professor Redtenbacher, by acting upon oleic acid with nitric acid, and submitting the result to distillation; obtained no less than nine acids in the distillate; one of these is a new acid; but very curiously, it was discovered at the same time in his own laboratory by a student, in the plant called *pelargonium roseum*, from which, therefore, he has named the acid, *pelargonic acid*.

It is impossible, in contemplating these results, to avoid entertaining the belief that chemists are upon a track which will ultimately lead to the production, by artificial processes, of the natural alkaloids, morphine, strychnine, quinine, or such vegetable bodies as indigo, santaline, &c., and to the elucidation of the *modus operandi* of the vital forces in transforming the materials presented to the organs of nutrition of plants and animals.

As I have already observed, an especial designation seems demanded for this branch of chemistry, which is neither analytical nor synthetical. I will therefore propose, in the absence of a better term, to denominate the aggregate of the processes by the term *genesis*, and the subject, *genetical*, or *constructive chemistry*.

This branch of the science is occupying the attention of very many students on the continent, and is undergoing a rapid development. From the masses of figures and calculations, now accumulating, representing analyses, we may anticipate many practical results, of vast importance, to emerge. I ought not to quit this subject, without alluding to the improvements in candle-making, resulting from Chevreul's labours.

For my own part, I entertain the most sanguine hopes that the diseases most fatal to mankind will be elucidated, and, perhaps, wholly prevented, by pursuing this path of chemical inquiry.

Whilst the science of organic chemistry was advancing on the Continent like a torrent, was this country to be permitted to remain the only one in Europe where the necessary qualification could not be obtained to enable men to assist in this great work? The example of Hesse Darmstadt, in founding and supporting a school at the bidding of Liebig, who has given his country new importance in Europe, has been followed by France, Prussia, Belgium, and even Russia and Austria, and nearly all the smaller German states. Is the accomplished chemist less likely to find profitable employment in the manufactures, arts, and professions of Great Britain, than in those countries? Much as we have to boast of in the way of popular lectures, it might occur to many to suspect the soundness of the knowledge thus obtained if the patent list were examined, and the extraordinary mistakes made, to the serious pecuniary loss of many persons for want of just scientific notions, considered. I may mention, as an illustration of this remark, the credit given by the public, and, I might add, by some distinguished individuals, to the profession, made not long since, that a fuel had been discovered which would burn and supply heat without leaving the ordinary products of combustion—that no carbonic acid was given to the atmosphere in burning this material. The belief entertained in this ridiculous fiction was sincere enough, as it cost the loss of several lives. Assuredly, the spread of chemists, taught after the manner we have adopted, will supply the public with better instruction.

It is a startling, but nevertheless certain fact, that in many of our manufactures, depending, wholly or in part, upon chemical principles, this country is fast falling behind those of the continent. If the instances in which this is most evident may appear insignificant in comparison with the vast creations of our machinery, it should be remembered how easy a downward progress becomes. "A respect for every department of Nature," says Baron Humboldt, "is especially necessary in the present times, when the material wealth and increasing welfare of nations is so closely connected with the diligent use of natural productions and natural forces. The most superficial glance at the present condition of Europe assures us that any relaxation of effort would be followed by gradual diminution and ultimate annihilation of national prosperity. Nothing but energetic progress in chemistry, and other branches of natural science, will save any state from the evils of decline. Man can make no use of Nature, can appropriate none of her powers, if he be not conversant with her laws, and the relations of number and measure existing amid her processes. Those nations which relax now in manufacturing activity, in the practical application of technical chemistry, must inevitably fall from any prosperity they may have attained; more especially as neighbouring states, instinct with powers of youthful renovation, in which science and practice co-operate, enter upon the struggle, and press forward in the race."

It is wholly inconceivable, that the enlightened statesmen who guide the energies of this country, will, when once their attention is aroused to these truths, withhold their aid in establishing this College. Its special object is too great to be merged into courses of general education, or to be entrusted to individual exertion. The association and co-operation of but a few persons representing each science and art based upon chemistry, would, however, amply suffice to effect its purposes. Perhaps it is better to call forth voluntary efforts, than to institute schools of chemistry by authority, and to clog them with official restrictions.

Gentlemen, it only remains for me to say what grateful thanks are due from all persons interested in science and the arts, but especially from the gentlemen who enjoy the privilege of our course of instruction, to our Royal President, our noble Vice-presidents, and to the Council, for their generous assistance in founding this College. This they have afforded, under the conviction, that this institution is calculated to confer great and enduring benefits on all classes of their fellow-countrymen, and on all mankind; and that—although not obviously and conspicuously—yet to the enlightened mind—the highest exercise of benevolence is to promote the extension of our knowledge and of our power over nature.

To one gentleman, however, we owe an especial debt of gratitude, for his constant personal exertions, the devotion of his valuable time, and the unwearied employment of his influence, with the most noble and enlarged views, to promote the establishment of this College. I should be deprived of the greatest pleasure I derive from my own efforts in its behalf, if I could not publicly acknowledge that our success—which, I trust, is now unquestionable—will be mainly attributable to Sir James Clark.

DRUGGISTS' SURGERY.

To the Editor of THE LANCET.

SIR,—At page 532 in the last number of THE LANCET is a report from Bartholomew's Hospital, by Mr. Holmes Coote, of a dislocation of both humeri, occasioned by a fall on the pavement; that the patient was immediately after the accident taken to the shop of a druggist, who, when the man had sufficiently recovered from the shock of the fall, examined the left shoulder, which was bruised, and pronounced it "sprained," and directed a liniment to be applied. About a fortnight after the accident, he was admitted into Bartholomew's Hospital, under Mr. Lawrence, when both humeri were found to be dislocated.

In giving a report of the case, I think Mr. Holmes Coote should have availed himself of the opportunity of deprecating the evil resulting from chemists and druggists presuming to give an opinion or advice on any medical or surgical case. Here was this poor man suffering a whole fortnight of pain, longer than he otherwise would have done had he applied to a surgeon, or sought relief at an hospital, immediately after quitting the shop of this druggist. Not only did he suffer a fortnight's more pain, but in all probability he was a man with a wife and family, who also most likely had to suffer many privations, from the father not being able to labour for their support by one fortnight so soon as he might otherwise have done.—I am, Sir, your most obedient servant,

May, 1846.

H. H. R.

THE LATE PROFESSOR DAVIS.—USE OF THE FORCEPS.

To the Editor of THE LANCET.

SIR,—You will see that Professor Murphy, at the close of his letter, (THE LANCET, p. 613,) has—in his unauthorized conclusion, from the late Dr. Davis's writings or his teaching, that his predecessor sometimes used the forceps "when the head was impacted in the pelvis"—fully confirmed the correctness of my reading (see THE LANCET for May 23rd) of the passage in question in his work, imputing to the late Dr. Davis, "that he advocated a much bolder use of the forceps than he (Dr. Murphy) would recommend."—(p. 159 of his work.)

I am glad that I have been the means of correcting Professor Murphy's misapprehension of his author, and that he has had the candour to admit his mistake.

The cause of truth, not less than duty, has induced me, as a former pupil, and a son of the late Professor, to act, as Dr. Murphy himself, I am sure, would have done under the same circumstances.

Russell-place, Fitzroy-square, June, 1846.

J. HALL DAVIS.

ON THE DIVISION OF MIDWIFERY FEES.

MR. TUCKER, OF BERNERS-STREET, IN REPLY TO MR. ROBINS' REMARKS.

MR. ROBINS says, in the commencement of his letter, that the views proposed by the Society, "in my simplicity I had presumed to condemn." Now the Society does not ask *ego* to entertain any particular views, but seeks to establish some rules which shall be the most just and honourable that can be possibly entertained, and in accordance with the opinions of the greatest number of practitioners.

While the point is contested, individual opinions bear equal value; therefore the gentleman mentioned in my letter, though he had might on his side, I do not think had either justice or honour.

Mr. Robins again observes—"It would have been as well if the opinions of the profession had been ascertained *before* the resolutions referred to had been propounded." Now, it is only in answer to mention, that the profession are too apt, as *we have found*, to stand aloof until they know to what they subscribe.

MEDICAL NEWS,

FACTS, NOTICES, AND REMARKS.

FRENCH REWARDS TO MEDICAL MEN.—The Royal Academy of Sciences, Paris, have just awarded to M. Amussat, their first prize in medicine and surgery, of 60*l.*, for his researches on wounds of the vascular system. Dr. Bonnet, of Lyons, received the second prize, of the value of 50*l.*, for his investigations on diseased joints. Prizes of 25*l.* each were also awarded to Dr. Becquerel and Dr. Rodier, as an encouragement for their researches on the composition of the blood in health and in disease. A sum of 20*l.* was awarded to M. Réveillé Parise, for his remarks on the dressing of wounds with thin plates of lead. M. Morel received 20*l.* for his memoir on dislocations of the clavicle, and M. Clias also obtained the sum of 20*l.* for his new method of gymnastics. The gold medal, value 35*l.*, was presented to the celebrated ichthyologist, M. Agassiz, for his valuable work on living and fossil fishes. Other prizes were awarded to Messrs. Bischoff and Raciborski for their respective treatises. Thus upwards of 250*l.* have been presented by this Academy to medical men, for the encouragement of their efforts in art and science. How true the saying, "These things are managed better in France" than in England!

ROYAL COLLEGE OF SURGEONS.—At a meeting of the Fellows, on Tuesday last, Cesar H. Hawkins, Esq., surgeon to St. George's Hospital, was elected a member of the council, in the vacancy occasioned by the decease of J. Scott, Esq., of the London Hospital. Several leading medical men in the provinces attended on this occasion, to record their votes, Leeds, Bath, Bristol, Nottingham, &c., sending their representatives to the college.

KING'S COLLEGE HOSPITAL.—The annual dinner in behalf of this institution, took place on Saturday, May 23rd, at the Freemasons' Tavern, the Earl of Eldon in the chair. In the course of the evening it was stated that the gross amount of receipts for the past year had been 5446*l.* 11*s.* 10*d.*, and the expenditure, 5008*l.* 3*s.* 8*d.*; the number of patients admitted during the year, had been 1,266, exclusive of out-patients. Dr. Arthur Farre acknowledged the toast of the Medical Officers.

DISSECTIONS IN TURKEY.—The Sultan is stated to have promulgated an order, that the bodies of female slaves who die in the market shall be given up by their owners to the students in medicine for dissection.

HIS ROYAL HIGHNESS PRINCE ALBERT has appointed Surgeon Major William J. Judd, of the Scots Fusilier Guards, to be Surgeon in Ordinary to his Royal Highness. Mr. Judd is well known to the profession by his published works, and his papers in THE LANCET, particularly those on the negro's skin.

HOSPITAL FOR CONSUMPTION, ETC., BROMPTON.—At an annual meeting of governors, on Saturday, May 30, the report stated that the expenses hitherto incurred for the new building, have amounted to 13,446*l.*, of which the sum of 9134*l.* has been received; a balance remaining against the charity of 5132*l.*, payment of which, by arrangement with the builder, is extended over three years and a half.

MR. GOADLEY's excellent collection has been presented to the Museum of the Royal College of Surgeons, by a committee of gentlemen, who subscribed four hundred pounds for its purchase. Prince Albert was a donor of 20*l.*

WHOLESALE POISONING IN NORFOLK.—HAPPISBURG, TUESDAY EVENING, JUNE 2.—A further investigation into the circumstances attending this shocking affair was, at the instance of the Secretary of State, commenced yesterday morning by Mr. Pilgrim, the county coroner, at the village of East Ruston, two miles distant, on view of the bodies of Martha, William, and Maria Green, grandchildren of the deceased Jonathan Balls.

The Coroner remarked, that the step taken by Sir James Graham had given general satisfaction; and the gentleman whom the Secretary of State had sent down, had been most active and persevering in collecting such facts as would tend to clear up the mystery attending the deaths. He did confess that the affair ought to have been investigated before, and he could not help thinking that if an inquiry had taken place at the death of the first child, it would have saved the lives of many others who had been sacrificed. He hoped, accordingly, that the local authorities would be more alert, and never have a similar case to that they were inquiring into.

Evidence was then taken from Mary and Robert Green, (the daughter and son-in-law of the deceased Jonathan Balls,) Sarah Pratt, and Rosanna Peggs; from the depositions of which last it was elicited that a daughter of Balls had died some years ago, after having, as well as her child, who had also died, received severe bodily injuries from her husband; yet neither in the case of mother nor of child was any inquest held.

The Coroner observed, that it was most extraordinary that, although there had been so much talk about this poor woman's death, no inquiry should take place; but that he would have the body disinterred in the course of the following morning, and ascertain what state it was in. The more they went into the inquiry, the worse it became.

The surgeon who examined the body of Maria Green, a child that had been buried ten years, stated that the presence of poison had been discovered. This is the body of the child on which an inquest was held at the time of death, but of which there was then no internal examination. The examination of the other two children had not been proceeded with, and the inquiry was adjourned until Wednesday, at nine o'clock.

On Wednesday, the inquiry was resumed, after view of the bodies of Maria Lacey and Hannah Peggs, disinterred at Ingham; and during the day a chemical examination was commenced of their remains. The inquest on them was, however, adjourned until next week; and it is stated that the Secretary of State has authorized a chemist of eminence to proceed from London, specially to assist in the investigation.

NEW-YORK STATE LUNATIC ASYLUM.—From a late report of the superintendent of the Asylum—Dr. Brigham, we glean, that of the months in the year, the maximum number of admissions for three years has been in May, and the minimum in December; but the doctor thinks the seasons have little to do with the malady, and that the moon has no peculiar influence on lunatics except when *seen*, and then only as any other brilliant light affects them.

One fruitful cause of insanity set down in Dr. Brigham's tables is, impaired bodily health, but in a great majority of cases the cause is declared to be doubtful or unknown. In a large number, the cause assigned is religious anxiety, and in nineteen the cause expressly assigned is "Millerism."—*American paper.*

FARRINGTON DISPENSARY.—The annual dinner of this institution took place on Wednesday, at Anderton's hotel, Sir James Duke, M.P., in the chair. Donations to the amount of 106*l.* were announced during the evening, and the report stated that the charity had relieved 3,133 patients during the last year.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, May 29th, 1846:—E. W. Pritchard, S. Probyn, H. F. Smith, G. A. Jeffery, D. W. Stephens, J. W. Constance, F. J. Sandford, E. Sandford, H. Loney, C. F. Williams, and A. Clark.

APOTHECARIES' HALL, LONDON.

Names of Gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, May 21st, 1846:—Robert Smith Jeffs; Robert Nichol, India; Peter Thomas Gunning, Iron Acton, near Bristol; Frederick Collins, Layton, Essex; John Gathergood, St. John's, Lynn.—May 28th: Edward Palmer Turner, Birmingham; Coleman Burnham, Paterington; Owen Kiernan, Devonshire; William Abraham Salmon, Wells, Somerset; Octavian Royle, Plainfield, Norfolk; John Climensson Day, London; John James Rygate, Grays, Essex; Frederick Howard, Dorking; Frederick Giles Broxholm, Sunbury, Middlesex; Edward Henry Owen, London; Robert Lumb, Whitehaven; James John Roughton, Kettering.

CORRESPONDENTS.

Chirurgicus, (Bristol.)—How can there be a doubt on the subject? Two tickets were not wanted for the purpose of enabling a single individual to eat one dinner! Of course the object in sending for tickets was to place such in the hands of reporters. There was not a blockhead in the committee who was not perfectly aware of that fact. It is unknown to us whether such a dinner has taken place.

X.—We agree with Dr. Herapath in considering that Jones's patent flour is one of the most valuable inventions of the age;—that is, if we are to estimate its worth by the influence that it is likely to exercise on the health and daily comfort of immense masses of persons. Provided with the patent flour, and water, and the means of making a fire, new and beautiful bread may, within two hours, be in the hands of the sailor on the ocean, or of the traveller on the mountain or in the wilderness. The general introduction of Jones's patent flour into use must lead to a complete revolution in the present system of baking bread and biscuits. In private families its employment will become very general; and by its being adopted in the great baking establishments, the journeymen-bakers—now almost the worst persecuted drudges in society—will be completely emancipated from their nocturnal, and health and life destroying labours. We repeat, that, judging of the utility of Mr. Jones's invention by the numbers whom it is calculated to gratify and benefit, its value could hardly be over-estimated.

Mr. Markham.—The order was issued in March, 1842. The order itself has not been modified, but the operation of it has, in many instances, been relaxed. The party named is disqualified, apparently, in all respects; and it would be a most scandalous proceeding if such a person should be appointed to the district. It will deserve, and shall receive, the severest condemnation and the fullest exposure.

A Tradesman.—Similar printed "begging-advertisement" circulars are forwarded to us every week. Parties who have been induced to advertise in that publication, in consequence of fraudulent statements, have their remedy at law. The authors of them might be indicted; they obtain money under false pretences. Advertisers may successfully resist all charges for advertising made under such circumstances. Not a sixpence of such accounts could be recovered at law. The printing and publishing books of THE LANCET shall be at the service of any tradesman who may have been the victim of such impositions. A single legal investigation would fully expose the authors of these nefarious transactions.

M. D. (Glasgow), at Edinburgh.

A Constant Reader.—The puffing of Dr. Orpen has been already noticed.

A Subscriber, (Worcester.)—The election of the Board of Guardians was a complete juggle. If the party elected be merely a fellow of the College of Surgeons, it is an illegal election, he being disqualified by the order of the poor-law commissioners. A regular announcement of the vacancy ought to have been advertised. We advise our correspondent to state the case to the poor-law commissioners, and to ask, point-blank, if the election be a legal one: his letter to the commissioners, and the reply, shall be willingly accorded places in our columns. (Owing to an accident, this notice was omitted in our last replies to correspondents.)

Mr. M. G. Webb.—There is no other diploma or licence which confers the right of practising medicine in England or Wales, than one of the three first named. The St. Andrew's diploma does not confer the legal right of practising medicine in England.

On looking over the paper of *Mr. Greenhow*, we consider that the judges acted most unfairly in not awarding to him the prize for his essay, unless a better was forwarded to them. The essay of *Mr. Greenhow* was evidently written with great care, and presents the evidence of industrious research and much ability. We shall inquire personally of *Mr. Hume*, the member for Montrose, what became of the hundred pounds; who were the parties that lodged such a sum in his hands, to be awarded for the best essay on Medical Reform; and to whom the money was returned. We shall inform the hon. M.P. that there is at least one claimant for £50 of the amount.

The communication of *Professor R. D. Thomson* (of Glasgow) has been received, and the requisite attention shall be devoted to the subject.

Unless such a communication as the one forwarded to us by *J. S.*, relative to the examination for the degree of M.D., at the University of St. Andrew's, be authenticated by having attached to it the name and address of the writer, it could not be published with the least advantage, and it might have the effect of producing many wrong impressions.

Mr. H.—We regret that his note of last week was accidentally overlooked. The Editor would feel much pleasure in giving the required introduction.

The communication forwarded to us by *Dr. Corbel*, of Orsett, Essex, a short time since, shall be published in the next LANCET. An extraordinary pressure of matter has prevented its insertion at an earlier period. As our readers may perceive, the correspondence published in THE LANCET has attained to a degree of magnitude, and embraces an extent of surface over the globe, which are almost, if not quite, without a parallel in the history of medical journalism.

The letter of *Mr. Harding* is unavoidably postponed until next week.

The communication of *F. W. W.* shall be published next week, giving an account of the influence of the climate, and other circumstances, of the island of Chusan, on European constitutions.

We hope to be able to publish the valuable report, which has been furnished to us by *Mr. Robins*, at an early opportunity.

Communications have been received from—*Mr. Amesbury*; *Censor*, (Glasgow); *Mr. Holmes Cootie*; *A Foreign Subscriber*; and other correspondents, whom we shall reply to in the next LANCET.

ST. BARTHOLOMEW'S HOSPITAL.

SURGICAL CASES TREATED AT THIS HOSPITAL.

Reported by HOLMES COOTE, Esq.,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, SURGEON TO THE NORTH LONDON OPHTHALMIC INSTITUTION, AND LATE HOUSE-SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

DISEASE OF THE SOFT PARTS UPON THE DORSUM OF THE FOOT, FROM NEGLECTED INJURY.—AMPUTATION AT THE LOWER THIRD OF THE LEG.

CASE 1.—Joseph C—, aged twenty-six, was severely injured, two years ago, by a heavy weight, which fell upon the left foot, and crushed three toes. Considerable swelling and inflammation ensued; the toes mortified and were cast off, but the foot never regained its natural size.

Admitted, 1844, under Mr. Stanley. There is a large and painful ulcer upon the dorsum of the foot, with thickening of the surrounding parts; the patient is unable to bear upon the limb in the slightest degree. Every plan was ineffectually tried to bring the sore to a healing state, and at the end of six months, the patient, feeling himself hopelessly crippled, was anxious to have the foot removed. Two operations suggested themselves to Mr. Stanley's mind; the one, partial removal of the foot; the other, amputation of the leg at the lower third; the latter was preferred, in consequence of the uncertainty which existed as to the nature and extent of the disease under which the patient was suffering. With a small amputating knife, Mr. Stanley formed an anterior and a posterior flap, and divided the bones about three inches above the malleoli; the wound was united by sutures. The parts healed without a bad symptom, and the stump, full and round, was covered with a thick fleshy pad.

After some weeks he was provided with a short wooden leg, adapted to the extremity of the stump, with which he now walks about in perfect ease, and with good movement of the knee-joint.

DISEASE OF THE MIDDLE CUNEIFORM BONE; AMPUTATION OF THE LEG, IMMEDIATELY ABOVE THE MALLEOLI.

CASE 2.—John G—, aged thirty-one, a sufferer from rheumatism, states, that two years ago he experienced severe pains in the foot, which swelled, and became red: abscesses next formed, which burst, and degenerated into fistulous passages, through which a probe passed down to bone denuded of its periosteum.

Aug. 2nd, 1845.—The leg was amputated by Mr. Stanley immediately above the malleoli; an anterior and a posterior flap were formed, the latter being the longer, so as to bring the cicatrix in front of the tibia: the wound was brought together with sutures: water dressing. Upon examination of the foot, it was found that the middle cuneiform bone, ulcerated upon its surface, and of yellow colour, was loose in a suppurating cavity, surrounded by the other bones, not materially diseased.

The fourth day after the operation the sutures were removed, and a bread-and-water poultice was applied. The wound healed without a bad symptom; the stump, fourteen inches in length, was covered with a thick fleshy pad, and the patient was directed to move about upon crutches.

April 28th, 1846.—He came to the hospital for the purpose of trying an artificial limb, constructed, after the suggestions of Mr. Stanley, by Mr. Fergusson, surgical instrument maker to the hospital.

A long leather boot, made to fit with great accuracy, receives the stump, and is attached to a circular leather strap with a buckle, above the knee, by a superior and an inferior lateral strap, united at the bend of the knee by a ring. This boot must be so constructed, that the weight of the body, in walking, shall press upon upper and lateral parts, and not upon the extremity of the stump; the rings in the lateral bands are for the purpose of allowing the knee to bend readily. To the extremity of the boot a foot is attached, in the instep of which is a common hinge, kept patent by a spiral wire spring.

Immediately upon the proper adjustment of the artificial limb, the patient found himself able to walk about the ward with a single crutch; he even took a few steps, in the presence of Mr. Stanley, without any crutch whatever. He was directed to accustom himself gradually to the boot, and to show himself at the hospital in the course of a few weeks.

No. 1189.



PENETRATING WOUND OF THE OS CALCIS, FOLLOWED BY INFLAMMATION AND SUPPURATION IN THE CANCELLOUS TEXTURE; SECONDARY DISEASE OF THE TARSUS; AMPUTATION OF THE LEG ABOVE THE MALLEOLI.

CASE 3.—William C—, aged nineteen, a sailor, states that as he was walking along the deck of his ship, off the Cape of Good Hope, barefooted, six months ago, he trod upon a large nail, projecting from a loose piece of board, and ran it full two inches into the heel. By fixing the board against the deck with the opposite member, he managed to withdraw his foot from the nail. Although he did not suffer much at the moment, severe pain came on a few hours afterwards. In a few days the foot became swelled and painful, and he was confined to his bed. Some weeks afterwards, an abscess formed in the heel, and was opened by the surgeon of the ship. A considerable quantity of pus escaped, which gave him much relief, but the pain never entirely left him. From time to time other abscesses formed about the heel, and burst, leaving fistulous passages, through which, fragments of dead bone came away. Finding himself unable to put his foot to the ground, never free from pain, and unfit to gain his living, he came to the hospital prepared to submit to amputation.

September 5th, 1845, admitted into Bentley Ward under Mr. Stanley.—The left foot is swelled and painful; there are several fistulous passages, apparently leading to a cavity in the os calcis. The spot where the nail penetrated the heel is marked by a cicatrix; the foot is quite useless; he is never free from pain.

Every measure likely to benefit the patient was tried; he was kept quiet in bed; the foot was leached, and all inflammatory redness was removed; no perceptible improvement ensued.

January 18th, 1846.—The leg was amputated by Mr. Stanley. An anterior and a posterior flap were formed, as in the preceding cases; the stump, eleven inches in length, measured from the knee, healed without an unfavourable symptom.

Examination of the limb.—The cicatrix of the heel corresponded with a long fistulous passage in the os calcis, closed inferiorly by periosteum, and terminating superiorly in an abscess of the cancellous texture of the bone, its cavity of the size of a walnut; the posterior calcaneo-astragaloid articulation was destroyed by ulceration.

A boot similar to that described (Case 2) was constructed by Mr. Fergusson, and in the early part of March the patient could walk about, without the aid of a stick, and with a very slight limp.

April 28th.—He is able to take considerable exercise without irritation to the stump.

INFLAMMATION OF THE ASTRAGALUS; ULCERATION OF THE ASTRAGALO-SCAPHOID ARTICULATION; AMPUTATION IMMEDIATELY ABOVE THE MALLEOLI.

CASE 4.—Robert B—, aged seventeen, a pale, unhealthy-looking lad, first experienced pain in the right foot three years ago. Swelling and inflammation next came on; abscesses formed and burst; and a fistulous passage over the astragalus led to denuded bone. He was unable to put his foot to the ground.

Admitted March 11, under Mr. Stanley, Bentley ward. Amputation performed April 11, 1846. An anterior and a posterior flap were made; the bones were sawn through close to the malleoli; the wound was united by sutures.

Examination of the foot.—The astragalus, thickened, yellow, and of dense bony structure anteriorly, was ulcerated upon

that surface opposed to the os scaphoides. At Mr. Stanley's request, I examined the dense part of the astragalus microscopically, and found that it presented the ordinary bone corpuscles in great quantity. It was most probably thickened, and rendered denser, by the inflammation caused by the disease going on in the astragalo-scaphoid articulation.

April 28th.—The sutures are removed; there is some supuration between the muscles of the calf and the deep flexor muscles of the foot, but the pus escapes readily, and the patient says that he feels easy. Still in the hospital.

Two years ago Mr. Lawrence performed a similar operation upon a gentleman whose foot had been severely crushed between a steam-boat and a floating barge. After the cicatrization of the wound, an artificial foot, supplied with hinges, was adjusted to the stump, and at the present time, the gentleman, actively engaged, is able to walk, ride on horseback, or dance without the least difficulty, and with scarcely any perceptible lameness.

Remarks.—Inflammation of the cancellous texture of bone produces effects similar to those which are witnessed in the softer structures of the body. The existence in bone of an abundant system of capillaries, lodged in distinct tubes, the Haversian canals, can be easily demonstrated by microscopical observation; the earthy particles, deposited in granules around these vessels, are abstracted from the blood by minute tubes, termed, from their office, "calciferous," which preside over the nutrition of the bone, in both its healthy and morbid state. It is easy to conceive, how, in a part thus organized, inflammation (case 4, inflammation of the astragalus) should produce ulceration, with surrounding induration, or hardening of the bony tissue. The difference in the density of the bone, at a distance from or near to the seat of disease, became clearly perceptible upon attempting to make a thin section with a fine saw. There is a peculiar yellow colour in bone thus hardened, the immediate cause of which is not, I believe, perfectly understood.

An instance of inflammation of bone from injury, terminating in supuration, and partial mortification or necrosis, is related in Case 3. The serious consequences of the formation of a circumscribed abscess in bone, the hard walls of which will not collapse with the escape of the pus, may be readily understood; these cavities, emptied of their contents, have been noticed by the older pathologists, and were called *spinæ ventosæ*, from the idea that they contained air.

Suppuration of the cancellous texture of bone, observed Mr. Stanley, in his clinical remarks, admits of division into the circumscribed and the diffuse; the former, attended with much pain, often remains stationary for years; the latter always makes its way to the surface by many ulcerated openings. In the museum of St. Bartholomew's Hospital, there are several preparations of circumscribed suppuration, or abscess of bone—e.g., Abscess (1) in the head of the femur; (2) in the head of the tibia; (3) in the lower extremity of the tibia; there are also preparations showing the effects of diffuse suppuration, in the worm-eaten skulls so common in all museums.

Necrosis, or death of bone, a more frequent result of inflammation, the denser and less vascular the part diseased, is precisely analogous to mortification in the softer structures. The subject is too well understood to need particular notice.

The cases here related illustrate the serious consequences following inflammation of the bones of the tarsus. When the carpal bones are thus affected, there is rarely occasion for so severe a measure as amputation of the limb; the patient, carrying his arm in a sling, can move about, and follow his occupation. Far otherwise is it, when disease has attacked the tarsal bones; the patient, harassed by constant pain, completely crippled, confined to his bed, and dependent upon others for support, speedily loses both strength and spirits, regarding the limb as an incumbrance, and is often the first to suggest to the surgeon its removal.

The operation, proposed by Chopart, of removing the anterior part of the foot, is applicable to only very few cases of this kind; and to this operation, as well as to that of extirpating particular bones, there is always the objection that it is impossible, beforehand, accurately to determine the limits of the disease. "Had we by any means been able," said Mr. Stanley, in his clinical remarks, referring to Case 2, "to ascertain that the middle cuneiform bone, nearly loose in a circumscribed cavity, was the only part materially diseased, I should not have performed the super-malleolar amputation; but it was impossible, by the most careful examination, to arrive at any definite conclusion as to the extent of the disease prior to the removal of the limb."

In none of the other cases would this partial and often

tedious operation have been productive of permanent benefit to the patients; the disease of the surrounding parts would have required, sooner or later, the removal of the entire foot.

In amputating the leg for diseases or injuries of the foot, it has heretofore been the rule to divide the tibia and fibula about four inches below the anterior tuberosity of the former, the object being to spare the patient the annoyance of a long projecting stump, bent at right angles to the thigh, and constantly exposed to injury. This practice—an exception to the rule which forbids surgeons to remove more of living parts than is absolutely requisite—has received condemnation in early times. Towards the end of the sixteenth century it was opposed by Van Solingen. In 1756, Ravaton, who recommended that amputation should in all cases be performed as far from the trunk as possible, and who invented a boot to be attached to the extremity of the stump, asked, with some surprise, why it is that the leg should so often be made the victim of the maladies of the foot! About the end of the eighteenth century, Messrs. White* and Bromfield† called the attention of the profession to the super-malleolar operation; and additional observations may be found in the works of Velpeau, Lenoir, Blandin, Lisfranc, and Baudens, of whom the last has contributed a valuable treatise upon the subject. In this country, however, the practice had fallen into disuse. It has been revived by Professor Syme, of Edinburgh,—by Dr. Lawrie, of Glasgow,—by Mr. Lawrence and Mr. Stanley, of St. Bartholomew's Hospital, and some others, and with results so favourable, that it may, I think, be fairly asked, whether a surgeon is justified for the future in operating immediately below the knee, when the super-malleolar operation will remove the whole of the diseased parts.

In the first place, the super-malleolar operation is less dangerous, less painful, and more quickly performed. "Amputation," says Botal, "*eo minus periculosa est, quo magis a principalibus partibus distat.*" "The pain of the superior amputation," observes Gavaroli,‡ "is to the pain of the inferior amputation, as the circumference of the skin, and the thickness and sensibility of the fleshy mass of the superior part of the limb is to the circumference of the skin, and the thickness and sensibility of the fleshy mass of the inferior third." "The inferior operation," says Mr. Stanley, "is more quickly performed than the superior operation, because, about the ankle, the circumference of the limb is not more than one-third of its circumference at 'le lieu d'élection,' or about five inches from the knee-joint.

The rapid cicatrization of the stump, in the cases here related, affords the best answer to Larrey's fear, that there would be difficulty in uniting the flaps, in consequence of the amount of tendinous structures divided. Minute anatomical investigations have clearly demonstrated the existence of vessels in tendon, and the results of the sub-cutaneous operations prove that it possesses ample vitality to unite to neighbouring parts when divided.

The objection urged against this operation, that it is impossible to supply the patient with an artificial foot, adapted to the extremity of the stump, and so constructed as to allow him to move about without irritating the cicatrix by pressure, had more weight in olden times than at the present day. The boot recommended by Mr. Stanley supports the weight of the body by pressing against the upper and lateral parts of the leg; the extremity of the stump is free from pressure. This is undoubtedly a great improvement, for the surgeon is no longer hampered with the necessity of making a long posterior flap, so as to bring the cicatrix upon the anterior surface of the tibia; he is free to make his incisions in such a way as to secure the best covering to the stump. Dr. Lawrie, of Glasgow, relates two cases of extraordinary activity, in patients supplied with similarly constructed artificial limbs; one was able to walk eighteen miles a day with ease; the other, a sailor, was able to mount the rigging as usual, by means of a small hook upon the anterior surface of a wooden peg, which supplied in this case the place of a foot.§

It happens that cases in which the super-malleolar amputation is practicable but rarely present themselves. Why, in such instances, five or six inches of healthy member should, contrary to general surgical principles, be sacrificed, and the patient put to more pain and danger than is needed, must be left to those to answer who prefer the operation at the superior part of the limb.

"Un trop grand nombre de chirurgiens," says Dr. Servier, in an excellent article, "de l'amputation de la jambe au-dessus des malléoles," "se contentaient, et se contentent encore à cette

* White's Medical Observations and Inquiries, vol. iv. 1769.

† Bromfield's Chirurgical Cases and Observations, 1773.

‡ Thèse de Strasbourg.

§ Medical Gazette, 1840-1.

heure, de pratiquer dans tous les cas, in verba magistri, l'amputation au lieu d'élection, sans s'occuper de rechercher par eux-mêmes si l'amputation du tiers inférieur de la jambe est réellement plus avantageuse, ou plus désavantageuse que la première. C'est dans cette coupable insouciance d'une part, et dans le respect pour la parole du maître de l'autre, qu'il faut rechercher une des grandes causes de l'infériorité que l'amputation de la jambe au tiers inférieurs a constamment conservée jusqu'à ces derniers temps, relativement à l'amputation faite au lieu d'élection.*"

GENERAL LYING-IN-HOSPITAL, VIENNA.

Cases reported by DAVID MAXWELL AITKEN, Esq.,
M.R.C.S., Resident at the Hospital.

Labour, with great deformity; delivery by Cæsarian section; operation described; death of the mother, with safety to the child.
—Remarks on propriety of the Cæsarian section.

ANNA D—, aged thirty-eight, married; short in stature, below the middle height; pale, thin, and emaciated; chest narrow, and the limbs small; no visible deformity; accustomed to poor living, eating animal food perhaps only once or twice a week: occupation, shirt-making.

On Saturday, the 7th of February, 1846, at seven o'clock in the evening, she was admitted into the Lying-in-Hospital, at Vienna, with labour pains strong and frequent.

Dr. Bright, the assistant of the Lying-in-Hospital, having made his examination, discovered that the outlet of the pelvis was very much deformed, and the brim contracted; the membranes were ruptured; the vagina was hot and dry; the cervix and os uteri soft and swollen. The os uteri was dilated to the size of a shilling; and on passing the finger a little above its anterior lip, a laceration was discovered in the cervix, extending about an inch upwards, and about the size of a shilling in circuit. The patient complained of pain when touched about the neck of the uterus. The labour pains were rather strong and frequent, occurring every three to five minutes. The membranes had been ruptured some hours previous to her admission. This was her first pregnancy, and she had gone her full term. On being interrogated, the patient stated, that about six o'clock A.M. of the same day the pains had commenced, and in a quarter of an hour they had become so frequently repeated that her friends sent for an accoucheur.

A surgeon-accoucheur, or rather, a barber-surgeon, (for the accoucheurs here are principally men that cut hair and shave people,) came to her house in the town. He made an exploration and discovered deformity, so that, to use his own words, he must deliver her as rapidly as possible. He introduced the fingers and ruptured the membranes, and then endeavoured to pass the whole hand into the pelvis. After continuing a long time in this practice (during a pain), he suddenly felt something give way, (the uterus, or neck,) which laceration was the one I have before mentioned. With all this, he still persevered; and the woman, finding herself in more pain, with labour no further advanced, discharged him from further attendance. She continued to have the pains for nearly the whole day; and towards evening, they became so strong, that she decided on coming into the hospital, and arrived there at the time previously stated.

The Professor, Dr. Kleine, was sent for upon her admission, when this history and the deformity were made known. After making his exploration, he said, that there was immense deformity of the pelvis, not so much but that if the child had been dead, he would have preferred craniotomy; but considering the presentation of the child, which was a breech, (the first oblique position—viz., the right side of the child directed backwards towards the mother's left sacro-iliac synchondrosis, and its left side towards the mother's right ilium and anterior notch) from this laceration of the cervix, he was induced at once to decide upon the Cæsarian operation. The measurements of the pelvis will be given at the end.

After the woman had agreed to this proposition, and had had the sacrament administered to her, she was placed upon a table, in the recumbent posture, the shoulders being a little elevated. The bladder was emptied of its contents with a catheter; the knees were very slightly bent upwards, and the thighs a little flexed upon the abdomen, to relax the abdominal muscles. Everything being ready, about half-past eight o'clock P.M., and the assistants near the patient, with plenty of cold, iced water, the Professor commenced an incision even with the umbilicus, but on the left side of the linea alba. The incision

was carried gradually downwards, to within one inch and a half of the symphysis pubis, the knife dividing only the integuments. The second incision was directed in the same manner as the former, and divided the left rectus abdominalis as far down as the end of the former incision. Lastly, the peritonæum being exposed, a small piece, corresponding to about the centre of the uterus, was taken up with the forceps, and was gently snipped with a pair of scissors, so as to admit a director. The director being passed upwards, was cut very gently upon, thus making the opening into the peritonæum larger. The finger was now introduced, (the forefinger of the left hand,) and directed downward towards the pubis, the Professor cutting down upon his finger till it reached the extreme end of the abdominal wound. The same means were adopted to extend the wound upwards. This being done, the uterus now became visible. After the incision was made through the integuments, the skin was drawn gently outwards, and pressure made upon the uterus, to keep the intestines as far backwards as possible. As the rectus was being cut through, (lengthwise,) the pressure was increased to still further prevent any chance of the intestines escaping. Slight hæmorrhage now came on as the rectus was divided, but was immediately stopped by the application of sponges dipped in iced-cold water. The woman bore this with great fortitude, scarcely giving utterance to the slightest moan. A little wine was now given to the patient. The uterus was large, and of a reddish-blue colour, the fundus extending an inch and a half above the umbilicus.

The incision was begun at its fundus, in the mesial line, and even in height to the abdominal incision. The cut was continued as far downwards as to be within two inches and a half of the symphysis. The wound was made gradually, as also was that through the integument and rectus, each incision being deeper and deeper through its whole length, till the wall was cut through, leaving exposed the child, enveloped within the amniotic membranes. The membranes were firmly enclosing the child, and a portion was taken up with the fingers and torn through, till there was space enough to extract the child. The pressure was now increased and continued; there was very little bleeding. The child was seen lying in the position before described, (first oblique breech position;) the Professor grasped the feet and gently extracted them, the lips of the uterus and abdominal wound being well kept back by the assistants. As the feet and breech were being extracted, a violent labour-pain came on, the uterus powerfully contracting upon the head and shoulders of the child, which it held with great force for some few seconds. During the pain, the Professor discontinued all extracting efforts. The pain having ceased, the arms were drawn downwards, sweeping over the face, and extracted; and lastly, the head was brought out, but as it was passing out of the cavity of the uterus, another contraction took place, lacerating the uterus at its lower portion, and extending the wound for at least three-quarters of an inch more. From this torn portion of the uterus, considerable hæmorrhage took place, so that the patient completely fainted. Some wine was again administered, which restored her. The iced water was now more frequently applied, and the pressure constant and increased. The divided vessels of the uterus could be well seen; their large, open mouths sufficient to admit a small crow's quill. During this hæmorrhage, which lasted half an hour, the poor woman fainted three times, and the last syncope was so long, the pulse leaving the wrist, and the aspect becoming perfectly death-like, that we had serious apprehensions for her immediate safety: we all thought, in fact, that she was dead; but by the aid of powerful stimulants to the head and nostrils, she revived.

After the patient was a little restored, the placenta, situate at the right side and posterior part of the fundus uteri, was detached, when the child (a fine healthy boy) was entirely extracted; he screamed most lustily. The cord was divided, and the infant given to a nurse.

The woman being again quite restored, sutures (five in number) were passed through the rectus, integuments, and peritonæum, beginning just below the umbilicus, and continued to the symphysis nearly, with interstices of half an inch between each suture. Strapping plaster was lastly covered over the whole wound transversely, and then, after the lapse of a quarter of an hour, the woman was carried into the room appropriated for her. The operation in all took about one hour and a half, including the delay occasioned in restoring her when she fainted. Within half an hour after the operation, one grain of opium extract was given to her.

8th.—Ten A.M.: Had slept nearly the whole night; felt herself very comfortable; tongue moist, skin also; no headach or pain in the abdomen. Had passed urine during the night;

bowels opened once. Whilst in the lying position, she was not moved from the position we placed her in on the previous night. Pulse weak, rather quick; more than 90, but not quite 100 strokes per minute. Broth was allowed her, and she took slops during the day. Repeat one grain of opium at night.

9th.—The opium had not produced sleep; during the night, she had complained of thirst, and drank a good deal of water; the skin became hot, and the pulse accelerated. Early this morning she had a rigor, which lasted half an hour, very strongly shaking the bed beneath her. Some few hours afterwards she began to vomit, (three or four copious bilious vomitings;) what was ejected was very offensive. Pain came on in the abdomen about one or two o'clock this morning, and the latter began also to swell; the pain was increased on pressure, and very much aggravated when vomiting. About nine or ten o'clock A.M., the vomiting again returned, and at each effort there was an escape of a yellowish, dusky, very offensive fluid, from the wound in the abdomen. The swelling now became so great, that, from the constriction the strapping and sutures had upon the lower part of the abdomen, the swelling above the umbilicus had the appearance as though a large tumour as big as one's head were contained within the cavity of the uterus or abdomen itself. The skin was getting hotter and hotter, quite dry; pulse very much accelerated; swelling and pain in abdomen increasing; escape of fluid (very much increased) from the abdominal wound. Countenance anxious, *alae nasi* dilated, eyes glassy, and rolling of the head. In the middle of the day, low, muttering delirium came on, which continued some hours. Constantly calling for her child, and once making a dreadful effort to get out of bed, to see it, as she said, she fainted, and thenceforward never recovered; she continued occasionally to mutter, and about one o'clock died, being about forty-three hours after the operation. No medicine had been given, excepting the one grain of opium on the 8th, and one grain on the 9th; during the delirium, &c., nothing was administered. The child is suckled by a nurse, and had been doing well.

Post-mortem took place on the 10th, at ten o'clock A.M. Upon removing the strapping, there was an escape of dirty-brown and very offensive fluid. The edges of the wound showed not the least sign of reaction. The incision in the abdomen was five inches and eight lines in length. Upon examining the head, we observed that the parietal bones were exceedingly thin, not being more than one line in thickness, texture firm and compact. The inner side of these bones had patches, of various dimensions, of a thin, vascular, soft osteophyte. At the margin forming the sagittal sutures, especially on the right parietal bone, we noticed sugar-loaf-like elevations on their exterior, whilst depressions were observed corresponding from within, and extending the whole length of the sagittal suture. In the falx, a tough, fibrous, greyish-red coagulum was deposited. Meninges of the brain, thin, pale, and bloodless, showing signs of infiltration of serum; the substance of the brain was very much infiltrated likewise. In each ventricle were contained about two drachms of limpid serum; the choroid plexus pale and bloodless. About a drachm of limpid serum was found at the base of the skull; the thyroid gland pale and small. In the trachea, a thick greyish kind of mucus was adherent to the lining membrane; the thorax was very narrow towards its apex, broad at its base; ribs brittle, and easily broken; they were, moreover, bent inwards at various parts. Left lung free throughout its bulk, but the right lung adherent at its apex to the walls of the thorax by bands of loose cellular tissue. Right side of the thorax narrowed; ribs bent inwards, towards the vertebral column; and corresponding to these points were seen deposits of a yellowish kind of callus. The lungs were collapsed and bloodless, but a little infiltrated, with a dirty-greyish kind of serous fluid. The pericardium contained half an ounce of yellowish serum. Heart small, flabby, contracted, and had upon its surface several small tendinous-looking patches; its large vessels were filled with red fibrous-coloured coagula. The endocardium and valves were of a dusky red, by imbibition; the valves otherwise were normal. The cavity of abdomen contained about two ounces of a dirty-brown reddish-coloured fluid. A portion of the small intestines, commencing about two feet above the cæcal valve, was covered by a thin, soft, reddish-coloured exudation, which united them with the uterus. The peritonæum covering these small intestines was highly injected, the injected vessels with their ramifications being beautifully seen. Liver, pale, soft, and easily broken down; size natural. Gall-bladder, filled with a light yellow kind of fluid. Spleen, small, flabby, pale, and quite bloodless. Stomach contained a great quantity of a greyish kind of mucus. The

intestines contained fluid, bilious-looking fæces; kidneys pale and flabby; bladder, collapsed and empty.

The uterus, with its fundus, above the brim of the pelvis. The edges of the wound had no appearance of any attempt at healthy reaction, but were covered with a dirty-brown kind of secretion. That part of the uterus corresponded to the attachment of the placenta, and had on it a dark, firm, fibrous-looking coagulum. The anterior part of cervix, just above the anterior lip of the os uteri, had a laceration of the size of a shilling, or a little larger. The tissue of the fundus uteri was pale and flabby, and the whole organ enlarged. About the cervix it was thinner than in any other portion, and was highly suffused with blood.

Osseous system.—The vertebral column in the lumbar region strongly bent forwards towards the pubis, and the fifth lumbar vertebra was in the place where the upper part of the os sacrum should have been—i. e., a line drawn from the pubis at its centre, and passed backwards, instead of passing directly to the os sacrum, would have impinged about the middle of the body of the last lumbar vertebra. The os sacrum was more than an inch below its proper position. It was highly concave, considerably curved backwards, and resembled the hand when the fingers are extended, and made to flex upon the wrist, to form an acute angle. The whole of the pelvis was very much distorted. Nothing in her history proved that she had had rachitis; indeed, her health had been generally good as a child.

Of the parts attached to the pelvis, the measurements were as follow:—

When the finger was introduced into the vagina, and passed upwards and backwards towards the sacrum, the latter was easily touched, and, moreover, the last lumbar vertebra could be easily felt, the measurement being two inches and three lines, and that from the pubis to os coccyx two inches and seven lines. The finger, pressed a little more upwards, could be passed all round the margin of the brim of the pelvis.

Of the dried pelvis, after being prepared, the following are delineations. I am indebted for them to a worthy fellow here—Dr. Balfour. Drawing *A* shows the deformity of the brim and ilia; and plate *B* is intended to show the deformity as looking into the pelvis from above. The conjugate diameter,

FIG. A.

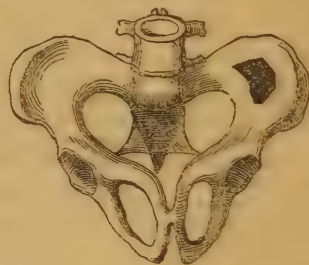
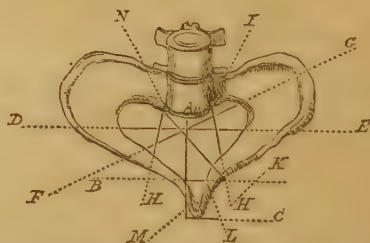


FIG. B.



A B, was only two inches and ten lines; or, inclusive of the beak-like process, *C*, four inches: this measurement extended directly backwards, and impinged upon the most projecting point, which was *A*, the fifth lumbar vertebra. The length of the beak itself was one inch and two lines—i. e., from *B* to *C*. From the left sacro-iliac symphysis to the ilio-pubic junction, (*H* to *I*), measured two inches and five lines; and obliquely, from the right sacro-iliac symphysis to the left ilio-pubic junction, (*N* to *K*), measured four inches and four lines; transverse, from *D* to *E*, four inches and eight lines. From the promontory of the sacrum to the corresponding acetabulum measured two inches and twelve lines. The breadth of the beak-like process of the symphysis pubis, from one part to the other, at its base, *L*, was one inch and four

lines; at its extreme end, eight lines only. The right ilium bent more inwards than the left, but both were of a spoon shape—that is, the crests of both ilia curved inwards, so making them look very concave; the ilia were also very thin, and in parts quite transparent. From the point of the coccyx to the promontory of the os sacrum, one inch and a half.

Outlet.—From the apex of the os coccyx to the arch of the pubis, three inches and two lines. From one tuber ischii to the other, two inches and one line. Breadth of the descending rami of the ossa pubis was one inch. At the junction of the rami of the pubis with that of the ischium, across to the opposite junction of the pubis and ischium, measured only six lines. Dr. Rigby's "Midwifery," in the Library of Medicine, p. 187, and the first plate from Naegele's collection, will give some slight idea of the kind of deformity, especially that at the symphysis pubis. The second plate will give some idea of the concavity of the ilia.

According to English practice, I think the deformity would not have been considered so great as to require the Caesarian section. I think I can prove that it was done with the most humane view; and, at the same time, that the most judicious determination was evinced in adopting it.

In the first place, there was severe laceration of the uterus. This alone is very dangerous; and how much more so does it become when the uterus is subjected to perpetually-recurring contractions! the passage of the child through the cervix and os throwing on one side the chance of either of the limbs, arms, or legs, slipping through this rent, and at once tearing the whole cervix away; or still worse, the rupture extending into the body and fundus. (*Vide* a case of rupture of cervix uteri, *Northern Journal of Medicine*, No. 17, Sept. 1845, related by T. Williamson, M.D.)

Again, the child was living, and apparently healthy, for the sounds of the heart were very distinct. In this woman there was a weak constitution to battle against. There was also puerperal fever raging in the wards, and the number of patients that died in the course of a single day from this "scourge" was awful. I have seen twelve women lying dead in the puerperal room, all having ceased to live within three hours of each other. Now I think that, should the mother have escaped a rupture into the body and fundus, still there was every chance of her becoming affected by this contagion. Most of the cases of puerperal fever we have here, generally occur in persons of the most weak and delicate constitutions. The woman, doubtless, would have had severe hæmorrhage; and this alone might have destroyed her, and most probably the child also. The child, on this day I write, April 18th, 1846, is well, and likely to continue so. What would have been the result had this operation not been performed? This most probably, or, I am inclined to say, most certainly. The mother either would have died from exhaustion by hæmorrhage, or she might, and most likely would, have had endometritis, peritonitis, or have become a victim to puerperal fever. Thus I think that Professor Kleine not only acted with judgment, but clearly succeeded in saving one life instead of losing two.

LIVERPOOL INFIRMARY.

Reported by JOHN COOPER, Esq., M.R.C.S., &c., Surgeon to the Infirmary.

LIGATURE OF THE EXTERNAL ILIAC ARTERY IN A CASE OF INGUINAL ANEURISM.

As Dr. Malgaigne has recently published a case of inguinal aneurism, in which he tied the external iliac artery, and represented it as only the fourth instance in which this operation had been successful in Paris, I send you, for the pages of *THE LANCET*, an account of a similar case, in which the same operation has been, with the same fortunate result, lately performed in Liverpool. Although I am well aware that such a case is now no novelty in the records of surgery, yet, in a statistical point of view, each instance is probably of some value.

John F—, just entering his fifty-seventh year, formerly a seaman in the British navy, and who had seen much service, but who for the last few years had been employed as a rigger in this port, was admitted under my care into the Liverpool Infirmary, on the 28th of January last.

He had a tumour about the ordinary size of a sheep's heart, and something of that form, in his right groin. The base of this tumour was considerably above Poupart's ligament, and its apex at a point about three inches down the thigh; it could be made almost to disappear by pressure; its strong pulsations were evident to the eye at a considerable distance.

The patient stated that he had been recently labouring hard in his daily occupations, ascending and descending the rigging of vessels, and at the same time often lifting and straining himself under heavy weights. About six months ago, he felt, he says, a dull and sometimes an acute pain, extending from his loins down into the right groin; but he remarks, that he perceived no swelling there until about ten days before he came to the hospital; that at first the tumour was about the size of a chesnut, but that it became from hour to hour more painful.

No disease in any other part of the arterial system being detected, I put a ligature upon the external iliac artery, on the 3rd of February. The operation was performed in the manner first practised by Sir Astley Cooper, the steps of which, being well known to all operating surgeons, I need not particularly describe. The first incision, however, was commenced a little above the anterior superior spinous process, in order to allow myself room to follow the artery high up, should the disease of its coats render such a proceeding necessary.

The operation was somewhat prolonged by the unruly conduct and excessive resistance of the patient; and the man being both muscular and fat, I was obliged literally to feel my way through the greater part of it. However, pressing the bow of the needle firmly down between the artery and the vein, and making the needle revolve upon its point, the ligature was easily carried round the artery. Upon tightening the ligature, all pulsation in the aneurismal tumour immediately ceased, and the tumour itself became sensibly flattened.

Every proper precaution was taken to preserve the natural temperature of the limb. No constitutional excitement at any time succeeded to the operation; the ligature, however, did not come away until the forty-second day. The patient was discharged on the 18th of April, 1846, without any debility of the thigh or leg, and with scarcely a vestige of the tumour to be discovered by the finger.

CASE OF

FRACTURED SACRUM IMPEDING LABOUR.—DELIVERY BY CRANIOTOMY IN TWO SUCCESSIVE LABOURS.—REMARKS ON THIS OPERATION.

By JOHN ROWLAND GIBSON, Esq., M.R.C.S., London.

OBSERVING in *THE LANCET* of May 16th, (p. 555), a case of fractured sacrum impeding labour, extracted from an American journal, in which the result was fatal both to mother and child, I beg to furnish, for publication, a case which came twice under my care from a similar cause, but in which, I am happy to state, the result was favourable.

A. F—, aged thirty-six, the mother of seven living children, whose previous labours had always been natural, had been run over by one of Pickford's luggage-vans, and sustained severe injury to the pelvis. She was removed to St. Bartholomew's Hospital, where she remained under treatment for four months, and left the hospital well. Shortly after her return home, she became pregnant, and advanced to her full period. She had previously obtained a dispensary letter, and received the attendance of some gentlemen at the commencement of the labour, under whose care she remained from the 21st of July, 1844, to the 23rd inclusive, when I was requested to attend her. She had been bled and otherwise treated, but no advance had taken place in the progress of the labour, although the pains had been vigorous. Upon examination per vaginam I found the liquor amnii had escaped: the head presented at the upper aperture of the pelvis, but no portion had entered the pelvis. The scalp was tumid; the os uteri dilated to nearly the full extent of the superior antero-posterior diameter of the pelvis, which could not be more than two inches and a half, as near as I can judge.

Upon investigating the case, I found the history of it as I have before recorded. The sacrum appeared to be that part of the pelvis which had sustained the chief injury, inasmuch as its promontory projected forward, and so much contracted its antero-posterior diameter. Upon examining externally, there was a deep depression, in which almost the two hands might be buried, corresponding to the sacrum. In this case there could be no doubt that one of two operations should be immediately performed—craniotomy, or the Caesarian section; and as the latter operation must entail greater suffering, and far greater risk to the safety of the mother, than the former, I did not propose it. With the approval of an experienced medical friend, and the consent of the patient, I proceeded to deliver,

by perforating the head. This I did, not only "cautiously, but with great care," well breaking up the brain, particularly at its base. But in order to accomplish the extraction of the foetal head, it was not only necessary to destroy the brain and evacuate it, but to remove the parietal and the greater portion of the occipital bones. The delivery was completed in about an hour and a half. Two grains of opium were given, and the case proceeded, with some slight uterine inflammation which was readily overcome, to a favourable issue.

About five months after her recovery, she again became pregnant, but did not apply to me, or inform me of its occurrence, until within the ninth month of utero-gestation. At this late period, I did not deem it advisable to induce labour, but to await the commencement of natural labour, which took place on Oct. 1, and proceeded slowly during the whole of that day. The os uteri being somewhat dilated and readily dilatable, without any advance, as in the preceding labour, I considered it advisable to accomplish the delivery without further delay. The uterine efforts had been vigorous, although not very frequent, and the head seemed fully developed. The delivery was accomplished in the same manner as on the former occasion, and at this time she recovered without one unfavourable symptom. On this occasion I may mention that I received the accordance of one of my colleagues in the Holborn Union as to the necessity for the operation.

In resorting to the operation of craniotomy, when it is determined as absolutely necessary, (and it never ought to be adopted unless it be), it cannot be performed too promptly and too efficaciously, and when commenced, the delivery should, I consider, at the same time be accomplished. Some accoucheurs have advised, although others have dissented, that after perforating the head, if it do not descend readily, several hours should be allowed to elapse, in order to permit the descent by the parturient efforts; but when the nature of this operation is considered, and that no further injury can be done to the fetus, the great dread, and very natural anxiety, which are entertained both by the patient and her attendants, that her powers are already exhausted by protracted suffering, and perhaps by unnecessary delay,—surely, upon moral as well as physical grounds, the delivery ought to be accomplished at the time of the operation. In reference to the operation itself, it is most important, in the removal of the portions of the cranial bones, that this be accomplished through the scalp wound, whereby the scalp affords protection to the soft parts of the mother from the jagged edges of the remaining cranial bones.

There is one other point to which I would beg to allude, and that is, the state of the os uteri, as indicating a reason pro or con the operation of craniotomy. I may here be permitted to refer to a case which came under my care about three weeks since. When the contraction of the superior aperture of the pelvis is so great as not to permit the entry of the foetal head, supposing the head to be the presenting part, the dilatation of the os uteri, which is purely mechanical, cannot take place; and its being, under such circumstances, undilated, furnishes no argument for the delay of the operation, but, on the contrary, one for its speedy employment. In the female to whom I allude, labour had existed from the Monday to the Thursday. There was deformity of the pelvis, as well as of other bones, from previous rickets; the superior aperture, antero-posteriorly, was barely two inches; the os uteri, although dilatable, was dilated scarcely more than to the size of a half-crown; and because the os uteri was not more dilated, a gentleman under whose care this case had been, did not consider it advisable that craniotomy should be performed. Had this sign been followed as an objection to the operation, it is quite certain the patient must have died undelivered. I performed the operation, removing the parietal and occipital bones, and the patient perfectly recovered.

Holborn-hill, May, 1846.

SUICIDAL CUT-THROAT SUCCESSFULLY TREATED.

By F. SMITH GARLICK, Esq., Surgeon, Halifax.

On the 12th of March, 1846, at half-past eleven o'clock A.M., while I was in conversation in the street, I heard an alarm given that a woman had cut her throat. In company with another gentleman, I immediately repaired to the house, on entering which, we found a woman on her knees on the floor, an open razor lying near her, the front of her person and clothes drenched with blood, and a man holding a cloth firmly against an incised transverse wound at the lower part of the neck. There was a considerable quantity of blood on the

floor; the patient was blanched, and the pulse feeble. Having lifted her on to a common kitchen table, we placed her on her back, and administered frequently small quantities of compound spirits of ammonia mixed with water. On examining the neck, we found a transverse wound, about three inches in length, situated at its lower third, about an inch above the superior extremity of the sternum. The sternal attachment of the left sterno-cleido-mastoideus was nearly, but not completely, severed; the sterno-hyoid and sterno-thyroid muscles were divided; and the trachea, which was nearly cut through, presented a wound large enough to admit the point of my little finger.

The hæmorrhage seemed to have been principally venous, or from only small arterial branches; no arterial jet was noticed, and the character at this time was that of a general oozing. Mr. Swallow now joined us, and rendered his assistance.

After satisfying myself that no arterial trunk of magnitude was implicated, I brought the edges of the wound together, and retained them *in situ* by two sutures and strips of plaster. Over these, I placed a piece of lint doubled, wet with cold water, which I desired should be changed at intervals. The patient had been supplied with small quantities of brandy, administered in a little tea; and the pulse now began to rally, and the features to assume a less blanched appearance. We thought it desirable that she should not be moved, and therefore kept her upon the table until three o'clock, Mr. Waller (Mr. Swallow's assistant) taking charge.—Three o'clock P.M.: Mr. Swallow accompanied me to see our patient. We found her, as we had left her, upon the table. No further hæmorrhage of consequence had occurred. Cold water had been constantly applied to the wound, and the patient had been regularly supplied with teaspoonfuls of brandy mixed with tea. Cough rather troublesome, and expectoration of bloody mucus frequent. We determined to undress her, and put her comfortably into bed, as she complained of the table hurting her. We got her into bed, and I remained in attendance until half-past five. During this time, I changed the lint at intervals, and administered a teaspoonful of a mixture containing compound spirits of ammonia, and occasionally a little of the brandy. Re-action set in favourably, and the pulse kept firm. I now left, directing the lint to be kept wet with cold water.—Eleven o'clock P.M.: Re-action fully established; countenance flushed; eyes glassy; pulse 100; no further hæmorrhage; wound rather painful; had coughed up frequently frothy mucus mixed with blood. Discontinue the stimulants. A powder was ordered, containing two grains of calomel, six of jalap, and twelve of bitartrate of potash, to be taken directly; and a dose of a saline aperient mixture regularly, during the night. A little cold water to be poured on the lint, by means of a teaspoon, at intervals. To have only tea, gruel, &c.

13th.—Nine A.M.: Had passed a tolerable night, and dozed a little; bowels not moved; countenance flushed; expression rather anxious; pulse 100; no hæmorrhage; wound rather painful. The powder to be repeated, and the mixture continued. The case progressed favourably, and on the

16th.—the dressings being removed, the wound was found suppurating. The air, during coughing, then passed freely through the wound, producing a whistling sound. Lint and strapping were applied as before. By the 6th of April, the wound had entirely healed, the patient's health remaining good.

Remarks.—The subject of the preceding case is a married woman, aged thirty-two, the mother of three children. She had been confined five weeks prior to this attempt on her life, and had been attended in her confinement, which took place in a village three miles from this town, by an old woman, who acted the part of midwife and magician. This individual made a powerful impression on the patient's mind by relating horrible stories, and declaring, among other things, that she possessed the power of raising the devil whenever she pleased! Whether the impressions thus received, at a time, too, when the body was in a weakly condition, may be considered as the sole exciting cause of the rash attempt on her life, I cannot say; but, doubtless, they had produced a state of mind which was noticed frequently to be peculiar, and which, from the period of her confinement, was characterized by fits of deep despondency.

If the successful termination of a case be considered a criterion of the skill and judgment displayed in the treatment, I have every reason to rest satisfied, though I am aware that I have not implicitly followed the written instructions which we find in books. The late Sir Astley Cooper, in addressing his class, used to say, "Gentlemen, think and act for yourselves;" and I am ready to admit that I have ever been prone to pursue

advice so paramantly necessary in the treatment of all surgical cases.

In Mr. Liston's "Practical Surgery," I find the following observations. Speaking of the treatment of cut-throat, he says,—"The immediate apposition of the divided surfaces is attended with great danger; the blood, as it flows from the vessels, and encouraged by the confinement of soft coagulum, passes by suction into the windpipe; some of it may be ejected, but the lower part of the tube is not very irritable, and the power of coughing is diminished, so that great part trickles down, and fills gradually the extreme branches of the tube." In the preceding case, the wound *was* closed, but not accurately, within a quarter of an hour after its occurrence, by inserting two sutures half an inch from each extremity, leaving the centre free, as, also, by a strip of lint, and pieces of adhesive plaster. Though there was slight oozing for some time, the patient had no difficulty in coughing up any accumulation which passed into the windpipe. The continued application of cold water had a tendency to restrain the oozing, and I feel satisfied, acted very beneficially.

Again, Mr. Liston says: "The solution of continuity cannot, with safety or propriety, be brought together for many hours after its infliction, until all oozing has ceased, and the surface is glazed. No purpose is to be gained by closing the wound accurately by stitches and plasters; if it extend laterally to a great extent, a single point of suture may be inserted near each extremity, of course, only through the integument; but the centre cannot heal; and no attempt need, or ought to be made, to close that part." This is all very good and very proper; but I was, throughout, extremely anxious to prevent the inhalation of cold air through the wound, as that alone will excite cough and bronchial inflammation. Mr. Liston would leave the wound open—would simply cover it with "a muslin or gauze handkerchief, or, what is better, a worsted comforter, or one of Mr. Jeffrey's respirators." I attempted so to apply my stitches, lint, and plaster, as to prevent, as much as possible, the passage of cold air, and yet allow of the exit of any discharge. Further, I took a common cotton handkerchief, folded as is usual for the neck, applied its centre behind, crossed it in front over the wound, and continued it, by means of tape, under the arm-pits, round the posterior part of the chest, and then tied it. This answered well, both in protecting the wound and retaining the dressings. The patient was extremely attentive to instructions, and there was no difficulty in keeping the head in a favourable position by pillows, with the chin approximated towards the sternum.

Mr. Liston's strictures seem more particularly to apply to that treatment in which the wound is closed too soon—before all oozing has ceased, and the surface is glazed—in which, to use his own words, it "is closely stitched," and so thoroughly secured, as to retain coagula, and favour the inhalation of blood. Such treatment he designates as "disregarding the common-sense view of the case." Treatment of this kind is, doubtless, bad; but to diminish a gaping wound by the application of two sutures, leaving the centre free for the exit of coagula and discharge, Mr. Liston does not condemn.

In conclusion, I may just observe, that the case progressed without the development of a bad symptom; and, whether owing to my care and treatment, or in spite of both, the woman is now quite well.

Cheapside, Halifax, April, 1846.

ON THE EMPLOYMENT OF

ELECTRO-MAGNETIC CURRENTS

IN THE

TREATMENT OF PARALYSIS.

(ILLUSTRATED WITH CASES.)

By GOLDING BIRD, A.M., M.D., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, AND ASSISTANT PHYSICIAN TO GUY'S HOSPITAL.

I SHOULD not have ventured to occupy the attention of the profession with the consideration of the above topic, had I not felt that some notice of the remedial value of the electro-magnetic currents would be of interest, and deserved the attention of our profession, no less in its medical than in its moral bearings, in consequence of the gross quackery too frequently mixed up with the subject. Our profession, oppressed as it is by quackeries, not less, unfortunately, among the members of its own ranks, than those who possess no other title to practise than that which is afforded by a brazen effrontery, suffers much from a species of empiricism to which attention cannot too forcibly be drawn. So long as the char-

latan confines himself to vending his nostrums guarded by a government stamp, the additional three-halfpence necessarily appended for every shilling's-worth of the rubbish, at once stamps its character; and thus, the very means used to restrain the piracy of the nostrum, brands it with its true character. All who buy such a remedy, fall into the net with their eyes open. Quackery, however, assumes a very different, and much more dangerous character, when it consists in the empirical use of an avowed remedy. Here the apparent honesty of the empiric adds a dangerous subtlety to the snare, and many a victim avoids the trap of the avowed nostrum-monger to be thus caught.

We should all smile at the absurdity of a man avowing the exclusive practice of a calomel-cure, a quina-cure, or an Epsom-salts cure. Yet, is this more ridiculous or less irregular than the water-cure, so rife in this country? or the milk-cure, or grape-cure, of Sweden? To this class of empirics may be referred the self-styled *medical galvanists*, and *medical electricians*. Of this genus of quacks many varieties exist—some modestly proffering their remedy to the world as a cure for a few affections, whilst others, possessing less tender consciences, or more effrontery and ignorance, blazon their electrical and galvanic nostrums as a panacea for every ill. These medical galvanists lay heavy contributions on the public, and one of them, in the west end of the metropolis, pockets some thousands per year by his practice. There is scarcely a part of London where these irregulars do not exist—the small suburb of Pentonville alone rejoices in two, if not three.

The success met with by these pseudo-scientific empirics induces us to inquire into the cause of their prosperity; and, setting aside the influence common to all mystic or half-secret remedies, it cannot be concealed that not a little of their success is to be traced to the fact of the majority of our own body having paid little or no attention to the study of the physical sciences,—are theoretically and practically ignorant of many of those parts of these important studies which bear upon our profession. They thus—too often unable to apply the remedy in question for themselves—become unwittingly the powerful allies of the empiric, either by direct countenance, or by not being able to meet the intruder on his own ground. Every practitioner should feel it his duty to be as conversant with the application of electricity and its modifications as of a cupping-glass; and there is no more necessity for increasing the "specialties" of our profession by the electrician or galvanist, than by a qualified administrator of glysters. Largely as I have employed the remedy in question, I have never needed any other electrician than the wife or mother—often the footman or maid-servant. It requires no argument from me to prove that the treatment of disease, by whatever means, is the proper duty of the accredited members of our profession, and every guinea taken by the special irregular practitioner is to be legitimately regarded as a direct robbery committed upon the regular and educated practitioner. It affords me great pleasure, differing as I do on many points of medical policy with the editor of *THE LANCET*, to have an opportunity of expressing my sense of the obligations under which the profession are to him for his late able exposition of quackery—an exposition which cannot fail to be of service to the medical and general public, by unmasking empiricism in its most subtle, no less than its avowed form, and thus exposing it to the withering scorn of every honest man.

I now purpose limiting my remarks solely to the employment of induced electricity, or electro-magnetism, in paralysis, because it, under the name of galvanism, is more frequently the weapon of the irregular practitioner of electricity than any other. There is, however, another reason, of a more selfish character, which has induced me to select this portion of the subject, in the fact, that my name has been advertised in connexion with the apparatus used to administer it, and in more than one instance which has occurred to me, other liberties have been taken, implying a sanction of proceedings, which I have no other means of publicly repudiating.

We are indebted to the researches of our illustrious countryman, Dr. Faraday, for almost every fact connected with the science of induced electricity. It is now well known, that when an electric current of weak tension traverses a wire, it disturbs the equilibrium of the electric matter naturally existing in any conducting body held parallel to it. A momentary current of induced electricity of high tension is thus developed in the body, but no further phenomena are developed until the primary current ceases to traverse the wire. At the instant this stops, the electric equilibrium is restored in the conducting body, this being also accompanied by a momentary current of high tension. These two induced currents move in opposite directions, and may be detected by their

producing the phenomena of light and heat, as well as chemical and physiological effects. Now, it is also known, that whenever an electric current traverses a conductor placed at right angles to the long axis of a bar of soft iron, it induces in the latter, magnetic phenomena of high power, which vanish the instant the electric current ceases to traverse the conductor. A train of reasoning flowing from this fact, has led to the belief, that in all permanent magnets, the physical phenomena of polarity, attraction, &c., are owing to myriads of molecular electric currents traversing the bar of metal in a direction at right angles to its long axis. Electricity thus inducing magnetism, in accordance with the well-known law of "action and re-action being equal and contrary," magnetism will induce electricity whenever a magnetic bar is moved across a conducting body. On these facts is based the construction of all varieties of electro-magnetic machines, and we are thus enabled, without trouble, to excite at pleasure currents of electricity of high tension, infinitely more potent than could be obtained by the use of the large and cumbersome galvanic batteries, at a great expense of money and time, as well as comfort, from the noxious gases evolved during their excitation.

A hollow wooden cylinder has coiled round it some twenty feet of insulated copper wire, the two ends of this *primary* coil being soldered to binding screws. On the outside of this, and insulated from it, is wound some hundred feet of very fine copper wire; this constitutes the *secondary* coil, and is also connected to binding screws. If, now, the primary coil be made to connect the two plates of a single battery excited by dilute acid, the instant contact is made, the electricity existing naturally in the secondary coil is set in rapid motion, and if any one connects the two ends of the coil by his damp hands, he will experience a shock, the restoration of the electric equilibrium, on breaking contact with the battery, producing a second and more powerful shock. If, then, a bar of soft iron, or bundle of iron wire, be placed in the centre of the wooden cylinder around which the wire is wound, it becomes a powerful magnet, and reacts energetically on the electricity existing in the wire coil, greatly increasing its tension and energy. In an apparatus thus constructed, the only thing required to make it effective, is to furnish the means of rapidly making and breaking battery contact. All sorts of contrivances have been used for this purpose, from ratchet and cogged wheels to different forms of self-moving contrivances. I believe the first of the latter proposed in this country was described by myself in the *Philosophical Magazine*. All that I have seen, have, however, for simplicity, certainly been excelled by an ingenious mechanic, who is well known to many teachers of physics for his excellence as a philosophical instrument maker.* It consists of a vibrating bar of brass, contact being made and broken by platinum points, oxidation thus being avoided.

An apparatus thus constructed, complete and fit for use, with its battery, costs but a mere trifle,—about five or six and twenty shillings being the cost price of the whole,—and it certainly far exceeds in simplicity and effect the electro-magnetic machines advertised, generally, at four times that sum.

When the apparatus is wanted for action, all that is required is to pour into the battery dilute sulphuric acid, and the whole is fit for use. Long wire conductors, terminated by copper discs, are connected with the screws of the secondary coil, and are used to convey the electric currents excited in the wire wherever we please, the intensity, and the consequent violence of the shock, being modified by withdrawing, wholly or partly, the bundle of iron wire from the centre of the coils. It must be remembered that the currents thus excited do not come from the battery; they are merely excited by it, and are derived only from the electricity naturally present in the wire. Also, it is important to bear in mind, that in the coil, currents move alternately in opposite directions, and that for every vibration of the brass arm of the contact-breaker, two currents really traverse its wire in opposite directions, so that there is, properly speaking, no actual positive or negative pole, or end of the conductors.

As I stated at the commencement of my remarks, I purpose in this communication alluding only to cases of paralysis, in which I have found the remedy in question of great value. Time will not permit me to give any account of its action in other diseases; and in many, its effects are very similar to those of ordinary electricity excited by friction, a long report of cases treated by which remedy, at Guy's Hospital, I some time ago published in our Hospital Reports. So far as I know, I believe I may claim the credit (if it deserve any) of first em-

ploying the electro-magnetic currents as a substitute for the electricity excited by the cumbersome and difficultly-applied voltaic battery.

I have classified the varieties of paralysis in which the remedy has been of decided service in the following manner:

1. *Cases of partial paralysis, resulting from congestion or other cerebral mischief, admitting of successful treatment. The congestion or effusion is removed, but a more or less palsied state of some part of the body remains.*

Cases of this kind are common enough; and although the paralysis in general slowly disappears with the cause of the cerebral disorder, still the axiom of "*sublatâ causâ, tollitur effectus*," does not always apply. Every now and then, although the blow has ceased, the bruise (if the expression be permitted) remains. Time, friction, change of air, restoration of the general health, strychnia, &c., will, after all, succeed; but when with improved general health the stimulus of the electro-magnetic current be employed, success is much more general and certain. All that is required here, is to apply one of the conductors, covered with wet linen, over the trunk of the largest nerve of the part affected, and to pass the other, similarly covered with linen, over the region of the palsied muscle, so as to keep them actively contracting for some minutes. In recent cases, a single application will often succeed; in more chronic ones, the remedy may be continued for weeks, until the paralysis disappears. One of the first cases in which I used this remedy occurred, about nine years ago, in a gentleman holding a prominent position at the bar. I saw him with Mr. Freeman, of Spring Gardens, under whose care he was. This gentleman had palsy of the left side of the face, the relic of an hemiplegic attack following cerebral congestion, the result of intense study and anxiety. His cerebral disease had been cured, his general health restored, but the paralyzed nerves of the face alone refused to resume their functions. The electro-magnetic current was applied daily, the patient's footman being the "medical electrician," and in a few weeks he quite recovered.

2. *Paralysis of muscles supplied by the portio dura, following exposure to cold.*

This form of local paralysis, independent of cerebral mischief, generally yields readily to treatment. Cases, however, occur, in which the nerve remains inactive, and the patient walks about for a long time with a distorted face. The electro-magnetic current is here of great value. I have seen many cases of this kind: one to which I was recently called resulted from exposure of the left cheek of a lady for some hours to a current of air from a broken window. She recovered readily from the accompanying bronchitis, but was left with her features distorted, being drawn to the right side. I at once suggested the current from the apparatus; her maid-servant was the operator, and cured her mistress in a week.

3. *Local paralysis involving the whole or part of a limb from exposure to cold.*

This variety resembles the last, and is probably of a rheumatic character; although, it must be confessed, it is often a difficult task to define the line separating rheumatic from some paralytic affections. The following is one of many I have seen:—The actuary of one of the large assurance offices consulted me, with nearly complete paralysis of motion of the left arm, sensation being pretty perfect; no pain whatever in moving the limb. During a cold winter, he had been in the habit of sitting at his desk, with the right side of his body roasting by a large fire, whilst the left was chilled by blasts of cold air from a frequently-opened door. Gradually, pain and stiffness appeared in the left arm, but no swelling. The pain gradually vanished, and the limb was left palsied. Other remedies proving useless, the electro-magnetic current was applied. I ordered a conductor to be placed over the lower cervical spinal region, to influence the origin of the axillary plexus, the other being passed down the arm. After a few weeks, he quite recovered. This gentleman was his own operator: he fastened the spinal conductor in its place by his neckcloth, and thus had the right hand at liberty to apply the other.

4. *Paralysis affecting one side of the body, or a single limb, the result of exhaustion.*

These cases are not unfrequent, and before their nature was understood, they used to be fearfully mismanaged, the paralysis being looked to, rather than the cause producing it, and depletion and mercury employed when nutritious food and stimulants were really indicated. It often happens that

* Mr. Neeves, working philosophical instrument maker, Broad-street, St. Giles's.

these cases are directly traceable to an obvious cause, and then the diagnosis becomes easy. The insidious exhaustion and enervation produced by excessive lactation is a not unfrequent cause. I saw a well-marked case of this kind, five or six years ago, in a patient under the care of a most excellent and talented practitioner, Mr. Pretty, now residing in Mornington-road. This lady, a person of weak frame and strumous diathesis, had become exhausted by nursing her third infant, and the left arm became gradually palsied as far as motion was concerned. A generous diet, weaning the child, and the electro-magnetic current, were ordered. I had lost sight of this lady until a few days ago, when I was called to see her sinking from phthisis. I then learnt that, under the treatment suggested, the paralysis had soon disappeared.

Paralysis, from enervation, has occasionally followed sudden loss of blood at flooding labours. I have witnessed complete hemiplegia as the result. A case of this kind I once saw with my friend, Mr. Law, of Finsbury, who had most properly treated the poor lady with generous diet and iron, under which she did well. When under this treatment, in spite of the restoration of the general health, paralysis remains, the electro-magnetic stimulus promises, from what I have seen, to be of much service.

5. Cases of rheumatic paraplegia.

To this category I refer cases of rheumatism, affecting chiefly the lower extremities, the pain and acute action disappearing, while more or less complete paraplegia remains. In these cases, I have seen the greatest benefit result from electro-magnetism, as well as from ordinary electricity. I have witnessed so many of these cases thus treated so well, that I can speak with great confidence of its influence. One case will suffice as an example. A man came last summer into Luke's ward, at Guy's, under my care, with complete paralysis of motion of the lower extremities. He was totally unable to move his feet or knees, and was carried into the ward. This state of things had followed the dashing of ice-cold water on his legs and thighs, whilst sweating profusely. But little medicine was ordered for this man, and in less than three weeks, he, under the use of electro-magnetism, walked about the ward, aided by one crutch and his stick. In these cases, one conductor should be firmly pressed against the sacrum, whilst the other is placed in a basin of salt-and-water, in which the feet are immersed.

6. Paraplegia the result of enervation?

I am not quite sure of the pathological correctness of the title I have thus assumed. By it, however, I understand a series of cases in which paraplegia, both of motion and sensation, results from excessive fatigue, from sitting for weeks and months together, during the greater part of the twenty-four hours, with the spine somewhat bent. I knew of one case in which a distinguished physician actually became thus palsied, after assiduously devoting his time to the study of certain phenomena by the microscope, in doing which, he, for hours together, used to lean over the instrument. There is, however, another cause, unhappily too rife, of these cases, the miserable result of the utilitarian dogma which makes human labour a marketable commodity, without any regard to the conservation of health. I may perhaps startle some by announcing the fact, that I have, in several instances, seen more or less complete paraplegia among a class of labourers of the most oppressed and most unprotected character. I refer to the needle-women of this metropolis—a class of girls and women who, to earn enough of the wretched pittance they receive from the agents who employ them, to procure the commonest necessities of life, are often compelled to work for fourteen, sixteen, eighteen hours, or even sometimes longer in the twenty-four hours. They toil on, indeed, at the needle, until the sight fails as they drop asleep; waking, after snatching a short slumber, to resume their work. These poor creatures receive from three-halfpence to four-pence halfpenny for making a shirt, (for the latter price producing such as is worn by respectable mechanics and others.) They are unable to procure proper food, and are often driven to intemperance to forget their miseries, or to prostitution, to add to their wretched income. No wonder that they become exhausted, enervated, bloodless; and paraplegia is not unfrequently the result. I had under my care, in the hospital, this last summer, a young woman, who had once moved in a respectable sphere. She was quite paraplegic. She had been exhausted by working in the way I have described, and declared to me, that excepting dozing in her chair, she had often not slept for two nights together. She first felt vague pains in the toes, then in the knees; rigidity came on; and ultimately she became as I saw

her, the lower half of her body being as powerless as if made of marble.

In many of these cases, no organic lesion exists; and by due nourishment, rest in the recumbent position, iron or zinc, and the subsequent application of the electro-magnetic stimulus, recovery generally takes place. These cases are little known, and will continue (we must fear) to occur, so long as the labour of the friendless and dependent female is regarded with no more feelings of sympathy or humanity than the amount of duty performed by a steam-engine or any other machine.

In thus advocating the electro-magnetic current as an important and most valuable excitant of paralyzed muscles, I must still acknowledge that it is anything but a universally-successful remedy. In the great majority of forms of palsy above described, it is indubitably, in some, the actual curative agent; in all, it expedites and aids the cure; in none is it injurious. As a general rule, I think it will be found, *ceteris paribus*, to act most effectually in proportion to the acuteness of the case. In chronic paralysis, we must recollect that any new tissue deposited during, perhaps, many months, or longer, although organized like the healthy structure, and provided with its due supply of nerves, is still composed of fibres which have never obeyed the influence of the will—have never moved at the volition of the patient. This I believe to be the reason of our not at once rousing a long-paralyzed muscle into action. We can here only expect to succeed by submitting the paralyzed part for a long period to the influence of the remedy. I cannot conclude without urging upon the profession the impropriety and mischief of using electricity in some cases merely because paralysis exists. In true spinal paralysis depending upon organic lesion, the electro-magnetic current often does mischief, especially where there is subacute inflammation, or a highly-irritable state of the spinal marrow—a state of things shown, among other symptoms, by the involuntary and unconscious starting of the legs. In all such cases, the remedy does no good, and in some it does great harm, the effect of its local irritation, when applied to the legs, appearing to be reflected to the spine, and greatly increasing the patient's sufferings.

Postscript.—In connexion with the remarks connected with the quackery of this subject, I may mention a fact, of which the profession are probably not aware, that a new class of "medical electricians" have of late started up, in the shape of the persons employed at some of the railways to exhibit the electro-magnetic telegraph. I had lately occasion to see a gentleman from Cheltenham, who had been under the treatment of the person employed in that town, who had been using electricity to cure a diseased heart! He informed me that this person treated in this way a large number of invalids.

ON CHOLERA,

ITS NATURE AND TREATMENT.

(INQUIRIES RENDERED IMPERATIVE BY ITS PRESENT ADVANCE FROM ASIA INTO EUROPE.)

By CHARLES CLARK, Esq., Surgeon, Kensington.

By the latest accounts from Asia and the east of Europe, it appears that that awful pestilence, the cholera, after sweeping over a part of the former continent, has arrived at the latter. This course, combined with our former experience, justifies us in entertaining the most serious apprehensions, that, ere long, it may arrive upon our own shores. The absurdity and total inefficacy of all quarantine regulations to exclude it, was, I think, sufficiently demonstrated during its last dreadful visitation, to prevent such injurious and fruitless restrictions upon trade, commerce, and social intercourse, being ever again resorted to for that purpose. No person, I apprehend, who has had any experience in the matter, and whose mind, divested of prejudice, is capable of being exercised in a sound induction from facts, will now contend that cholera is of a contagious nature. The simple fact seems to be, that the cause of cholera exists, like many other epidemics, in a peculiar—I may, perhaps, say poisonous—condition of the atmosphere, but of the exact nature of that cause or condition we may as well, I believe, confess ourselves entirely ignorant. But until we can place the whole of the country under an exhausted receiver, and teach people to live without air, we must continue to be liable to its attacks. Such, then, being the case, it behoves us to buckle on our armour, and prepare to meet such a formidable foe with all the resources in our power. Although not a practitioner, but a student, at the time of its last incursion, I well recollect the utter confusion, contradiction, and discrepancy of opinion which then existed amongst medical men as

to the best mode of treating this fatal disease, and the pages of *THE LANCET* for 1831-3, will sufficiently demonstrate the truth of this. In order, therefore, that it may not come upon us a second time, and find us almost entirely unprepared, I beg to suggest that this subject be immediately mooted at the various medical societies throughout the country, and that the question, What is the best treatment of cholera? should undergo an ample discussion upon the data already established, whilst a cool and comprehensive survey can be taken of them, and men's minds are unprejudiced by the hurried observance of a multitude of cases occurring around them; for it is not during the hurry and confusion of the fight that the best plans of a battle are laid. This would serve also to elicit information as to the opinions which now exist amongst the profession upon the subject,—would direct public attention to it, and contribute to enlighten those junior members who have not had an opportunity of acquiring practical knowledge by treating the disease themselves. Now as every one is entitled to hold his own opinion, after due deliberation, and to construct his own little theory upon the subject, and as I have treated the disease in India and elsewhere, I may, perhaps, here venture to state my ideas of its nature, and the best mode of treatment.

Cholera, then, seems to me to be produced by a deleterious condition of the atmosphere, of the exact nature or even origin of which we are utterly ignorant, as no appreciable difference can be detected between this air and any other, by any means with which we are at present acquainted. This air having entered the blood through the medium of the lungs, a morbid impression is directly produced; the constitution as it were immediately takes the alarm, and a number of violent actions are set up by the *vis medicatrix Nature* to expel the dangerous intruder: hence the severe vomiting and purging at the onset, terminating in the rice-water stools, and producing extreme irritation of the spinal nerves, as exhibited in cramps in the abdomen, lower extremities, &c. These rice-water stools, as they have been not inaptly designated, are evidently nothing more than the serous or albuminous portion of the blood exuded upon the surface of the intestines, combined with the epithelium of the mucous membrane. Granting this, then, (and I think it will scarcely be disputed,) the immense quantity of these evacuations sufficiently demonstrate what must be the condition of the blood still remaining in the vessels. Being thus deprived of the greatest part of its fluid contents, of course the crassamentum, or fibrinous portion, is left in a viscid and thickened condition, quite unfit for the various purposes of circulation; hence local engorgements ensue, especially in the system of the vena portæ; hence the blueness and lividity of the surface, the diminished heat of the body, the feeling of cold and numbness, the scanty nature of the bile, urine, perspiration, and other excretions, the hollow countenance, the pinched nose, the sunken eye, the diminished respiration, feeble pulse, and death. If this sketch of the origin, progress, and termination of the disease be correct, what, then, should be our chief indications of treatment. Evidently, to moderate the morbid actions established by Nature for the expulsion of the poison; and as this seems to be attempted by draining the blood of its fluid parts, a prime object should be, to replenish these as near as possible, and thus endeavour to maintain its natural fluidity and free circulation, so as to support the system whilst the exhausting processes are going on. 2ndly. To prevent local engorgements, especially of the liver, vena portæ, and other portions of the abdominal circulation. 3rdly. To promote healthy secretion, and allay pain, irritation, and spasm, &c.

Now the question remains, how are these various objects to be most effectually accomplished? To fulfil the latter part of the first indication, I would propose that a drink should be prepared, resembling as near as possible the composition of the serum, with albumen, muriate and carbonate of soda, &c., only, of course, in a more dilute state, and that the patient should partake of this as freely as possible, in fact, *ad libitum*. Efferevescing salines might also be given occasionally. To restrain inordinate action, promote healthy secretion of bile and perspiration, and at the same time allay irritation, spasm, and pain, nothing, I think, will be found more effectual than a combination of calomel and Dover's powder, administered freely, until the violence of the vomiting and purging is restrained, and bilious evacuations are obtained; taking care, however, that the quantity of opium given be not such as to prove injurious to the brain, or to excite a fever of reaction—a result which I believe frequently occurred during the last epidemic, with the calomel and opium treatment, and often carried off the patient after the cholera itself had been surmounted. Should local engorgement ensue and continue, notwithstanding

ing these means, bleeding might then be resorted to, regulating the quantity of blood abstracted by the extent of the congestion and the constitution of the patient; but it is upon this principle alone, in my opinion, that blood should be drawn in cholera, for, as we cannot purify a well of impure water by withdrawing a bucketful, neither can we change the whole mass of blood by removing a portion. If it were possible to abstract the whole or even the greatest part of the vitiated blood in these diseases, and replace it with healthy blood, adapted to the constitution of the patient, by transfusion or otherwise, I believe this would be the most successful practice of all; but, unfortunately, this is a task rather beyond our reach at present. To support the tone and energy of the nervous system, and promote animal heat, towards the close, and in some cases during the progress, of the disease, stimulants, as wine, brandy, ammonia, &c., may be employed as auxiliaries, but only as auxiliaries; for I cannot understand upon what correct pathological principle they are made the sheet-anchor of the treatment, as some have advised. Nutritious diet, in proportion to the powers of digestion, should of course be attended to, and warm baths will be found serviceable.

Such, then, is an outline of the plan I would venture to recommend to the attentive consideration of my junior medical brethren to combat this fearful pestilence, should it unhappily again visit these islands in its awful and devastating course; and though it becomes us, from bitter experience, to speak with the most profound humility of any plan of treatment yet devised to stop its ravages, yet I am firmly convinced the foregoing will be found the most effectual of any with which we are at present acquainted, if vigorously and judiciously carried out.

The progress of the disease during its last visitation in this country showed that it chiefly attacked the poor, the ill-fed, the ill-clothed—those breathing an impure atmosphere in crowded streets and dwellings,—in fact, all those whose blood was impoverished, or whose health and strength were previously impaired by any cause whatsoever. It might therefore be denominated the poor man's scourge—perhaps, some would say, his relief; but even the slightest apprehension of its advent now is enough to make one shudder to contemplate the havoc it may produce, especially in Ireland, should it follow upon the heels of the famine which is now undermining health there, and, as it were, preparing for its prey the suffering people of that unfortunate country.

Peel-place, Kensington, May, 1846.

THE ISLAND OF CHUSAN, CHINA.

ON THE EFFECTS OF THE CLIMATE ON EUROPEAN CONSTITUTIONS.

By FRANCIS DELAYAL WALSH, Esq., Surgeon, late of the "Thames" East Indiaman.

HAVING resided some time on the coast of China, I forward these few remarks on a peculiar disease that prevails there, and afflicts nearly all Europeans that newly arrive; I may safely say, that out of a thousand that went down the coast as far as Chusan during the late war, not one escaped. I mention this as the average. Those who had been there previously, promised us that we should all certainly be sick as soon as we set foot on the coast of China, though we had never been sick before. It happened so; I was sick there for the first time since I had been out; so were all that were with me, soldiers and sailors. No sooner were we anchored in Chusan harbour, than we were seized with pains in the bowels, and loss of appetite. Some vomited, and all had diarrhoea; nothing that we ate agreed with us, though we tried all sorts of food. The soldiers on shore were nearly all in hospital; in one company there were only two men able to do duty. The same disease attacked all the officers. It was a common occurrence to see thirty or forty officers sit down to dinner, and then jump up and run out as soon as they had swallowed the first spoonful of soup; so that they used to call the disease the Chusan trot. It was called the main-deck trot by the sailors. Some soon recovered, but were very apt to relapse upon the least change of weather, as, for instance, a shower of rain. Dr. P. Grant, who inspected the hospital at Chusan, said it was the most troublesome disease he ever had to deal with. The men kept leaving the hospital, and returning again, at every relapse losing flesh, and becoming weaker, until they were quite worn out, and many died.

This disease, though troublesome and fatal, could be easily relieved. Anything that excited a secretion of bile gave temporary relief. It seemed that the liver had refused to secrete bile, or act, and yet did not become inflamed or congested, but

torpid or inactive. The circulation through the portal vein was diminished; the intestines were congested; the stools liquid, frothy, and clay-coloured, something like brewer's yeast in appearance—sometimes mixed with undigested food lately taken. If by means of calomel or blue pill we could excite the secretion of bile, the disease was relieved for a time. Some were so conscious of this, that they took small quantities of blue pill every day. I preferred fasting, and believe I cured myself by that means; but I could persuade few to adopt this remedy; they preferred eating, drinking, smoking, and blue pill. I have heard no one assign any probable cause for this disease; some attributed it to bad air, and some to bad water; some thought that the Chinese had poisoned the springs, but we found no change when we drank Thames or Indian water from the ships, and we saw nothing that could produce malaria. There was no sea-beach, swamp, or uncultivated land. The coast was hills and rocks. The rice-grounds were few and small, and no change was observed, either when they were covered with water or drained.

I have attributed this disease to a certain electric state of the locality. The following will be my reason for doing so:—

The coast of China is the eastern coast of the largest tract of land in the world—of the great eastern continent, extending in longitude from the east of China to the west of Africa. It is also bounded by the largest tract of water—the great Pacific Ocean.

Now, there is a current of electricity passing round the world from west to east, (see Faraday); and electricity is conducted better by water than by land. Electricity, then, will be positive on the western, and negative on the eastern coast; or on the one it will be plus, and on the other minus. Now we have pretty good proof, that where electricity is negative, vitality is depressed; where it is positive, it is excited. The hand placed in the negative current becomes cold, in the positive, warm; and many practitioners in India have remarked, that there are peculiar diseases in connexion with peculiar electric states of any locality; that there is a remarkable difference in the biliary secretion; the liver is excited where the electricity is positive, depressed where it is negative. Now, in diseases on the coast of Africa, the practitioners complain of excess in the secretion of bile; on the coast of China, of deficiency. In the diseases of China, there was a complaint that no bile was secreted. This is directly the reverse of the diseases on the coast of Africa: an excess of the action of the liver is complained of in the same latitude with the same heat of climate. Bleeding is more resorted to on the coast of Africa, and calomel in large doses, to act as a sedative. In China, bleeding was seldom resorted to with good effects; and calomel was found beneficial in small doses, to act as an excitant. From these reflections, I question if the coast of China will ever be a healthy place, either for Europeans or for natives of India; both seem equally to suffer from disease.

Men are more local beings than they are apt to be aware of; and Nature seems to have formed peculiar races of men for peculiar localities. On the eastern coast of the great continent, the men are all Mongolian; on the western, they are a directly opposite race. There, the African becomes the strongest amongst the human race—there, the European cannot live and generate.

I may offer a few remarks on the great difference between the African and Mongolian race. If we take the same latitude, the same heat of climate—the tropic of Cancer, for instance,—we find on the eastern coast the race is fair; where protected from the sun, they are of waxy-white complexions. Some of them appeared as much whiter than our Europeans as the Europeans were whiter than natives, of which I could give instances. The eye is generally angular—the caruncula is always hidden by the upper eyelid. I found no exception to this in a true Chinaman. Every hair of the head, beard, eyelashes, and eyebrows, is straight; the eyelashes hang downwards to the eye; the beard is scanty and straight, and confined to the upper lip and chin; scarcely any of what is called whiskers by us grows on the cheeks and throat. The men appear deficient in virility: they often marry many wives, but have few children. Early marriages are encouraged, to keep up the population. They appear to resemble those Scythians mentioned by Hippocrates, amongst whom there were many natural eunuchs. One of the reasons they give for smoking opium is, to excite sexual desire, or the “golden passion,” as they call it.

These peculiarities of the Mongolian race are directly opposite to those of the African. The African is black in the same latitude that the Chinaman is deadly pale; his every hair is curled—his eyes are full—his caruncula is exposed—his beard, more on the throat and cheeks, and less on the lips and

chin, is bushy and curled. The men have excess of virility; they are stronger. We find them a match for the English pugilist. Whilst we have these extremes on the eastern and western coasts, we find the centre of the continent occupied by the Caucasian feature, varying in colour with the latitude. As a proof that there is some cause for this, we find that races change their colour and feature, in a few generations after they have changed their localities. The Portuguese at Calcutta and Madras are many of them blacker than the natives, though of white origin. At Macao, the same race are assuming the Chinese features, although they boast of a pure descent; yet, after a few generations, they have straight hair, angular eyes, beard confined to the lips and chin, and pale-yellow wavy-looking complexions. If, according to a late learned writer, the more or less activity of the biliary organs is the cause of the dark or fair complexion, the biliary secretions are certainly deficient on the whole eastern coast of the eastern continent, and in excess on the western coast. Longitude, as well as latitude, seems to affect us in disease. Electricity, as well as heat, has its peculiar effect on the constitution: both, in excess, appear to be excitants. I may add, that I do not believe positive and negative electricity to be proper terms. It is as improper to call a deficiency of electricity negative, as to call cold, negative heat. Electricity, like heat, is everywhere seeking equilibrium, but appears to find this equilibrium with greater rapidity.

George-street, Euston-square, June, 1846.

OFFICIAL CORRESPONDENCE

ON THE POOR-LAW COMMISSIONERS' "MEDICAL ORDER OF MARCH, 1842." WHAT IS "DISLOCATION OF THE ARM"?

By DAVID CORBET, M.D., Orsett, Essex.

JUNIUS, in the dedication of his letters to the English nation, truly affirms, "One precedent creates another. They soon accumulate, and constitute law. What yesterday was fact, to-day is doctrine. Examples are supposed to justify the most dangerous measures; and when they do not suit exactly, the defect is supplied by analogy." Anxious, therefore, that no precedent injurious to the general interests of the profession, which could be evicted, should be established in any case of mine, the following correspondence is forwarded to THE LANCET for publication:—

A few preliminary observations may be necessary. A man, named Joseph Green, applied at my surgery on the afternoon of a Board day, with a dislocation of the shoulder-joint, which had occurred the previous evening. He stated, that he had applied at the Board, and had been refused relief, (this I have reason to believe was not the case; the Board had broken up ere he made the application to some individual guardian,) that he was without money, and had no prospect of being able to pay for the reduction of the dislocation. Well, of course the poor fellow could not be sent away unrelieved, and accordingly, with the assistance of Mr. Borthwick, the end of the humerus was placed in situ. Next day, I found, from Mr. Joseph Spurgeon, of the Bell Inn, Horndon, where Green was lodging, and where the accident had occurred, that the allegation of Green's utter destitution was strictly true; "Joe of the Bell" had himself, with his accustomed humanity, prevented the man from starving; and on laying the case before the overseer, Mr. G. West, an *ex post facto* "medical order" was immediately granted. Christmas came, and my accounts were forwarded to the clerk of the union, including the usual charge in such cases for Green; this charge was disallowed, and hence the correspondence.

1. To North Surridge, Esq., Clerk to the Orsett Union.

Orsett, Feb. 12th, 1846.

MY DEAR SIR,—Be kind enough to state in writing the precise grounds upon which I have been refused payment by our guardians in the case of Joseph Green.—I remain, yours truly,

DAVID CORBET, M.D.

2. To David Corbet, Esq., M.D.

Romford, Feb. 14th, 1846.

MY DEAR SIR,—The ground upon which the Board disallowed the fee for reducing the dislocation of the shoulder in the case of Green was, that the operation is not one of those enumerated in "the medical order," for which you would be entitled to extra-remuneration. A case very nearly resembling this has just occurred in the Romford Union: Mr. Collin, one of the medical officers, having attended without an order, claimed the fee, which was disallowed by

the Romford Board, on the ground that the patient was not a pauper. Mr. Collin then appealed to the commissioners, who held that a dislocation of the shoulder is not a dislocation of the arm, and that he was therefore not entitled to extra-remuneration. The decision of the commissioners (whether right or wrong I know not) applies, of course, to your own case.—I am, my dear Sir, yours faithfully,

NORTH SURRIDGE.

3. To the Poor-law Commissioners, Somerset House.

Orsett, Feb. 15th, 1846.

GENTLEMEN,—I have been refused payment by our guardians for the reduction of a dislocated shoulder. I had an overseer's order in the case, and I believe there is no doubt the patient was in circumstances requiring relief. That there may be no mistake as to the grounds upon which payment has been refused, I enclose you the original letter I had from our clerk—that the commissioners held that a dislocation of the shoulder was not a dislocation of the arm! There is such an evident mistake here, that I am really ashamed to trouble you; but some crotchet has entered the head of our worthy functionary, and he has led the Board into the injustice of refusing me the usual fee.—Yours truly,

DAVID CORBET, M.D.

4. To Dr. Corbet.

Poor-law Commission Office,
Somerset House, Feb. 18th, 1846.

SIR,—I am directed by the Poor-law Commissioners to acknowledge your letter of the 15th instant, complaining that the Board of Guardians of the Orsett Union had refused you payment for the reduction of a dislocated shoulder, in a case which you attended under an order from an overseer of the poor. The commissioners desire to explain to you, that the general medical order does not specify a "dislocation of the shoulder" as a case for the treatment of which a fee is payable to a medical officer, and therefore, the claim, in the shape it was made upon the guardians, was one which they were justified in refusing. If you had made a claim for a "dislocation of the arm," of course your demand, at least as regards its terms, would have been different.

The commissioners request you will inform them what bones were dislocated in the case which you refer to.

I am, Sir, your obedient servant,

L. OXFORD, Assistant Secretary.

5. To the Poor Law Commissioners.

Orsett, Feb. 18th, 1846.

GENTLEMEN,—I have to inform you that it was the principal bone of the arm (humerus) which was dislocated in the usual way, downwards and forwards, from the cavity of the blade-bone. The medical order seemed clearly worded to me, but your explanation now renders it so vague that it should be instantly altered; for, depend upon it, medical men, in recording declarations of what you call the arm, will invariably be characterizing them as of the shoulder, elbow, or wrist, as the case may be. There can be no doubt of the humerus (the bone from the shoulder to the elbow) being a bone of the arm.—Yours respectfully,

DAVID CORBET, M.D.

6. To Dr. Corbet.

Poor-Law Commission Office,
Feb. 23rd, 1846.

SIR,—I am directed by the Poor-Law Commissioners to acknowledge the receipt of your letter of the 18th instant, respecting your claim for payment of a fee for the treatment of a dislocated shoulder, as adverted to in your previous communication of the 15th instant, and I am to state, that if you give such an explanation of the case to the Board of Guardians of the Orsett Union as you have now furnished to the Commissioners, and make your claim for the treatment of a "dislocation of the arm," the Commissioners have no doubt that it will be duly considered by the Guardians.—I am, Sir, your most obedient servant,

E. CHADWICK, Secretary.

I attended the Board in person, and read to the Guardians the several communications, and was thanked for explaining what the medical order really meant—that there was in truth no such thing as a dislocation of the arm, but dislocations of the various joints did occur. In justice to Mr. Surridge, the acute, indefatigable, and courteous clerk of the Union, I must add, that he read a copy of the communication from the Commissioners to Mr. Collin, which clearly maintained the doc-

trine that dislocation of the shoulder was not included in the medical order, allowing an extra fee for the treatment of a dislocation of the arm! I have applied to Mr. Collin for a copy of this document, with a view to publish it as an appendix to my own correspondence, but I regret much he declines complying with my request.

The moral of all this is, that the Commissioners clearly mean "the arm," in its most extended signification, synonymous with the upper extremity, but insist on the technical term in the order being complied with; I therefore recommend my brethren always to charge for the "arm," whether in fractures or dislocations of the bones or joints of the upper extremity, from the clavicle to the little finger.

Orsett, Essex, 1846.

DAVID CORBET, M.D.

MEDICAL JURISPRUDENCE.

REMARKS ON A SUSPECTED DEATH FROM QUACKERY.

By WILLIAM HARDING, Esq., M.R.C.S. London.

IN THE LANCET of May 23rd is a short report of an inquest, held by Mr. Bedford, coroner for Westminster, at the Falcon Tavern, Lisle-street, Soho, on the body of a child, supposed to have died from the administration of improper medicines. Should you consider my communication deserving of publication, you must, if you please, permit me to detail the particulars of the case, the facts of which are shortly these:—Elizabeth C—, nine years of age, residing in Leicester-street, complained of indisposition and sickness. Vomiting, fever, sore throat, with imperfect redness of the skin, followed in the train. The father of the child applied to a chemist in Little Newport-street, who first prescribed an opening powder, then visited the child; ordered an emetic, leeches, and blister to the throat, and afterwards sent eight white powders, one to be placed on the tongue every four hours. These medicines were all duly administered.

At the expiration of about a week, the parents discovered that the druggist was not a qualified medical man, and seeing that the child was doing badly, dismissed him, and sent for a qualified practitioner residing in Great Newport-street, who attended for somewhat less than three weeks, when the child died. An opinion having been expressed that the symptoms were produced by mercury, and that death resulted from the action of that poison, the injured parents instituted an inquiry. The evidence went to show that scarlet fever had previously existed in the house, that the druggist had attended and been paid for his medicines, that the parents of the child believed him to be qualified to practise medicine, and dismissed him on discovering their error.

The medical man who had attended after the druggist, and also examined the body after death, detailed the history of the case, his own treatment, the post-mortem appearances, &c., and gave an unqualified opinion that death had been the result of some mercurials improperly administered. He based his opinion on the symptoms presented during life, the post-mortem appearances, and the mercurial fœtor of the salivation, which he stated was characteristic and distinctive, and could not be mistaken. On the part of the chemist, it was stated that the eight powders contained only antimony and sugar, and that no mercury had been administered, save and except in the calomel and jalap at the commencement of the disease. The medical man repeated his assertion, that the peculiar fœtor could be produced by mercury alone, and that it could not be mistaken by an experienced practitioner. Now, I throw overboard the chemist. I have nothing to do with him; however skilful he may suppose himself in physic, he cannot

"Kaze out the written troubles of the brain," nor
"Pluck from the memory a rooted sorrow."

he cannot, therefore, devise a sedative to allay the mental agony that reigns in the bosoms of the parents of that poor child, who live to grieve over their accidental error in selecting an unqualified practitioner, and who have the pain of believing (however erroneous the impression may be) that that error deprived them of their child. My business, on the present occasion, is with the medical witness, with the evidence he gave before the coroner and the jury assembled, with his facts and his inferences, that the profession may judge whether conclusions so formed are sufficiently rigorous to assist a non-medical coroner and jury in forming a correct judgment.

First, then, for the evidence from symptoms. It is, perhaps, almost superfluous for me to say that symptoms are not, in the

present day, considered as furnishing anything like satisfactory evidence of the existence of a poison. Time was, indeed, when they were regarded as almost infallible; but that day has passed by, and every authority will now agree, that "however exquisitely developed, they can never justify an opinion in favour of more than high probability." Let it not for a moment be supposed that I wish to undervalue such evidence; there are many cases in which it may be fairly stated to be preëminently important; there are some of the irritant poisons, for example, whose effects are so abrupt in their commencement, so violent in their action, so rapid in their course, and so fatal, that the symptoms alone generate probability of the very highest kind, and provoke the strongest suspicion. But assuredly, ptialism cannot be placed in this catalogue, exhibiting itself, as it does, in the course of many maladies, and being itself undoubtedly an idiopathic disease; nay more, presenting itself constantly, in its most violent form, in the very disease under which it was affirmed this child had laboured—scarlet fever.

Still less to be relied upon than the symptoms during life, are the morbid appearances presented on examination ninety hours after death. Inflammation, ulceration, the presence of pus, the destruction of the tissues, though produced by mercury and many other poisons, are they not equally the effects of natural disease? The truth is, morbid appearances can seldom be much relied upon, and never when they show the presence of disease that might be generated spontaneously, or may be produced by medicinal agents. But perhaps I am urging these points too strongly, and it may therefore appear unfairly, as the medical witness particularly said, "I rest my opinion upon the mercurial fœtor of the salivation, which could not be mistaken." Now this I consider a most important question, deserving every careful consideration, and, indeed, the principal question I wish to bring forward in this paper.

Inquiries, as is well known, have taken place before coroners, in cases where death has been produced by, or supposed to have been the result of, salivation from mercury administered to children, and the inquiry is just as likely to take place when the attendance has been given by the duly qualified, as by the unqualified practitioner. Upon what authority, then, let me ask, is it stated that the fœtor of mercurial salivation is distinctive, and cannot be mistaken. I trust I shall not be considered as speaking disparagingly of my medical brethren, when I venture on the assertion, that the experience of no man, in private practice, however extensive that may be, is sufficient to decide this question in the affirmative, unless the opinion tally with the voice of authority, or the received experience of the profession. For my own part, I am not ashamed to avow that I have often been unable to distinguish the fœtor of the salivation which accompanies severe sore throat, from the fœtor of mercurial ptialism, and I should be very backward, indeed, to decide positively, from the smell alone, between the ptialism of mercury and the ptialism of malignant disease. Is this matter, let me ask, a thing already settled by experience and observation? for in pathology, facts, and facts only, form the basis and superstructure of our knowledge. If it be settled, my paper, perhaps, is superfluous, and the evidence of the medical witness beyond my criticism; if it be not settled, I think I cannot be in error in supposing it to be deserving of discussion. We are so familiar with salivation from mercury and its unpleasant fœtor, that, finding the symptoms present, the mind readily makes the inference that the drug has been administered; but let us not, under such circumstances, mistake strong probability for infallible proof. Why should the fœtor of mercurial ptialism be supposed to differ from that known occasionally to be produced by the preparations of copper, gold, arsenic, bismuth, and other agents? and why should it be expected to differ from the fœtor of salivation, as it accompanies natural diseases? Assuredly, it is not the mineral that smells; for mercury, in its simple and compound forms, is almost without odour. No; the fœtor belongs to the abnormal state itself; it is not an axiom in our science that a disease varies with its exciting cause. Quite the contrary. What avails it whether a subtle poison, floating in the atmosphere, placed upon the tongue, or introduced into the stomach, produce the specific change? Of what consequence is it whether inoculation, contagion, or any other cause, provoke the malady? The disease is still the same, varied or modified, not with reference to the peculiarity of its exciting cause, but with reference to the peculiarities of the constitution it chancés to invade. Reasoning, then, upon the subject, appears to me to lead to an inference opposed to the medical evidence on the present occasion. Analogy, if I may be allowed to use it,

does not support the proposition; and facts, as far as I can measure them, do not prove it.

My communication is already so long that I feel ashamed of intruding further on your valuable space; but allow me one line more, to ask, if it be not well known that gangrene of the mouth occurs to children in the course of fever, small-pox, &c.; and if it be not also admitted that it is most difficult, if not impossible, to distinguish the disease from that produced by over-doses of mercury; and is it not on record, that medical men have, under such circumstances, been charged with causing death by mercury, when, on inquiry, proof positive has been furnished that not a grain had been administered?

Percy-street, Bedford-square, June, 1846.

REVIEWS.

On Diseases of the Liver. By GEORGE BUDD, M.D., F.R.S., Professor of Medicine in King's College. London: Churchill. 1845. 8vo, pp. 401.

Remarks on the Dysentery and Hepatitis of India. By E. A. PARKES, M.B., late Assistant-surgeon H.M. 84th Regiment. London: Longmans and Co. 8vo, pp. 271.

UNAVOIDABLE circumstances have prevented an earlier notice of the first of these volumes. We do not regret the delay, as it affords an opportunity of reviewing some of the most important statements which the work contains, in connexion with the results of inquiries on similar subjects, by the author of the second of the above-named volumes. Diseases of the liver—"liver complaints"—were, some years ago, more fashionable than in more recent times—facts to which the verdant streets of our once fashionable spas bear desponding testimony. The rise and progress of physical diagnosis, in diseases of the chest, have, to a certain extent, withdrawn attention from those of the abdomen; whilst our improved pathological knowledge has made spinal irritation, hysteria, or a deranged gastric mucous membrane, responsible for many errors at one time attributed to the liver. In a physiological and a pathological point of view, more has been done by advancing science for this organ than for any other in the body. The microscope has traced its existence downwards in the scale of created beings far beyond a point where man's unaided powers had failed to find it, and thus, by its universality, established its importance. The structure, too, of this complex organ has, by persevering genius, been exposed and simplified; whilst its secretion—the constituents of which were at one time pronounced to be so numerous, that our knowledge of its nature was as obscure as that of the structure of the organ whence it came—has, by modern research, been proved to be composed of but some three or four elements. Of this advanced knowledge, Dr. Budd has availed himself. He has given to the profession a work which will render its members acquainted with nearly all that has hitherto been done in reference to the structure, functions, and diseases of this important organ and its appendages. Dr. Parkes's volume, with its unpretending title, is also a valuable contribution to this department of scientific medicine.

The first-named author has extended his inquiries to all the diseases of the liver. Dr. Parkes, availing himself of the opportunities afforded by his appointment as assistant-surgeon to one of her Majesty's regiments serving in India, has confined his attention to those diseases which are presented in that climate. The result is a work which, conferring inestimable advantages on all, whether those who suffer, and those whose duty it is to afford relief, must be a source of great satisfaction to the honourable director-general of the army, to whom the present volume is dedicated, and to whose discrimination in selecting a distinguished student for an unsolicited appointment, the profession is indebted for this the first result of his labours. But to proceed to our more immediate subject.

Dr. Budd commences with an Introduction, which treats of the general anatomy and physiology of the liver, and he ac-

companies his descriptions with many practical remarks on the pathology and treatment of its diseases. In reference to the structure of the liver, the following paragraph will clearly express the views entertained by the author :—

"In consequence of the arrangement of the minute vessels, if we cut into a liver in which, as is usual after death, the branches and twigs of the hepatic vein and the capillaries immediately terminating in them, are full of blood, while the branches and twigs of the portal vein and the capillaries immediately springing from them are empty, the cut surface will be mapped out into small, tolerably equal, and somewhat pentangular, spaces, having the outline, formed by the portal twigs, pale, and the centre, into which a twig of the hepatic vein enters, red. The small masses, of which these pentagonal spaces are sections, have been termed *lobules* of the liver. They have been described by Malpighi, Kiernan, Müller, and others, as isolated from each other, and each invested by a layer of areolar, or, as it used to be named, *cellular*, tissue. The injected preparations of Mr. Bowman show, I think, clearly, that this opinion is erroneous,—that the lobules are not distinct, isolated bodies, but merely small masses tolerably defined by the ultimate twigs of the portal vein and the injected or uninjected capillaries immediately contiguous to them. The ultimate twigs of the vein are, as it were, hairy with capillaries, springing directly from them on every side, and forming a close and continuous network. The lobules appear distinct isolated bodies only when seen by too low a power clearly to distinguish the capillaries."—p. 6.

We have no hesitation in withholding assent from the latter view. The first-named authorities have produced the most satisfactory evidence of the subdivided structure of the liver. From the pig's liver macerated in acetic acid, the lobules can indeed be picked out separately. It is quite true that the microscope shows more uniformity in the injected specimens than the naked eye can perceive; this is but a result of the injection of the capillaries ramifying in the portal canals. The liver in man, and in almost all animals, is composed of separate lobules, and we are greatly mistaken if pathological, as well as physiological proofs will not, ere long, be produced in support of this opinion. The arrangement of the blood-vessels, lymphatics, and other tissues, is described; the composition, quantity, and other matters connected with the secretion of bile, are discussed; one of the purposes of this latter function being the separation from the blood of certain noxious and effete principles.

"There has been much debate among physiologists, whether the principles of bile are formed in the liver, or are not rather merely separated by this organ from the blood, in which, under this supposition, they are supposed to exist, ready-made for secretion. Data are yet wanting for the complete solution of this question. But it is quite clear that the colouring matters of the bile exist in the blood, since if they be not separated from it by the liver, as sometimes happens when the secretion of bile is suppressed, the person is speedily jaundiced."—p. 28.

On this point Dr. Parkes makes the following remarks :—

"I have never seen any reason to believe that the non-secretion or the non-separation of the bile from the blood will produce jaundice. I have never seen jaundice in any case of hepatic abscess, and, in fact, in no case in which secretion has been totally arrested. I therefore, with all respect, differ from those pathologists who suppose that the liver merely separates the biliary principles from the blood, as the kidneys do urea. In these cases of complete suspension of secretion, cephalic symptoms are uncommon, contrary to what we should expect, if the opinions of Dr. Alison be well founded."—p. 191.

There is much force in the observation; but, before entirely adopting this view, we should wish to see it made the subject of further inquiry. The quantity of bile secreted by different individuals varies. In many it is deficient; the power of the liver to secrete is too feeble, and disease is the consequence, as shown in the following observations by Dr. Budd :—

"People who inherit this feebleness of the liver, if we may so term it, or in whom, in consequence of disease, a portion of liver has atrophied, or the secreting element of the liver has been damaged, may suffer little inconvenience as long as they are placed in favourable circumstances, and observe those rules

which such a condition requires; but whenever from any cause—as a hot climate, gross living, indolent habits, constipation—a more abundant secretion of bile is requisite to purify the blood, the liver is inadequate to its office, and they become bilious and sallow. In the management of such cases, we have two objects to fulfil,—1st, to enjoin those conditions and rules of life that render a plentiful secretion of bile less needful; and 2nd, to endeavour to render the liver itself more active.

"The chief conditions to diminish the quantity of matter which the liver is called on to excrete, are, a light diet, with water for drink; active exercise; early rising; and a cool, or temperate climate. Acids have been supposed to act in the same way, and have been much in repute as a remedy in liver disorders, particularly in India, where, from the circumstances mentioned, a remedy having this mode of action is especially required.

"Various medicines seem to fulfil, to a certain extent, the second object, that of rendering the liver more active, and increasing in this way the secretion of bile. Mercury, iodine, muriate of ammonia, and taraxacum, have undoubtedly an action of this kind."—pp. 34, 35.

The first chapter of Dr. Budd's book is devoted to the subject of congestion of the liver. He copies, with a proper acknowledgment, Mr. Kiernan's views and diagrams,—he describes mechanical congestion depending on disease of the heart and lungs, and states that a similar result has a different origin—viz., in morbid states of the blood, and in ague. The chapter is still exceedingly unsatisfactory, containing no information as to the method by which a congested liver can be recognised during life, and being recognised, how it is to be relieved. Its conclusion brings us to the subject of hepatic inflammation; and here we come into immediate contact with the views of Dr. Parkes. Both authors treat the subject at great length—at too great length to admit our entrance on it in the present number. We shall return to it, probably, in our next, and conclude now with an outline of Dr. Parkes's views on dysentery. They are highly original, and may be stated in a series of propositions. The first recognised fact, already pretty generally known, is, that

"There exists, on the inner coat of the large intestines, a series of solitary glands peculiar to that particular mucous membrane. They are evident in many diseases of the liver, when they become enlarged, as in cirrhosis, accompanied with ascites."—p. 4.

The author considers that they are not merely mucous follicles; they have some resemblance to the solitary glands of the small intestines, and are found equally distributed over the whole mucous membrane of the large.

The second statement is, that "inflammation and ulceration of these glands are the earliest morbid changes in dysentery," and those changes are described. The description we require to extract at length; it does not admit of condensation, and is deserving of perusal in its entire form.

"The first alteration in the glands is an enlargement of them, and a change in their contents. The contained substance becomes thicker, and now resembles flour and water in appearance and consistence. In all probability this condition occurs every day, and giving rise to slight diarrhoea, relieves itself, and the glands return to their normal condition. That alternation of constipation and slight diarrhoea, with deranged secretion, which is often termed torpor of the liver, may be something of this kind, and at any rate is always best treated by a reference to the colonic mucous membrane.

"If, instead of relieving themselves by secretion, the glands continue enlarged for some time without being acutely inflamed, that appearance is presented which has been incorrectly compared by Bellingall and others to a variolous eruption. I have seen this several times, and the resemblance is about as great as might have been anticipated from the loose nature of the statement. The characteristic marks of the variolous eruption are, a slough or disorganization of the cutis vera, (phlyctidium,) with vessels radiating from a central point or stigma, which by its adherence to the cuticle, elsewhere raised by a peculiar pus, produces the umbilicus. It is needless to say; that in dysentery there is no process of this sort; there is the simple gland, easily dissected and isolated, with an occasional dark point on the summit, or side, of unde-

terminated nature. I make this comparison, as an otherwise accurate observer, Dr. Murray, of the Bengal Horse Artillery, has insisted strongly on the coincidence between small-pox and dysentery, and even appears to think that this connexion will both establish and explain the contagious nature of the latter disease in certain cases. (*Calcutta Transactions*.)

"If a greater degree of inflammation be present, the vessels around the gland become enlarged and conspicuous, and form a ring or halo, spreading a short distance into the mucous membrane.

"This condition presents the earliest symptoms of dysentery—viz., slimy stools, increased in number without blood, causing perhaps slight griping and tenesmus when passed, and generally unattended by pain on pressure.

"Immediately after this, and in severe cases, during the very first days, ulceration begins, and is always denoted by slimy and gelatinous stools, streaked with blood, and attended by tormina, tenesmus, and pain on pressure, varying according to the seat of the diseases, and its intensity.

"Ulceration begins in three ways:—

"(a.) In the glands themselves.

"(b.) Around the glands.

"(c.) By effusion of a fluid beneath intermediate mucous membrane."—pp. 6—8.

These several forms of ulceration are fully described, and on their progress a classification of the stages of dysentery is founded.

"First period.—Of enlargement, and commencing ulceration of solitary glands.

"Second period.—Of complete and spreading ulceration.

"Third period.—Of cicatrization. [Or.]

"Fourth period.—Of abortive cicatrization, commonly called chronic dysentery, a disease which is a resultant of continued sub-acute inflammation and ulceration, combined with ineffectual efforts to produce the usual cicatrizing process."

The observations on the cicatrization of ulcers are of great interest. The author proves that this process takes place with great rapidity and completeness. The case of a young man who, recovering from dysentery, died suddenly from sun-stroke, affords an apposite example of the facts stated.

It is impossible to follow the author through the lengthened descriptions which he gives of the various complications of dysentery with disease of the liver, with scurvy, with remittent fever, &c., all of which statements are illustrated by cases: neither have we time to dwell on the symptoms of this disease nor on its treatment. Suffice it for the former to say, that scybala are by no means necessarily present in true dysentery; and for the latter, that it must vary with the character of the disease. We do not regret the necessity which requires us, for the present, to bring our remarks to a close, as we are satisfied that there are few whose practice leads them to feel an interest in the subject of hepatic disease, or in dysentery, who will not make themselves acquainted with the contents of both the volumes, the titles of which head this notice.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

MAY 26TH.—MR. PERRY IN THE CHAIR.

CASES OF MELANOSIS, WITH OBSERVATIONS. By HOLMES COOTE, Esq., Fellow of the Royal College of Surgeons, Surgeon to the North London Ophthalmic Institution.

THE author, after relating several cases of melanosis, gives a brief historical notice of the works in which a description of the disease is contained. He then observes, that "melanosis in the human subject occurs as a primary disease only in the eye and in the skin. In the horse it is seen chiefly about the anus, parotid gland, or spleen. Mr. Spooner, of the Royal Veterinary College, has never met with it but in horses of a light colour, most of whom were becoming white from age."

After some remarks upon the necessity of not confounding true melanotic tumours with other dark-coloured swellings, the author gives a brief account of the chemical composition and microscopical anatomy of true melanosis. He argues from the latter, that melanotic tumours, though sparingly, if at all supplied with bloodvessels, are not unorganized, the cells which compose them having their periods of growth, maturity, and decline. He denies the correctness of regarding melanosis as a variety of cancer. He enumerates many points in which the two diseases essentially differ. Melanosis of the eye com-

mences between the choroid and the retina; the tumour, pushing the contents of the globe on one side, makes its way externally by irregular periods of increase. Melanotic tumours of the skin are either cutaneous or subcutaneous.

The development of internal disease, to which the fatal termination of the case is owing, is marked by general lassitude, and undefined pains over the trunk and limbs. The patient is exhausted by sickness and diarrhoea, but in most cases retains his mental faculties to the last.

Secondary melanotic accumulations are found in all structures, except the cornea, synovial membranes, tendons, and aponeurotic expansions. The liver often attains an enormous magnitude: in one case, examined by Mr. Lawrence, it weighed seventeen pounds and a half. From a table of fifteen accurately-watched cases, it would appear that the average duration of life, after the removal of the primary disease by operation, does not amount to more than thirteen months. The author concludes by endeavouring to show that the operation, though justifiable for the purpose of relieving a patient from a source of suffering, ought not to be held out as a means of eradicating the disease, or of materially prolonging life. He rests these conclusions very much upon examinations made by himself, having found, by the aid of the microscope, that, in one case, melanotic matter existed in the bloodvessels, in apparently healthy muscles, nerves, and other tissues immediately surrounding the primary tumour.

MR. WHITE COOPER referred to one of the cases recorded in the paper before the Society, and said, that subsequent to the operation that patient was the subject of extreme dyspepsia. The eye itself was well, but the patient was much attenuated, and subject to distressing pyrosis. He feared that she laboured under disease of some internal organ, probably of the stomach, similar to that removed from the eye.

THE PRESIDENT observed, that in the case alluded to, the melanotic disease was situated externally to the eye. This he believed was a very unfrequent seat of the affection, and asked if any chemical examination had been made of the contents of the tumour.

MR. COOPER had not examined the tumour chemically; but under the microscope it exhibited all the characters of melanosis. It commenced from a small red point, it was supplied with vessels from the canthus, and had progressed with great rapidity. Mr. Fergusson had seen the case previous to the operation, and had recommended the removal of the tumour as affording the only chance of saving the patient. It was accordingly removed; the operation was attended with much hæmorrhage, but the wound healed rapidly, and in a fortnight, the eye, to all appearance, was well. A considerable portion of the conjunctiva covering the cornea was removed in the operation; but there was no consequent opacity.

MR. FERGUSSON had a full recollection of the case, and had a firm impression that the tumour was melanotic. He certainly concurred in opinion as to the necessity of an operation; but he was by no means sanguine as to the result of that proceeding. It was gratifying to him to hear of its success, which was contrary to his experience generally in these cases; for he had hitherto found, that when this disease was situated in the vicinity of the eyeball, it invariably returned, and, at a later or earlier period, destroyed the patient. The first case detailed in the paper was peculiar in regard to the appearances observed in the portion of optic nerve removed, when it was placed under the microscope, as it exhibited black spots similar to those observed in other parts of the tumour. He feared that a similar condition of the nerve left behind would obtain. Had Mr. Coote seen this patient since the paper had been written? Had he also any peculiar views respecting the term "malignant" as applied to these tumours? That term, in his (Mr. Fergusson's) opinion, was strictly applicable to this disease. The result of these cases, in general, bore out the correctness of this opinion; for the average duration of life, after the operation of removal, as proved by the paper, was but thirteen months, and the disease was not a much longer period in proving fatal, even after its first appearance. He therefore looked upon this as a malignant disease.

MR. COOTE had not seen the subject of the first case detailed in his paper since the operation. He had, however, heard, that for some months subsequently to that proceeding, there was a dark, sanious discharge from the orbit; the veins of the palpebræ were enlarged, and the integuments stained of a dark colour. He had little doubt that if the blood from these veins had been examined, it would have been found to be melanotic. He had divided the optic nerve with a clean knife; the spots alluded to by Mr. Fergusson had been clearly detectable under the microscope, and he feared, from this

fact, that a satisfactory termination of the case could not be expected. In addition to the signs of the return of the disease in the orbit there was also enlargement of the liver. Regarding the term malignancy, he was inclined to give it a much more extended meaning than was commonly done. Some were disposed to restrict the term to carcinomatous disease. Now melanosis was not at all allied to cancer; its origin, progress, seat, and termination, were essentially different. He was disposed to include, besides melanosis and cancer, many other formidable complaints under the term malignant.

Dr. THEOPHILUS THOMPSON believed, with the last speaker, that cancer and melanosis were of a different nature. In support of this opinion, he related the case of a lady, fifty years of age, who, until twelve months previous to death, usually enjoyed robust health. At that period she suffered from debility, without pain or local indisposition. The abdomen was slightly distended, but her appetite was good, the bowels regular, and the urine normal; her intellect was unaffected. She rapidly emaciated, and her countenance presented the characteristic appearance of malignant disease, the two last circumstances forming the only diagnostic marks of the true nature of her complaint. Malignant disease was suspected to be situated in the stomach, duodenum, or liver. Two months before death, a dark inky spot presented itself upon the gums, and two teeth became loosened. The debility gradually increased, but the swelling of the abdomen subsided before death. The intellects were clear to the last. On examination after death, the peritonæum exhibited the appearance of having been painted over with black paint, resembling very much the pigmentum nigrum of the eye. The small, shrivelled omentum presented the same appearance; the black matter could be readily scraped off, leaving the peritonæum of its natural appearance underneath. This layer was not thick, except over the cæcum. There was a patch of the same kind in the mucous membrane of the duodenum. All the other organs were healthy. Death was evidently the result of this disease. There was no tubercular or cancerous matter. He alluded to this case as a striking illustration of melanosis which, he thought, was undoubtedly malignant. It also proved that melanosis did not, as the author of the paper believed, always primarily affect the skin or the eye.

Mr. LLOYD related a case of melanosis which affected almost every organ of the body without showing itself externally. The patient had suffered from obstruction of the rectum, attended by discharges of blood; and to this were soon superadded profuse discharges of blood from the uterus, which organ, on examination, was found to be ulcerated, and affected with excrescences. As the disease was considered to be malignant, an unfavourable prognosis was given. Evidence of the spread of the disease to the abdomen and lungs soon presented itself; there was great difficulty of swallowing, cough, and distressing dyspnoea, and expectoration of a dark bloody matter. Hectic supervened, and the patient died exhausted. On examination after death, melanosis was found to be present in the rectum, uterus, lungs, liver, and intestines; and small tumours were also discernible between the coats of the intestines, and also on their mucous membrane. The œsophagus was contracted, as though affected with scirrhus, but no melanosis was found there. So abundant was the melanotic matter in the affected parts, that when these were put into vessels containing other preparations, the latter were spoilt by the contact. With reference to the duration of life after the removal of melanotic tumours, he related a case in which, eighteen months since, he had removed a tumour of this kind situated on the lower eyelid, and impinging somewhat upon the eyeball. After the operation, the chloride of zinc was freely used. The tumour presented all the characters of true melanosis; but the case was entirely successful, the patient getting quite well and continuing so.

Mr. C. HAWKINS defined malignant disease to be that which, whether interfered with or not by operation, exhibited itself in other organs, and proved rapidly fatal. He placed true melanosis at the head of all malignant diseases. It generally proved rapidly fatal after removal. He had seen all parts of the body affected with this disease. The question was not whether the disease were melanosis, carcinoma, or encephaloid, but whether removal by the knife would give the patient a fair chance of surviving. In some semi-malignant cases, removal might perhaps prevent a relapse of the disease. This was more particularly the case in scirrhus of the skin.

Mr. ARNOTT eulogized the paper as giving evidence of an anxiety on the part of the author to draw a more specific difference than at present existed between malignant and other diseases. It was difficult to determine what diseases really were malignant; but he thought the definition of malignant

disease, as given by Mr. Hawkins, was correct, and applicable to melanosis. Melanosis, however, was altogether different from cancer. He believed that the author was in error in stating that melanosis, as a primary disease, invariably occurred in the skin or eye. He thought there was more chance of relapse after operation for melanosis of the eye or skin, than from scirrhus or encephaloid disease. Had the author of the paper ever seen melanosis of the eye or skin prove fatal without involving any internal organ, as was occasionally the case in cancer? In the first case related in the paper, the disease clearly existed in the remains of the optic nerve, yet up to this time had not returned in that part. It was quite different in cases of cancer of the eye, in which, after operation, it exhibited itself always in the orbit. He related a case in which melanosis affected the skin over the lumbar region; it ulcerated. He recommended removal by the knife, which was resorted to, and the parts appeared to heal kindly. Fifteen months afterwards, however, the disease returned, and the woman's entire body resembled that of a mulatto. Every part of it, after death, was found affected with melanosis.

Mr. PERRY inquired whether Mr. Coote had any evidence of the disease being hereditary. He asked the question, because he was acquainted with a family, numbering four, whose mother had, twenty years since, died of melanosis, and her children were in good health. He had known similar instances in relation to horses.

Mr. COOTE had no record of a case proving fatal simply from its primary effects on the skin or eye, or without the involvement of some internal organ. With regard to the cases of Messrs. Lloyd and Thompson, which were in opposition to his (Mr. Coote's) opinions, that melanosis occurred as a primary disease only in the skin or eye, it must be recollected, that in these cases the diseases affected the mucous membrane, the changes occurring in which we were not yet fully acquainted with, although they were supposed to be similar to those occurring in the skin. He had no proof of the disease being hereditary, and it was too rare to expect much evidence on this point. Mr. Arnott had alluded to the first case in the paper, in which the disease had been removed, and had afterwards presented itself in the viscera, the orbit remaining healthy. Such cases had been observed in the practice of veterinary surgeons.

Mr. LLOYD referred to a case in St. Bartholomew's Hospital, which had been regarded as an instance of carcinoma of the breast, until the true character of the disease, which was melanotic, presented itself on the skin.

Dr. P. M. STEWART corrected Mr. Coote's statement, that in the cases related by Dr. Thompson, the disease was situated in the mucous membrane, for, on the contrary, it was the serous membrane that was affected; and in Mr. Lloyd's patient, the cellular tissue between the coats of the intestines was the seat of the tumours.

CASE OF RUPTURE OF THE HEART, FROM FATTY DEGENERATION OF THAT ORGAN. By R. H. MEADE, F.R.C.S., of Bradford, Yorkshire.

The subject of this case was an old gentleman, aged eighty-eight, very strong and active, and who had walked to church (a distance of half a mile) and back again, on the morning of the day he died. He went to bed, feeling as well as usual; but on the servant taking leave of him, she noticed an unusual appearance in his countenance, and heard him gasp once, as if for breath. She immediately called for help, but he never moved or breathed again.

Post-mortem examination.—The lungs were quite healthy; the pericardium covered with much fat, and, when opened, was found distended with blood, separated into serum and clot, to the amount of a pound. This was found to proceed from an irregular jagged opening at the lower and back part of the left ventricle, near the apex of the organ. The muscular texture of the heart around this was so soft and altered in structure, that it would not bear the pressure of the finger. It was of a dirty-yellow colour, and at the first view looked like softened tuberculous matter; but, on closer inspection, it was found to consist of a fatty substance. The lower part of the ventricle, in which the rent had taken place, bulged out, so as to form a sort of pouch. The heart presented no other important alterations; but it was generally loaded with fat, and the muscular texture was pale and flabby.

The coats of the aorta, as well as the mitral and aortic valves, were partly ossified, but not to a degree to interfere materially with their action. An interesting question, the author observes, in connexion with this case, is—how long the disease had existed before the rupture of the heart occurred, and whether it could have been long present without giving

rise to symptoms? He states he was in attendance on the patient two months before his death, for some weeks, when he had cough, and complained of weakness, with constant noise in his head and ears. The pulse was full, and had a jerking feel; but he did not detect anything unnatural in the sounds or impulse of the heart.

HYDATID CYST EITHER ORIGINATING IN, OR PRESSING UPON, THE PROSTATE GLAND. By GEORGE LOWDELL, late House-surgeon to the Sussex County Hospital.

JOHN I—, aged sixty-four, was admitted into hospital, July, 1844. He had experienced difficulty in passing water for three or four years. This difficulty had lately amounted to almost complete retention. The bladder was extremely full, and the patient in severe pain. Several unsuccessful attempts had been made to pass the catheter. The same result attended the first trial after he was admitted. The instrument passed with great facility to the prostatic portion of the urethra, and from thence its point diverged into numerous false passages. On examination by the rectum, a large obscurely elastic tumour, in the situation of the prostate gland, was discovered pressing on the gut, and nearly filling the pelvis. He was ordered a warm bath, which relieved his pain, and enabled him to pass a small quantity of urine. Still his bladder continued very much distended. On a second attempt, a small catheter was passed into the bladder, and three pints of alkaline urine were drawn off. On examination of the abdomen, two small tumours were felt in the direction of the arch of the colon. The patient remained in a state of debility, and died a few days after his admission.

On examination of the body, the peritonæum, in the neighbourhood of the bladder, was found dark, black, and softened. The cellular tissue about its neck, and covering the psoas and iliacus muscles, was boggy and soft. The bladder was much thickened, and in the situation of the prostate was a tumour larger than a fetal head, which, when cut open, proved to be an hydatid cyst full of hydatids compressed together, the true substance of the prostate being lost in the thickened cyst. The urethra was healthy, but the prostatic portion had been so pressed upon the tumour, that, in attempting to pass the catheter, numerous false passages had been made in every direction. Between the layers of omentum, and in close proximity to the arch of the colon, were two tumours containing hydatids within a thickened cyst.

MR. CURLING recollected a case in almost every respect similar to the one before the Society, in which the patient died from the bladder being pressed upon by a large collection of hydatid cysts.

MR. LLOYD said that there was one important point in this interesting case, with reference to treatment, which deserved comment. He thought that no surgeon was justified in exercising a force sufficient to make a false passage in any case in which obstruction existed to the passage of a catheter. In this case it was truly lamentable to hear how many false passages existed. The danger attending the formation of a false passage was very great. He had seen cases in which the surgeon, having failed in his attempts to pass the catheter, had thrust it through the urethra, and the consequence had been a most destructive inflammation and suppurative of the surrounding cellular tissue. He could not help thinking, that in a case like the present, puncture of the bladder above the pubes would have been a more advisable proceeding than the one resorted to.

MR. FERGUSSON said that the question mooted by Mr. Lloyd, though a most important one, was but a mere echo of the common principles of surgery, as laid down in elementary works. No one, he thought, could dispute, that if a surgeon failed to pass a catheter by gentle means, he could not be justified in using force sufficient to make a false passage, unless, indeed, he had previously determined to force his way into the bladder, by making an opening by the instrument above the neck of that viscus.

MR. PAGET was convinced, from a careful examination of the preparation from this case, that none of the many false passages which existed in it were made by the surgeons of the Brighton Hospital. It was clear, when the attempts to relieve the bladder were made by Mr. Lawrence, the very dexterous surgeon of that institution, that the instrument had passed along one of these false passages, which passed directly up in front of the bladder. The case he (Mr. Paget) regarded as successful, so far as it went: the bladder had been relieved. He considered that the mischief already existing would have been much augmented by puncturing the bladder about the pubes.

MR. LLOYD had applied his observation more to the general

question of treatment in these cases than to the individual instance before them. He could not believe, nor would any pupil of the late Mr. Abernethy, that puncturing the bladder as he (Mr. Lloyd) had recommended, would have increased the danger of the case. He had never seen mischief of any kind result from the proceeding, though he had often adopted it himself, and seen it adopted by others.

MR. PRESCOT HEWETT, in support of the plan of treatment pursued, referred to the practice recommended by Sir B. Brodie, of thrusting the instrument through the middle lobe of the prostate.

BRITISH AND AMERICAN MEDICAL JOURNALS.

THE TREATMENT OF SYPHILIS BY FUMIGATION.

DR. CUMMING describes the native practice of India, which is followed, we learn, from other sources, with great success in many cases of obstinate syphilis assuming the secondary form. Dr. Cumming's communication appears in the *Edinburgh Monthly Journal*, and the method adopted is thus described:—

"Take of red oxide of lead, three rupées or three tolas* weight, (nine drachms;) quicksilver, the same quantity; and powdered litharge, half the quantity. Rub the quicksilver thoroughly in a mortar with the red oxide of lead till the globules disappear; or the rubbing may be suspended at the end of six hours, when the powder from the oxidation of part of the quicksilver will present some greyish spots: the last-named ingredient, the litharge, may then be added; after this, the process must be resumed, and continued, adding, from time to time, a little water; in about half an hour, the remaining globules will have entirely disappeared, and the ingredients become incorporated into a moist mass. This must be divided into fourteen equal parts, and kept for a day or two.

"The fumigation is thus effected:—Take a fire-chattee,* and put into it a number of pieces of cow-dung cake,† (dry;) ignite these, and place on the centre of the fire a bit of chattee,‡ which will be found to be quite hot, after the fire has burned for half an hour and the smoke dispersed. Then take freshly-ignited pieces of the same, and (the fire, though subdued, being extinguished) place them all round the bit of chattee, so as to keep up the heat.

"One of the portions of fumigating substance is now to be put (having been previously powdered) upon the hot bit of chattee; and the pot being placed under a chair with a rattan bottom, the patient is immediately seated without any clothing, except a *cumbee*,§ in which he and the chair are both wrapt; the cloth is kept up even to the eyes, and is only occasionally detached for a moment from the face, so as to enable the patient to breathe when much oppressed by the fumes, which often excite coughing.

"A profuse perspiration is quickly excited. After half an hour, the operation is suspended till the following day. It is repeated every morning, until the whole of the fourteen parts of the fumigating compound have been consumed; by which time a cure is generally completed. Ptyalism is rarely induced; but in general, about the tenth day, there are more or less tenderness of the gums and soreness of the throat."

CASES OF INVERSION OF THE UTERUS.

In the same journal, two cases of this distressing accident are recorded. The first resulted from the meddlesome treatment of an ignorant midwife, and terminated immediately in death. The occurrence is thus described by Dr. CHRISTIE:—

"The patient being averse to the presence of a medical man, insisted that she and the midwife could 'manage it,'—that is, the delivery of the placenta, before he came. Acting on this impression, the two set to work—the woman clasping her fingers together, and pressing downward with the palms of the hands applied over the fundus, while making a bearing-down effort, the midwife, on the other hand, at the same time pulling strongly and resolutely by the cord; and thus was the placenta delivered, accompanied by a gush of blood."

* An earthen vessel, with a wide mouth, called by the natives *Angethi*. [A common garden flower-pot will answer the purpose.]

† Commonly used in India for fuel. ‡ Pottery ware, or porcelain.

§ A woollen covering, or blanket. These terms should have been Anglicised.—ED. L.

The surgeon found the bed saturated with the same, and the fundus of the womb projecting in the cavity of the pelvis. A post-mortem examination presented the appearances usual in such cases.

The second case occurred in the practice of Mr. Smith. The umbilical cord measured but six inches in length. The patient suffered unusually during the progress of the labour, which was a rapid one, and the symptoms were such as to lead the writer to believe that inversion occurred as soon as the head was born. Having discovered, after delivery, what had taken place, the uterus was immediately replaced, and the patient did well.

"ASSASSINATION, (BY ASPHYXIA OR SUFFOCATION, WITHOUT EXTERNAL MARKS,) FOLLOWED BY SUBMERSION.—CAN SUFFOCATION BE PRODUCED BY A CRIMINAL HAND WITHOUT LEAVING EXTERNAL MARKS?

"A body was found floating on the surface of the water in the Oise. When drawn to the bank it was recognised to be that of a girl who had lived in concubinage with a man subsequently accused of the murder. The body appeared to have been roughly dressed, in order to be thrown into the river. Other circumstances concurred in pointing out that it was not an accident or a suicide, but a murder, and that the body had afterwards been thrown into the water.

"A post-mortem examination determined that the woman had been deprived of life before submersion. How then had she been killed? No trace of violence could be discovered. There were only strong signs of congestion in the brain, lungs, and liver, proofs of rapid death. There were no traces of poison. Three hypotheses were advanced by the medical men of Clermont,—submersion, drunkenness, and asphyxia.

"Dr. DEVERGIE was called in, and he first established that the slight diseases under which the girl laboured could not have caused death. He demonstrated that nothing warranted the supposition that it was caused by drunkenness, and it was proved that she had not the habit of drink. Death by submersion was not possible, and it was shown that the accused was seen carrying the body to the river. Under these circumstances, M. Devergie stated that a rapid death only could explain the phenomena of congestion noticed in the report of the examination; that these indicated death by asphyxia; that it was impossible to point out the means employed in producing suffocation; but that this kind of death could be produced by a criminal hand without leaving external marks.

"The jury, admitting this last interpretation, which supported the other evidence, gave a verdict of guilty.

"This is not the only case in which no external mark has been found after strangulation—in fact, a moderate pressure on the neck is sometimes sufficient to intercept the entrance of air into the lungs. The observations reported by Fleischmann, and the experiments he made on himself, show, that when pressure is made, more particularly between the hyoid bone and thyroid cartilage, or on the trachea, asphyxia may be complete in a few moments. Thus, as M. Devergie stated, it is not necessary to find manifest traces of violence in order to pronounce that there has been strangulation."—*Edinburgh Monthly Journal*.

With the observation that death by suffocation may be produced without leaving external marks all must agree, and consequently with the concluding remark of M. Devergie. But what is to prevent the inference, in the present case, that death was produced by charcoal vapour as a suicidal act? The case is imperfect, or imperfectly reported.

THE PRODUCTION AFTER DEATH OF CERTAIN CHARACTERS BELONGING TO BURNS MADE DURING LIFE.

MM. LEURET and CHAMPOUILLON show that vesications, and even the red line surrounding them, supposed by Christison to be characteristic of their production during life, may be also made to occur in the dead body; and—

"The only sign by which, according to Mr. Champouillon, we may recognise whether they are produced before or after death, is the appearance presented by the skin when the epidermis is raised from them. When produced after death, the dermis is of a dull white, its surface is viscid, and there is a complete absence of sanguineous injection. When, on the contrary, they are the result of burns made during life, the dermis presents a high degree of inflammatory coloration, which the application of cooling mixtures does not remove."

THE ACTION OF HYDROCYANIC ACID AS A POISON.

Dr. MEYER, as the result of his experiments with this acid on animals, states—

"1. That it had a paralyzing action on the peripheric nerves—i.e., it suppressed sensation and motion, and occasioned congestion, with augmented secretion, which was chiefly observed in the cavity of the mouth. 2. He found it to act only when received into the vascular system. On mechanically arresting the circulation, the poison did not act, although the integrity of the nervous system was preserved. On restoring the circulation, the operation of the poison was immediately observed. 3. Hydrocyanic acid does not act so rapidly as it was formerly believed. Its operation was never instantaneous. 4. Its fatal effect is owing to paralysis of the heart induced by the topical action of the blood, mixed with hydrocyanic acid, upon that organ. It required about thirty seconds for the poisoned blood to reach the heart and produce its paralyzing effects, and it mattered not whether the poison was applied directly to the substance of the heart, or to parts remote from it. In Dr. Meyer's opinion, prussic acid may act independently of the brain or nerves, or of their intervention. It requires for its operation, absorption and diffusion until it reaches the heart. It is owing to this, in his opinion, that amphibia are less rapidly killed by this poison than mammalia, the action of the heart in those animals being less necessary for the maintenance of life. Nevertheless, in a certain dose the poison may act upon and paralyze the nervous system, producing tetanic convulsions, congestion of the veins, and exudations in the serous cavities. It is not true, as it is generally believed, that in death from prussic acid the blood does not coagulate. Dr. Meyer found that this liquid coagulated in the bodies of the animals which were killed in his experiments."—*British and Foreign Review*.

These observations are to a certain extent confirmed by an experiment of Liebig. He endeavours to prove that prussic acid does not act by sympathy through the nervous system, nor is it absorbed directly into the blood; but that it can only act through the medium of its vapour on the pulmonary mucous membrane. If this statement be correct, it may be made to act as a poison, and yet with difficulty be discovered after death.

MODE OF PROTECTING WORKMEN FROM THE EFFECTS OF LEAD.

"A tinned iron mask is fitted to the face, and a cylindrical tube is attached to it opposite to the nose and mouth; in the interior of the tube there is a metallic net-work, above which is a fine sponge saturated with a very dilute solution of hydro-sulphate of soda. The sponge is so placed as entirely to fill the cylinder; it is fixed by means of a cover, also furnished with a metallic network, the air being thus compelled to traverse a body saturated with a liquid which decomposes the salts of lead. All the lead vapours remain behind in the state of sulphuret. This salt is slowly and uniformly decomposed by the carbonic acid, which is always abundantly present in these manufactories. The workman thus respire throughout the day an extremely small quantity of sulphuretted hydrogen, which, of all substances, neutralizes the effects of lead most effectually. M. Meillet also recommends that the hands should be well rubbed with an ointment, containing thirty grammes of hydrosulphate of soda to a pound of lead; the hands then wiped. These means have been tried by the advice of M. Meillet in many shot-manufactories, and the results have been most satisfactory."

The remedy suggested is nearly as bad as the evil which it is intended to correct.

NEW AMERICAN MEDICAL SCHOOLS.

A medical university (!) for teaching how to steam and give Lobelia and Number Six, has recently been chartered by the State of Alabama, and a new medical school at Memphis, by the State of Tennessee. We also learn there are applications pending before the legislature of Pennsylvania for the establishment of two new ones in Philadelphia, and that one or two more are getting ready to apply! How many more are in embryo, here and elsewhere, we know not. If the people were as wise as Æsop's frogs, they would probably say, "This may be sport to you, gentlemen professors, but it is death to us."—*Philadelphia Medical Examiner*.

THE LANCET.

LONDON, SATURDAY, JUNE 13, 1846.

It is high time that the "WATER CURE" should be known by another title, and we would suggest that of the *Water Death* as the most appropriate.

At page 666 will be found a brief report of the proceedings of an inquest held before Mr. PAYNE, the Coroner for the City of London.

After ELLIS has been subjected to that trial which awaits him on a charge of *Manslaughter*, the matter shall not be neglected by us, whatever may be the result. As ELLIS is out on bail, probably he may be selected by the College of Physicians to deliver the Harveian Oration in the place of JOHN ELLIOTSON, the MESMERISER.

WE have heard it attempted to represent the disreputable series of facts set forth in our late articles on the Royal Society as a mere medical squabble. Is, then, the treatment of the devoted anatomist or physiologist, the rejection of his papers, the misadjudication of the rewards which are justly his, from him, and to unworthy toadies and pseudo-discoverers,—is the prolonged and unjust exclusion from the Council, and from the Committees,—is all this a mere "squabble"? Above all, is it a "medical squabble"? Is not physiology a science? Does it not hold a high station even amongst the sciences? A medical squabble, indeed! It is, on the contrary, a question between scientific probity and diplomatic honesty, on the one side, and malversation of office, toadyism, and the prostitution of the Royal Society's honours, on the other. Yes; that Society which ought to be purity itself, unsullied by the contact, untainted by the breath, of the profligate, has been dishonoured by vile pimps and receivers. Fye on't! oh, fye on't!

A "medical squabble," indeed! It is, on the contrary, the question—Whether THE SECOND discovery in physiology—for, in our consciences, we believe that Dr. MARSHALL HALL's discovery has taken that most distinguished place previously held by Sir Charles Bell's—shall not only be unrewarded, but actually black-balled at the Royal Society, and its author excluded from its Councils, its Committees, from any justice, to say nothing of honour?

Nor let our readers imagine that this is a question which concerns a few of the profession only. That were at once ungenerous and wrong. The whole profession is honoured by honours justly conferred on any one. Are we not all proud of belonging to the profession of HARVEY, of HUNTER, of JENNER? Besides, let us be assured that those very principles which are adopted at the Royal Society will operate elsewhere, will dominate at the Colleges of Physicians and Surgeons, and at Apothecaries' Hall. If the members of the profession wish for justice to themselves, let them uphold the principle of justice to others. What morally rules in this great kingdom? Is it not the influence of opinion?

Let the profession see to it, then. Do they want their just rights—the uprooting of quackery—the just administration of the distinctions and remunerations of the profession? If

they really wish for these things, let them contend for justice everywhere.

We would ask the noble and generous in our profession—Is not fame dearer to you than money, or even life! What do you think, then, of a man unjustly deprived, darkly robbed of his just fame? We know that there are those who view with less horror the death-wound inflicted by that monster, COURVOISIER, than a stab to their scientific reputation.

Does not a man unjustly deprived of the results of years of labour, in the mercantile world, often lose his reason even? And do not our readers know, that a hardly-earned fame in science is still dearer to the labourer in that field? Let them think what wrong has thus been inflicted on Dr. HALL, on Dr. LEE, on Professor GRANT, during a long series of years, and that by a mere palterer in science, and a foreigner in our land.

We have heard a talk of throwing oil on the troubled waters of the Royal Society: oil may lull waves excited by the motions of the external atmosphere, but it has no effect on movements induced by causes deeply seated. The wound must be probed, it must be opened, and it must be healed from its very bottom, and in all its deep and sinuous courses.

To return to our proposition, then. Oil will not do. Physiology, and we include anatomy, is a part, and a fair part, of science at large. It is the science of the physician. It took rank in the constitution and in the early days of the Royal Society, and has kept it. What we have exposed is, therefore, no medical squabble. It is neither medical, nor a mere squabble. It is a question of right, of fame, of honour, of justice opposed to wrong,—to the deepest, blackest wrong; to wrong spread over more than six triennial Royal Society cycles. It is a question of a noble and upright independence opposed to cliqueism, favouritism, toadyism. This we say to the whole profession.

To the Fellows of the Royal Society, we say—Is the series of facts, of which we have presented the detail, such as add splendour to your Institution? Why then bolster up the doers of them. But if there be plague-spots on your Society, remove the infected, and take every precaution against their return, again to bring blight and devastation upon the fair field of science which you cultivate. In a word, let not the Royal Society remain an arena for the moral assassin; but let it be the seat of justice, honour, fame, and scientific glory!

Henceforth, let every act be beyond suspicion. Make your by-laws, and do not break them. Let time be given to determine what is good and what is bad. Let not the HALLS and the LEES of a future day be deprived of their undoubted rights, or the NEWPORTS or the BECKS be made laughing-stocks—asses clothed in lions' skins. Let not the Royal Society be dishonoured and despoiled. Let not her glory be tarnished, nor her usefulness sapped.

Do any think we have been too severe? We assure them that we have not. We have even kept back facts, because, as they did not seem necessary to our argument, we did not wish to publish them.

It would appear that Dr. ROGET thinks of the Royal Society after the manner of CHESTERFIELD, of whom it was once said, that he seemed to imagine the whole world made for him and his booby of a son. Let our readers expunge every

severe word which we have used in our indignation, and we would ask them—Are not the facts, the naked facts, condemnatory?

Let us, then, have some scientific man of inflexible integrity in the office of Secretary of the Royal Society. We have already mentioned the name of the much-injured, and the unrewarded, Professor GRANT. If stern and unflinching integrity,—if a pure devotion to science,—if talent,—if acquirement,—if eloquence in writing and in speaking, be required, this gentleman possesses these requirements most supremely. Let justice resume its stern career at the Royal Society, and begin by the election of Dr. GRANT to this office, at once of honour and of trust. Let the deserving be placed on the Council, and on the Committees; and let the novices be removed, to bide their own time.

And why should the medals not be recalled, or others given, or at least *offered*, where those ought to have been? for we cannot imagine that they would or could be accepted. Still, as far as the Royal Society is concerned, its honour would be in some wise redeemed.

Mistakes have been committed; let them be corrected. What is more, neglect has been most wrongfully inflicted; let the wrong be repaired. A mere vote of approbation, of thanks, some slight reparation, should be accorded: some fresh excitement to labour; something, in a word, which may be honourable to all parties, has become imperative.

We call upon the MARQUIS OF NORTHAMPTON, the noble president of the Royal Society—we call upon SIR JOHN HERSCHEL, its Vice-President, and its son in so many points of view, to do some good and just thing for the honour of the Royal Society in the present degraded position of the Institution, and of some of its fellows; we call upon SIR JOHN HERSCHEL, and remind him, not of his own relation to the Royal Society alone, but of that of his honoured father—yes, we invoke the shade of that father, and appeal to the justice of that son, to rescue the Royal Society from dishonour, and some of its fellows from injustice; we will not imagine a slowness in this philosopher to do a thing so necessary and so incumbent. It is the part of a generous mind to be quick to repair a wrong; the ignoble only, persist in injustice, and in vain attempts at justification.

One word more, and that addressed to the same preëminent name. We will imagine you kept, by the machinations of one or more malignant spirits, from every kind of honour and reward at the Royal Society—your labours from its *Transactions*, and yourself from its Council, its Committees, its Secretaryship, its Vice-presidency,—and from every kind of reward from other sources—your knighthood, your baronetcy; and all this, with the attendant feelings on such a series of wrongs. We will suppose that the same malignant influence even frustrated your noble purpose of passing to the Antipodes for a time, and observing the astronomy of another hemisphere. We imagine all this, and we call upon you, the living HERSCHEL, to imagine it also; and then, Sir, you will, in some slight measure, comprehend and realize the degree of injustice which has, during a series of years and events, been inflicted upon one devoted and far-searching fellow-labourer in the wide sphere of science. The physician in question has analyzed that structure which is usually denominated the spinal marrow; and amidst and from the intricacy induced by the cord of cerebral nerves, and the

connexions of the ganglionic system, he has detected and isolated the true spinal marrow, the central nervous organ of all those acts in the animal economy which effect ingestion and egestion, by which, therefore, it is sustained in the individual, and perpetuated in the species—a discovery, we will, in conclusion, venture to say, *not unworthy the protection even of a HERSCHEL*; and we select this name only because it is the one preëminently honoured and rewarded for science, and so inducted, as it were, to the duties, not ungrateful, as we trust, of the patron of science.

We mentioned in a former article the fact, that Dr. JOHN ELLIOTSON had been appointed to deliver the Harveian Oration for the present year. The following is the official invitation issued by the College of Physicians:—

“The President and Fellows of the Royal College of Physicians request — will do them the honour to be present at the College, to hear the Harveian Oration, which will be delivered by Dr. Elliotson, at five o'clock precisely, on Saturday, the 27th of June.—Pall Mall East.”

So, then, the visionary follower of MESMER,—the bitter enemy of legitimate medicine,—the professional pariah,—he who, for years, has been performing such fantastic tricks as might well “make the angels weep,” is to stand in the place of honour,—to assume the orator's robe before the heads of the profession,—before the most distinguished audience on the most distinguished occasion that belongs to the medical year, and to deliver an eulogium on the memory of the immortal HARVEY, the greatest and proudest name in medicine. Who can have meditated and compassed this great wrong,—this desecration to him who was hailed *Stator Perpetuus*,—this black infamy for the future archives of the College, if it be fully accomplished? The outrage will be enough to make the venerable figures on the College walls start from their frames,—enough to re-animate the cold busts that are scattered up and down within the precincts of the building,—enough to disturb the sacred bones at Hempstead,* and to kindle into anger the melancholy features of the statue which represents the sublime old man in the lecture-room. If they do this thing, the face of HARVEY should be turned to the wall, to avoid the mockery of his seeming to look on.

And this outrage is proposed to be perpetrated in a manner glaringly and peculiarly offensive. It was not enough that the mesmerist should be allowed, as matter of routine, to harangue the bare walls, or those within the rôle of the College, kindred in spirit with himself, but extraordinary means are to be taken to make the proposed occasion memorable and distinguished above former years. The following circular has been addressed to the Fellows by the Secretary:—

“College of Physicians, May 12th, 1846.

“Sir,—I am desired by the President and Treasurer to inform you, that it is proposed that the Fellows of the College should dine together on the day of the Harveian Oration, (Saturday, June 27th,) in the dining-room of the College, and that invitations should be sent to certain distinguished persons. To effect this object, it is proposed that a sum, not exceeding 17., should be subscribed by each Fellow who intends to dine, and the treasurer has consented to furnish any additional funds that may be necessary.—I am, Sir, your obedient servant,

“JOHN B. SEDGWICK.

“A list of the Fellows who intend to dine is suspended in the reading-room.”

We are informed that several of her Majesty's Ministers,

* The burial-place of Harvey.

and the heads of the Church, and of the Law, have been specially invited to witness this most unparalleled professional humiliation. The Hunterian Oration at the College of Surgeons was bad enough; the coming Harveian cannot but be far worse. It will constitute a vital blow to legitimate medicine. It cannot but have a most depressing effect upon the profession at large. Not only are the office-bearers of the College of Physicians deeply interested, but the Fellows, the Licentiates, the Extra-licentiates, every qualified practitioner in the kingdom, and the student and pupil of but yesterday,—the honour and repute of all are involved. To the profession, this unnatural alliance between MESMER and HARVEY will be interpreted into a recognition, by the College of Physicians, of the quackeries perpetrated in the name of MESMER. The laymen who are present, and the public, when made aware of the matter through the press, will see the mummeries of mesmerism placed side by side with scientific medicine; and they have their warranty in the facts, that of the two most responsible officers of the College, Dr. FRANCIS HAWKINS, the Registrar, is the colleague of two mesmerists, Dr. ASHBURNER and Dr. WILSON, at the Middlesex Hospital; while the President, Dr. AYRTON PARIS, makes at Pall Mall a feast for another, the PARACELsus of the day.

The only hope is, that some, and a goodly number, may be found among the Fellows, having enough of courage, and of love for their profession, and of reverence for its great names, to protest against these enormities. Every medical man present at the Oration, and at the dinner, will in some sort sanction the proceedings of the College authorities. We trust some of those who have already given their names as subscribers to the dinner will withdraw them; for we believe that—as the “circular,” which does not contain the name of the orator, was issued long before the “cards” of invitation—many were entrapped into giving their names who would not otherwise have consented to attend.

We trust this may prove to be the case. With all zeal for the good of the profession, and regard for the true interests of the College of Physicians, we would urge the Fellows that what is to be done should be done quickly. We can hardly believe that the younger Fellows particularly—the fresh blood of the College—will suffer this thing to come to pass. Will they suffer the arms of the Royal College of Physicians—a hand issuant from, and illumined by, the heaven of science, and stretched out to the aid of the afflicted—will they suffer this to be degraded into the absurd, and often obscene, pointing and passing of the mesmerist? Will they suffer one who, in a trumpery publication, has been slandering the profession for years,—the hero of ribald street-ballads,—to represent them on this august occasion? This man has deeply stabbed the profession, and, like Macbeth, he holds the bloody dagger in his hand. Is he to brandish this before the Fellows of the College, before their patrons, and before the subalterns of the profession, assembled to do honour to its proudest name?

We call on our contemporary of the *Medical Gazette* to take his proper part in this matter. Last week, that journal contained the following passage from *The Athenæum*, which most pertinently bears upon the present subject:—

“PATRONAGE OF QUACKERY.—It is painful to witness, at the present day, the patronage and confidence—and that by parties who, from their position, ought to be the leaders in the enlightenment of society—bestowed upon the professors of homeopathy, hydropathy, and animal magnetism, whilst men

profoundly acquainted with the structure and diseases of the human frame are left to struggle on unnoticed. In fact, it appears, that with those who send for the licensed medical man, a knowledge of his profession, and a sound, scientific education, are frequently the last things that are required as a recommendation of his services.”

After this it would indeed be an augury of cowardice and laxity of principle, if our contemporary were to pass over the proposed Harveian Oration without note or comment. But we have no doubt he will do his duty promptly and effectively. We need not say that we shall return to the subject.

THE itinerant empiric, named HUNT, upon whose practices we commented in a recent number, has forwarded a letter to us, in which, with a singular mixture of whining and bravado, an impertinent defence of his proceedings is attempted. We should no more think of inserting it, than we should an appeal from HOLLOWAY or MORISON. A professional man can only give fair play to an honest equal. Quacks of all kinds are, according to our code, without the pale; and no more deserve mercy or quarter, than do reptiles or beasts of prey. We, however, quote the following, as being a somewhat prominent passage:—“You (*THE LANCET*) set out with an assertion “which is the root and foundation of your entire argument, and “yet, in my opinion, is altogether a gross and absurd mistake. “You declare stammering ‘to be a disease, and, consequently, “its treatment and cure to belong exclusively to the profession “of medicine.’ Now I deny that stammering is a disease. It “is an imperfection occasioned by organic, physical, or accidental causes, the want of some proper regulation or use, and “not a disease.” We hope the profession are grateful for the modest and lucid definition. We do not quote it to handy words with its promulgator, or for the purpose of disputing with an unprofessional person respecting what does or does not constitute disease. We do so, merely for the purpose of exhibiting to the profession the nature of the philological image which has been set up in Regent-street by a few medical testimonial-mongers. If stammering is to be given up, why not chorea? if chorea, why not epilepsy? and so on, until the quacks have had the pick (as they really have had) of the whole nosology. We repeat what we have said before. This Dorsetshire farmer is an unprofessional person, engaged, instead of feeding his calves, in the treatment of disease by a secret process. Though physicians have published themselves as his pupils, he is ignorant enough, as his letter shows, however “late” he may be “of Trinity.” No conscientious and reflecting professional man can, when the matter is placed fairly before him, support such a person; he might, indeed, as well prescribe MORISON’s pills or HOLLOWAY’s ointment. If an individual case of empiricism is patronized, the entire system of quackery is supported collaterally. Formerly, so extremely lax was professional morality, that many otherwise estimable men did worse things than patronize Mr. HUNT, from sheer inattention and thoughtlessness. Not long ago we saw that a quack curer of stammering was actually advertised to give a course of lectures on the subject, in one of the metropolitan medical schools. The teachers were willing to inform and debase their students at the same time. But we have, indeed, worked to but little purpose, if such practices are to continue. The following are the latest of Mr. HUNT’s advertisements:—

"CURE OF STAMMERING.—NO. XVII.

"28, St. James's-square, Bath, 20th Jan. 1840.

"DEAR SIR,—I have great pleasure in bearing testimony to the remarkable success of your method of curing stammering, in two of the most distressing cases I ever witnessed. A few weeks ago they could hardly articulate a word; now both speak and read without the slightest hesitation. With best wishes, believe me, yours faithfully, "J. WATSON, M.D.

"Mr. Hunt, Regent-street."

"STAMMERING.

"Circus, Bath, Jan. 26th, 1840.

"DEAR SIR,—In the cases which came under my own knowledge, that were treated by you for stammering, the improvement was so great, and effected in so short a time, that I have great pleasure in saying that I consider the principles which you explained to me, in the short interview I had with you, are very well calculated to effect great improvement in all, and a perfect cure in many, of the worst cases; and such they have certainly proved in the instances I have been acquainted with.—I am, dear Sir, yours, &c., "GEORGE NORMAN."

"STAMMERING.

"Chichester, April 12th, 1828.

"Mr. Hunt was kind enough to give a lesson in my presence, to Thomas Miles, (a patient in the Chichester Infirmary,) a poor man, who had been affected with stammering, in a very high degree, from his infancy. And from the unreserved exposition of his principles on that occasion, as well as from the remarkable improvement (amounting almost to a complete cure) produced by this single lesson, I am of opinion that Mr. Hunt's method will be successful in nearly every case of stammering, not depending on any organic defect, provided the requisite degree of attention is paid by the pupil.

"JOHN FORBES, M.D."

"STAMMERING.

"Bath, Jan. 25th, 1840.

"I willingly comply with the request of Mr. Thomas Hunt, by giving my testimony of his abilities as a corrector of stammering. Proceeding on sound principles, he applies these with great ingenuity to the purpose designed, and, so far as I can judge from what I have witnessed, with speedy and signal success. The perfect unreserve with which he explains the principles, and demonstrates the modes, of their application, and his liberality in rendering his services gratuitously to those who have not the means of remunerating him, enhance his merits, and add to his claims on the public for liberal encouragement.

"E. BARLOW, M.D."

In conclusion, if our readers will, at any time, furnish us with the names of medical men who now support this form of quackery, in any shape, either by giving testimonials, or recommending patients, we will place them before the profession. If they covet notoriety, their wishes shall be gratified.

MEDICAL FEES AT ASSURANCE OFFICES.

To the Editor of THE LANCET.

SIR,—As one of that profession whom Widow Sutton and Sons charge with "disseminating an assertion, which we beg leave to pronounce wholly unfounded, and almost calumnious," (THE LANCET, April 18th, page 449,) I feel impelled to repudiate such an ill-founded aspersion, and cheerfully respond to the call of Mr. Stookes, contained in his admirable reply, (THE LANCET, May 16, page 558,) "furnish me with proofs that my assertion is no slander." In doing so, I willingly convey to him my unqualified approbation of his manly stand against the consummate arrogance which ever characterizes this would-be "strictly confidential correspondence" of assurance companies. I here, for the information of my medical brethren, and the edification of Widow Sutton and Sons, unhesitatingly state that, some years ago, when I replied to some of these offices, in one case, the correspondence was so "strictly confidential," that the applicant was told "he could not be accepted, in consequence of my unfavourable answers." I then thought it prudent to adopt a course I have pursued for ten years—that is, of not answering without a fee, and on refusal, recommending a non-professional referee in my place, by which I am saved the responsibility. In three cases where I have refused, the applicants have received this truly exemplary and disinterested (!) advice,—“We should recommend you to employ a medical man who would be more complaisant than Mr. Self, who refuses you so simple a thing as a certi-

ficate of health." Also I forward to you the name of a medical friend, (with his perfect concurrence,) whose unsatisfactory answer was actually given to the applicant for insurance: the result was, his dismissal as the family attendant. From these specimens of slander, I conceive it to be the imperative duty of the profession to free themselves from such injustice, by strenuously resisting all applications from assurance offices, whether accompanied by fee or not. Let me ask,—Is a guinea a compensation for the consequences of such breaches of faith?—Is it of any import to these offices, if we do not happen to comply with their cormorant demands, what they say of us?—And is the profession satisfied that these acts are not done to intimidate it into a compliance on future occasions, even, too, at those *very respectable* offices which refuse to pay? I fancy their respectability is of a peculiar order, having no parallel. What other public office would have the effrontery to ask for the special advice of a professional man, and then refuse to pay him! pretending it is at the desire of the applicant, though following it by an admission which does not require any one to be Argus-eyed to see that it is solely at their request, and for their special satisfaction and direction. For instance: "The Directors will feel greatly obliged by your answering fully, the questions on the other side, to enable them to judge whether A. B. is a fit and safe subject for insurance."

Widow Sutton and Sons will, I doubt not, after this brief statement of facts, conclude that there are some persons interested in the lucrative affair of assurance offices, who are not quite so immaculate as the "strictly confidential correspondence" invariably sets forth.—I remain, Sir, your obedient servant,

Commercial Road East, May, 1846.

WILLIAM SELF.

RELATIVE STANDARD OF THE APOTHECARIES' LICENCE AND DUBLIN UNIVERSITY DEGREES.

To the Editor of THE LANCET.

SIR,—In looking over the volumes of THE LANCET for 1845, a communication, signed M.D., and published in the number for May 26th, arrested my attention. This gentleman seems to be unable to "conceive why the Licentiate of Apothecaries' Hall should be deemed in any degree inferior to the graduate of the Irish or Scotch universities." This statement tends to impress your readers with a very erroneous estimate of the qualifications demanded by the Dublin University for medical graduation; and, as a B.A. and student in physic of this institution, I feel it incumbent upon me to lay before you an abstract of the regulations of the university, from which your very numerous readers can judge for themselves as to the propriety of deeming the English apothecary upon a level with the graduate of Trinity College, as regards literary and professional acquirements. I should scarcely have thought it necessary to trouble you with these remarks, were it not that the requirements of our three great universities—Oxford, Cambridge, and Dublin, are very much misunderstood by the majority of the profession, who seem to jump at the conclusion, that because these institutions are more aristocratic, and more eminently classical and literary, than any of their competitors, the examinations on medical subjects cannot be properly conducted. Indeed, I have seen, more than once, in THE LANCET, the graduates of these universities termed classical, not medical, doctors. Nothing can be more erroneous than this impression, which I hope to remove as far as regards the University of Dublin, with which I am more intimately acquainted than with either of the others.

For the degree of M.B., students not having graduated in arts are required to study for two years in this faculty, and to pass all the undergraduate examinations of these years; and, subsequently to this, to study medical science in the school of physic for at least four years, during which, attendance on hospital practice and clinical lecturing is strictly enforced.

Before being allowed to enter the College, every student is examined as to his proficiency in classical knowledge, the following authors being the subjects:—

Greek.—The Iliad of Homer, the first eight books; the Greek testament, and the first three books of the Anabasis of Xenophon.

Latin.—The Æneid, first six books; the works of Horace, (except Ars Poetica;) the first three books of Livy.

One or two other authors are generally added; but it is understood that a student will be admitted upon showing proficiency in those I have above cited. During the two undergraduate years, examinations are held, which include geometry, plain trigonometry, algebra, logic, and several

other classical authors, including Juvenal, Euripides, Sophocles, &c.

The medical examinations comprise every branch of medical science, and, to my certain knowledge, are inferior to those of no university or medical board of the United Kingdom. The degree of M.D. is granted to no student who has not previously graduated in arts. I now, Sir, leave your readers to judge for themselves respecting the value of the diplomas of Trinity College, and beg to remain, your very obedient servant,

Maidstone, May, 1846.

J. T. T.

THE FELLOWSHIP OF THE COLLEGE OF PHYSICIANS.

To the Editor of THE LANCET.

SIR,—The old regulation restricting the Fellowship of the College of Physicians as a matter of right to the graduates of Oxford, Cambridge, and Trinity College, (Dublin,) was repealed in 1835, after which time, all candidates were declared to be admissible as licentiates only, from which class a certain number are to be annually elected Fellows.

The advantages derived by English and Irish graduates are, that they are eligible a year after they have been licensed, the Scotch graduate being M.A. or B.A. five years later. If the latter does not possess a degree in Arts, his eligibility does not take place until after the lapse of seven years.

Can anything be more unjust than the above regulations? The education of the insulted graduates of the Scotch universities is acknowledged to be far superior, in a medical point of view, to that of the favoured ones of Oxford or Cambridge. In Dublin, it cannot be denied there is every facility for the acquirement of medical and surgical skill, but that the examinations there are superior to those of other universities, I deny. Hoping that you will direct attention to this subject in the pages of THE LANCET,

I remain, your obedient servant,

York, May 19th, 1846.

A LICENTIATE.

THE BOTANIC GARDEN, CHELSEA.

A CORRESPONDENT has directed our attention "to the manner in which the Chelsea Botanic Garden is conducted during the Summer Medical Session. Medical students," he says, "are invited there by half-past 8 A.M. to the botanical lecture, with the privilege of remaining in the garden until 11 o'clock. This," he continues, "is certainly a great advantage, where there are so many plants, the botanical character of which it is of the utmost importance to know. But how do things stand? Thus. In consequence of there being no catalogues to be had, through which the student may become familiar with the respective names of plants, according to their numbers, the students, of course, make their way homewards, remarking to one another on the absurdity of going so far to a lecture which every teacher of botany must define to his own class. And, in fact, since the commencement of this course, the number of students has decreased, I am sure, to one half, if not less. Formerly, catalogues could be obtained from the different booksellers, but the only one that I know of now is in the possession of Mr. Anderson, and he takes very good care to keep it to himself."

What is the result of all this? The anxiety the student feels to ascertain the character of one plant, the distinction between it and another of the same natural order, and from another order, which very much resembles it in the eye of the young botanist, (although quite different in their medical properties, one being a *notorious poison*, the other *inert*), compels him, as it were, to have recourse to what we call *cribbing*;—in other words, the taking the leaves of one plant, the root of another, and so on, until we have satisfied ourselves, and have their nature ascertained by our teachers. Well, this must do a great deal of mischief, and all in consequence of the catalogues being out of print, and of the laziness of those who ought to complete another.

In justice to all parties, I must say that Dr. Lindley had at one time selected one portion of the ground, arranged the plants in rotation, and numbered them accordingly, in his "Elements of Botany;" but really they are now so irregular, and the numbers are so soiled, that I have seen many an one take his pocket-handkerchief to clean off the dirt, and then, most frequently, be disappointed, from the paint being washed away: and not only this, but the numbers do not correspond. One day I saw the number 26, which represents, in his "Elements" *heleborus fetidus*, attached to the *petroselinum sativum*,

to which No. 73 ought to be attached; the former being a *deadly poison*, the other a *carminative*; and fig. 97, by which *ferrula assafoetida* ought to be planted, has nothing, while the *assafoetida* is quite in another part of the garden, without a name or mark of any kind. Rather than mislead the young beginner, which might tend to *fatal* results, it would be better to have the garden closed at once.

In conclusion, allow me to say a few words as to the *lookers-on*, of whom there are three; one, a robust, ill-tempered-looking fellow, who thinks himself the king of the place. One day, while a number of students were waiting the arrival of the professor, a young boy, about eleven years of age, who attends the class, and was anxious to know the name of a plant that was placed on the desk, took it up and asked his senior what it was; but immediately this gentleman seized him by the arm and said he had no business with it, for which he was hissed out of the lecture-room. The second evinces much the same character, when an opportunity occurs. The third is a little fellow, who hides himself among the trees in different parts of the garden, and if he sees any of the students even *touching* a plant, he calls out. Students are not allowed to go to the hot-house to see any of the tropical plants; and the reason they give for that is, that some flowers received an injury last summer. The result is, that when the student gets an opportunity, he rushes in and takes away all he can.

I would suggest (adds our correspondent) that these persons employed as *lookers-on* be occupied in arranging and keeping the garden in proper order, and that a catalogue be published, as some remedy for these evils.

QUACKERY.—THE "PULMONIC WAFERS" AND "COCKLE'S PILLS."

To the Editor of THE LANCET.

SIR,—I think it my duty to send you the following example in practice, of injury from the use of those things called "Dr. Locock's pulmonic wafers" and "Cockle's pills."

A few days ago, I was called to attend a lady, whom I found suffering from very severe headach, accompanied with nausea, great feeling of lassitude, and complete loss of sleep. On inquiring as to the origin of these symptoms, I learned that this lady had, three days previously, complained of slight sore throat and cough, for which she had taken some of the "wafers" and a "Cockle pill." The headach, which she described as intense, came on soon after, and continued incessantly, with the other symptoms; and suspecting that the quack medicines had produced them, I inquired whether she had ever taken opium. She replied no; for once, being stung by a wasp, some laudanum was applied to the part repeatedly, and, to use her own expression, "she was driven almost mad with headach," and other distressing feelings of a kind similar to those now complained of. I confess myself rather puzzled how to treat such a case; for beyond a slight sore throat, there were no symptoms but those produced undoubtedly by the nostrums; and I shall be glad to learn what are the best antidotes to these abominations, when they have been unfortunately swallowed, either singly or in combination, as above related.—I am, Sir, yours most obediently,

Golden square, May, 1846.

GEO. REDFORD.

LETTER FROM A NON-QUALIFIED ASSISTANT.

To the Editor of THE LANCET.

SIR,—In my weekly perusal of your journal, among its many epistolary contributors, I find one signing himself "Scalpel," pouring out a jealous invective against "non-qualified visiting assistants," awarding to them no higher designations than "quacks," "intra-professional nuisances,"—complimentary terms, certainly, which appellations, perhaps, would have been, at one time, applicable to this "Scalpel" himself. It much reminds me of the amusing expression of the kettle calling its fellow "smut." Peradventure, this sapient scribe was never one of those "quacks," "intra-professional nuisances," as he opprobriously designates them; or, a "non-qualified visiting assistant," glad to avail himself of practical, as well as theoretical knowledge. Circumstances, perhaps, never stood in the way to prevent him, immediately after his pupillage, from attaining to his qualifications; or again, perhaps he was never so unfortunate as to have pecuniary disappointments or drawbacks,—having his professional indentures, but not the substance to proceed. I cannot but view with disgust this perfidious maliciousness, evidently displayed in envy, to rob the non-qualified assistant of minor privileges and advan-

tages; the writer, perhaps, with snake-like apathy in his mind, grovelling and preying upon a selfish idea, in hopes of satisfying some sordid desire. I believe no general practitioner of any judgment or standing would engage an assistant to attend "unions, or elsewhere," unless he had a just conception of the acquirements and abilities of such an one. I really consider it a gross insult on the highly intellectual body qualified, to put forth such an assertion, that they should, for the mere sake of sordid gain, employ an incompetent assistant, to the mischief of their patients. Doubtless, many of the "non-qualified," were they brought to the test, could put this pedant to the blush of ignorance, though now, through circumstances (the barrier of all us mortals), obliged to await the laudable and honourable gradation of making themselves members of the profession. Trusting you will pardon my intrusion in these remarks, which, perhaps, are not quite so brief as they ought to be, I conclude, adding, with another of your correspondents, in your own words, that "in all the common affairs of life there is the right to appeal against injustice." I must most unwillingly at present subscribe myself, your obedient servant,

June, 1846.

A NON-QUALIFIED ASSISTANT.

ON THE DISTRIBUTION OF THE CLASS-PRIZES IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF GLASGOW.

To the Editor of THE LANCET.

SIR,—With all due deference to the judgment of the scientific professors of the above-named excellent institution of learning, I am of opinion that the system which prevails of awarding the prizes by the votes of the students of each class, is fraught with great unfairness, and frequently entirely perverts the result intended by them to accrue; namely, to reward those students who have shown themselves to be the most industrious and deserving of that mark of distinction, which it has been their aim to obtain. I shall briefly endeavour to point out the objection to the present system, and submit for consideration what would, in my humble opinion, be a means by which the industrious and deserving student would meet with the reward which he justly merits. There are weekly examinations held in each class on the subjects that have been introduced to the students in the lectures delivered in the course of such week: thus far the plan is good, and perfectly unobjectionable; but no mark is made by the professor as to the student who most distinguishes himself at such examination, so that he who makes himself the most popular amongst his fellows, is frequently enabled, at the end of the session, by a system of canvassing, to carry off the prize; which, instead of being a reward of merit and industry from the professor to the student, is converted into a species of retribution to one who has gained from his companions the *honourable and praiseworthy* distinction of being a "good fellow;" while he who has worked hard in the hope of being rewarded for his industry, and of giving proof to his anxious friends of his assiduity, is disappointed and disheartened. I have this week, in more than one instance, witnessed this result; and from remarks that have fallen from some of the professors, and from the caution and exhortation to impartiality which they think it necessary to make previous to the voting, I cannot imagine that they are entirely blind to the evil. But such is the system; and so long as it is sanctioned by them, they have not the power of influencing the result; and thus their liberality, in giving the "freedom of election" to the students, (evidently for the purpose of freeing themselves from any imputation of favour on their part,) is imposed upon.

The remedy I would suggest for this evil is, that each professor, at the end of each weekly examination, should make known to the class the name of the student who, in his most capable opinion, shall have given the greatest satisfaction; should make a note of the same at the time, and at the end of the session, and should himself award the prizes to those who have undergone the greatest number of *credible* examinations.

By this means all popularity, favour, and canvassing, would be done away with, a fresh spirit of competition would spring up, and the competitors would be sure that, according as was their proficiency, so would be their reward.

I am confident that the majority of students would join with me in objecting to the present system. Of the value or practicability of the suggestion I have made I leave to the professors, in their superior judgment, to decide. My desire to see justice done to the hard-working students, (in which

desire I well know they participate,) must be my apology to the professors for this public avowal of my opinion; and I flatter myself that the well-known zeal of the editor of THE LANCET for the rights of the profession in all its grades—from the physician to the student—will induce him to give insertion to these remarks, and to accept my apology for this intrusion upon his valuable columns.

Glasgow, April, 1846.

STUDENS.

MEDICAL NEWS, FACTS, NOTICES, AND REMARKS.

THE COLD-WATER DEATH.—INQUEST ON THE BODY OF A PATIENT.—On Friday, June 5th, an inquest was held before Mr. Payne, coroner for the city of London, at the King's Head, Eastcheap, on the body of Mr. Richard Dresser, of No. 9, in the same street, who, it had been reported, had died owing to treatment received at the "hydropathic" establishment of Dr. Ellis, at Sudbrooke Park, near Petersham. Dr. Ellis was present, attended by his solicitor.

The jury having been sworn, one or two witnesses were called, who testified that the deceased had complained recently of rheumatism and of jaundice; and that he had, only on the Sunday before, placed himself under Dr. Ellis's "care," at Sudbrooke Park.

W. D. DRESSER, of No. 11, Rotherfield-street, Islington, cousin to deceased, stated, that beside the jaundice, he had complained of severe pain about the hip, which he called rheumatism, and that he had had a similar attack four or five years ago, when he was laid up for three months. On Tuesday morning, June 2nd, he learned that Mr. Dresser was dead, when he accompanied Mrs. Dresser to Richmond. When he now saw deceased, his body was lying on a bed in room No. 4. They had seen Dr. Ellis previous to their examining the corpse; when, after asking the doctor the cause of death, he placed a paper in his hands, which contained the diagnosis. This paper was as follows:—

"Mr. Richard Dresser came here on Friday last, to seek relief from what he termed rheumatism in the hip (properly sciatica), giving no other particulars; the case was thought admissible. But it soon appeared that he had been suffering from hepatitis of the sub-acute character, giving rise to suppuration, occasioning exudations of lymph and a rapid extension of the disease to the adjoining viscera. The symptoms were, tympanitis, total inaction of the bowels, and sluggishness of the urinary organs, very severe pain in the left leg from the groin along the thigh to the ankle, coldness of the extremities, and loss of power. He was treated as is usual to subdue the symptoms; the pain was soon suspended; the bowels, though stubborn, acted freely, after the means had been tried, and continued to do so; and the urine either passed of itself, or was drawn off. The appetite allowed of his taking a little farinaceous nourishment, but disease proceeded insidiously; sub-acute inflammation advanced gradually, though there was no sign of active progress; the organ became generally the seat of suppuration, the pulse became quicker and softer, with much perspiration; the countenance became pale and sallow. There was tumefaction of the liver, with a doughy, oedematous, or boggy feel of the hepatic region generally. The enlargement, or bulging, was very great about the false ribs. Oppression, with dyspnoea, or short breathing, immediately preceded his decease, which took place at twenty minutes before eight o'clock this morning, June 2, without either a sigh or a struggle.

"In three or four hours after his decease the fluids filled the chest and throat, and oozed copiously out of the ears, nose, and mouth.

"J. E."

The witness continued.—Having asked the doctor the cause of death, he said it was not rheumatism but hepatitis, and that, had he known he was labouring under that complaint, he would not have admitted him into the establishment.

Mrs. DRESSER, widow of the deceased, saw her husband at the establishment on Sunday afternoon last, when she understood that he had been placed in some warm baths, and he said that his pain had left him. He was sitting up in bed, covered with blankets, and with wet wrappers around him. She took tea, and wished him to take some, but he refused, because he said that it was not allowed. Dr. Ellis came home in the evening, when she told the doctor that she thought her husband was very bad, because he was so very cold. The doctor then took a large cloth, placed it in a wash-hand basin containing water, and then put it on her husband's stomach, because, he said, he was afraid of inflammation, which he wished to stop. Deceased was shortly

afterwards placed in a bath. She saw him in half an hour, when there was so remarkable a change in his appearance, that she thought he was struck with death. He was so very dark under the eyes, that Dr. Ellis acknowledged he was much altered. His perspiration had stopped, which one of the bath-men told her was in favour of the patient. The doctor asked her if she wished to have further advice, or if she desired to remove her husband? She then left, the doctor promising to send her a letter in the morning, by eleven o'clock; but at nine, the secretary of the establishment called upon her to acquaint her with her husband's death. The baths were constituted of three pails of cold water, with a small portion of hot.

Mr. JAMES HICKS, surgeon, Old Kent Road, had assisted in a post-mortem examination of the deceased, in connexion with Mr. Waterworth, his partner, on Thursday morning. The body externally presented evidence of extreme congestion. The lungs were healthy, but enormously congested, as also was the heart, which was large and flabby, but otherwise healthy. The bowels were empty; the liver was healthy, but congested, and bearing no evidence of any previous disease; the kidneys were slightly diseased, and also congested. He considered the immediate cause of death to have been extreme congestion of the lungs and heart, to such an extent as to produce suffocation, by not allowing air to get into the lungs. This congestion was likely to be produced by the application of cold externally, whether cold air or cold fluids. He had read the paper written by Dr. Ellis, previously to making the post-mortem examination, but he did not think that it gave the true cause of death—quite the contrary. He did not think that there was the least disease in the liver. There had evidently been congestion of the lungs when the wet cloths were applied; and if the water were cold, it would generally produce death. It appeared to him, that if the cloths applied had been wetted with hot water, Mr. Dresser could not so soon have been cold as it was said that he was.

The inquest having been adjourned until Tuesday, June 9th, JOHN MAYNARD, a bath attendant at Dr. Ellis's establishment, was then called, and deposed that he saw Mr. Dresser from the Friday evening until the Tuesday morning. When he came, he appeared very ill. He saw nothing done for him before he was put into bed. On Saturday morning, he had a bath at a temperature of 85°. He was in the bath for ninety seconds. He was attended by Dr. Ellis during the day; but witness saw nothing more done for him that day. Witness carried water into the room, both hot and cold, during the day, two or three times; but he did not know what was done with it by Dr. Ellis to Mr. Dresser. On Sunday morning, witness prepared a bath for deceased, as before. On Monday morning, he again had a bath. Tapioca, and bread and butter, formed his nourishment during the day. Witness was not aware that he had any other food.

Mr. WATERWORTH, surgeon, on being sworn, stated that he had known the deceased for six or seven years; that he had attended him in March last for jaundice and stomach derangement, from impediment to the flow of bile, and not from disease of the liver. He had made the post-mortem examination, in conjunction with Mr. Hicks, whose remarks witness corroborated. Deceased was a man of very feeble power, as regarded the action of the heart. There could be no reason for treating him for diseased liver. Had the liver been diseased, as supposed, nothing could have more rapidly destroyed his life than placing him in baths.

The CORONER, in summing up, observed, that in the case of Mr. St. John Long, the judges had laid down the law in a very clear and perspicuous manner. The present Lord Chief Justice had argued, that although there might be no malice aforethought, if the defendant had applied himself to the treatment of a case, of the proper cure of which he knew nothing, and that he administered a liquid or medicine, of the constituents of which he had no knowledge, he was clearly guilty of manslaughter. The judges, in the case of St. John Long, had laid it down, that whether a man were a legally-qualified practitioner or not, that went for nothing. The question was, whether the treatment adopted was a rash and reckless treatment, which had resulted in death; or whether it was such treatment as might, under any other circumstances, have ended in results not fatal. In the present instance, they had no evidence to prove that Dr. Ellis was not a duly-qualified practitioner; therefore, the sole question for the jury to consider was, whether, on the present occasion, he had acted towards the patient in a *bona fide* manner, or with a gross degree of recklessness, rashness, and incaution, and thus caused his death to ensue. If the jury viewed the case as one of *bona fide* treatment, then they were bound to acquit

Dr. Ellis of all blame; but if, on the contrary, they considered that he had acted with rashness, then their verdict would be one of manslaughter.

The jury retired, and finally brought in the unanimous verdict,—“That Mr. Dresser's death resulted from the rash treatment he received under Dr. Ellis's care, and that they were unanimous in returning a verdict of manslaughter against Dr. Ellis.” Whereupon (it is stated in the daily papers) the Coroner bound over Dr. Ellis in the sum of 500*l.*, and two of his friends in sums of 250*l.* each, as securities that the “Doctor” should appear to take his trial at the next session of the Central Criminal Court, on the charge of manslaughter.

MURDEROUS ASSAULT ON A MEDICAL PRACTITIONER.—An atrocious outrage is reported to have been committed lately in Paris, on an English medical practitioner, Dr. Tukey, who was for many years at the head of a private asylum for insane patients in England. After dining with a friend near the Barrière de l'Etoile, he was, on his return, in a brutal way accosted by a soldier, who severely cut him about the face with a razor or knife, leaving him on the ground bleeding and apparently dead. Dr. Tukey, who was seventy years of age, died in a week at the hospital of La Charité, from the effect of his wounds.

ALLEGED ROBBERY BY MEDICAL STUDENTS.—At Bow-street, recently, John Dowker and a young man named Roper, both medical students, were finally examined on suspicion of having purloined a silver fork from an oyster shop in Vinegar-yard. They were committed to take their trial at the sessions, but were admitted to bail.—*Observer.*

** The public ought to be informed that almost every well-dressed young scamp who is charged with an offence at the police courts, states, when asked his profession, that he is a “medical student.” Thus the schools of medicine, and the junior members of the profession, incur much disrepute. If such “students” were called upon to state their places of residence, the fraudulent representations would be immediately detected.—*Ed. L.*

A MONSTER BIRTH.—A few weeks ago, the wife of William Corrington, of Coningsby, in the county of Lincoln, carrier, was delivered of one of the strangest malformations of nature yet recorded. This was a double child, or two children connected together in the most singular manner. They are joined from the head down nearly to the pelvis. The head, with the form of two heads in one, presents one face; and on the opposite side is a single eye between the two ears, that are very near together. The bodies are connected by the side, or rather, the left side of the breast of one to the right side of the breast of the other, all the limbs being perfect. The malformation has therefore four ears, three eyes, four arms and hands, two bodies, and four legs and feet. It lived two hours.

ALDERSGATE-STREET SCHOOL OF MEDICINE.—The annual award of prizes to the most meritorious pupils of the above School of Medicine recently took place, according to custom; but the lecturers have decided on deferring the distribution of them till their first sessional conversazione in October next. The following are the names of the gentlemen to whom the prizes were awarded:—

Physiology:—Prize, Mr. T. Caldcleugh, Durham; Hon. Certif., Mr. A. Harris, Lewes.

Anatomy:—1st Prize, Mr. R. Westwood, London; 2nd ditto, Mr. Harvey, London; 1st Hon. Certif., Mr. T. Caldcleugh, Durham; 2nd ditto, Mr. M. Morris, Dolgelly.

Medicine:—Prize, Mr. E. Latham, Howden; Hon. Certif., Mr. T. Caldcleugh, Durham.

Surgery:—Prize, Mr. R. Westwood, London; Hon. Certif., Mr. R. Power, London.

Chemistry:—Prize, Mr. E. Greatrex, Eccleshall; Hon. Certif., Mr. A. Harris, Lewes.

Materia Medica:—Prize, Mr. A. Harris, Lewes; Hon. Certif., Mr. E. Greatrex, Eccleshall.

Botany:—Prize, Mr. E. Latham, Howden.

Midwifery:—Prize, Mr. E. Latham, Howden; Hon. Certif., Mr. M. Morris, Dolgelly.

GLANDERS IN THE HUMAN SUBJECT.—Another fatal case of this description occurred recently at Navan, Ireland, in the person of a lad, seventeen years of age, who had caught the disease from a horse which he had groomed, the infection being conveyed through an abrasion or slight cut in one of the fingers. At his end, it is said that his person presented a frightful spectacle; and as his mental debility increased, delirium set in, the horse tormenting his imagination in a variety of ways. Three former patients who had died of

glanders in the Meath Infirmary, Navan, are stated to have been similarly affected as death approached. In the horse, the disease is reported to have been occasionally cured; and a cure of glanders in man may be found in *THE LANCET* for 1842-3, vol. i.; but this case was then considered as unique, no other instance being on record of the malady being subdued when occurring to the human subject.

PREMATURE INTERMENT.—A late French paper states that the cases of premature interment prevented by fortuitous circumstances amount in France since the year 1833 to ninety-four. Of those, thirty-five persons awoke of themselves from their lethargy at the moment the funeral ceremony was about to commence; thirteen recovered in consequence of the affectionate care of their families; seven, in consequence of the fall of the coffins in which they were enclosed; nine owed their recovery to wounds inflicted by the needle in sewing their winding sheet; five to the sensation of suffocation they experienced in their coffin; nineteen to their interment having been delayed by unforeseen circumstances; and five to delay in consequence of doubts having been entertained of their death.

* * We copy this statement from the *Constitutionnel*, but it cannot be correct, or the belief would be forced upon us that the medical practitioners of France are the most incompetent in existence. On the subject of premature interments we may remark, that the only certain sign of dissolution, in an unutilized body, is the evidence of decomposition. Hence, if this evidence be wholly wanting in the body of an unutilized person, the body ought not to be interred.—*ED. LANCET.*

THE DISTRICT LUNATIC ASYLUMS OF IRELAND.—Above all things, a system of frequent and vigilant inspection should be adopted, not once or twice a year, but quarterly, and that too by men who, from experience and education, would be fully competent to suggest to the local authorities such salutary changes, from time to time, as have been adopted elsewhere. Such a course would soon remedy the defects that have now grown to a serious amount under the system long in operation, and which has tended to lower the character of these fine institutions (with the exception of Cork, Belfast, and Armagh) as curative hospitals. As a painful instance, we must notice the fact, that the prize on the best mode of treating the insane, with a particular class of medicines, instituted by Sir Edward Sugden, the Lord Chancellor of Ireland, was carried off last summer, not by any medical officer connected with this class of institutions, where expense is not and has not been spared in any one department, where the medical attendant has been, for now nearly three years, left despot in everything relating to the treatment of insanity, but by a gentleman in England, with far less means at his disposal to obtain knowledge than that afforded in any one of our Irish Asylums. This is an occurrence that never could have taken place were these Asylums on a different footing to that which at present exists, and which has produced a table of cures such as neither the moral nor the physical condition of the respective districts of Ireland can explain, and which alone is sufficient to condemn, at once and for ever, the plan hitherto pursued, and still, of course, advocated, by the persons who are most deeply interested in the preservation of those abuses that have so perniciously operated towards the people for whose exclusive benefit these Asylums were erected.—[From the Report of the Parliamentary Committee of the Loyal National Repeal Association, on the Returns from the District Lunatic Asylums of Ireland, called for by Sir Robert Ferguson, M.P., and lately printed by order of the House of Commons.]

WESTMINSTER HOSPITAL.—A large quarterly special meeting of the governors of this charity was held at the hospital on Tuesday last, to consider the propriety of electing two assistant-surgeons. The necessity for this proceeding has been long unquestionable, in consequence of Mr. A. White having, for a considerable time, ceased to do any duty in the hospital, and the fact of Mr. Lynn having retired into the country. After a very lengthened discussion, in which the lamentable condition of the establishment denominated "a school," in connexion with this institution, was prominently displayed, and lugubriously dwelt upon, the proposition was negatived by the majority of one only; and thus the vigour and activity which might have been imparted to this institution by the infusion of a little new blood, is, for the present, at least delayed. In such deplorable repute is the school of this hospital, that only three students have entered their names during the present year. The lecturers in it appear to teach in an "unknown tongue."

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, June 5th, 1846:—F. J. Rowen, S. Devenish, F. G. Harcourt, T. G. Alanson, A. H. Bailly, H. Bate, C. W. Izod, W. J. Burke, J. Hey, M. J. Burke, W. Ferguson, and R. W. Purnell.

APOTHECARIES' HALL, LONDON.

Names of Gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, June 4th, 1846:—Frederick Robert Knight, Australia; John Henry Eddowes, Loughborough; John Elliott Wood, Rochdale; Thomas Joshua Heaton, Standish, Lancashire; Peter Royle, Manchester; Robert Roper, Boterdale; Francis Leopold Hooper, Great Canfield Vicarage, Essex; Thomas Benjamin Washington Buckler, India; John Lawrence Johnston, Penrith.

CORRESPONDENTS.

A Student.—The printed circular purporting to have been issued by James Baker, of No. 1, Dorchester-place, New North-road, Hoxton, has been received. He had better publish a short account of his somewhat curious proceedings in connexion with the Society of Apothecaries. The obtrusiveness of this person is becoming exceedingly offensive, and if continued, it will receive a check which will relieve the profession in his neighbourhood from a considerable annoyance. James Baker is not a member of the College of Surgeons.

Mr. Willson.—It is certain that it will be introduced, but precisely at what period, or what will be its fate, it would not, as matters now stand, be prudent to predict.

Mr. Leeson.—It happened in 1937, and an account of the circumstance was published in vol. i. of *THE LANCET* for that year.

M. D.—An individual is not deemed qualified to be admitted as a candidate for the office of physician to the German Hospital, unless he is acquainted with, and can converse in, the German language.

One of *Mr. Markwick's* papers shall be published in *THE LANCET* of next week.

The canvassing for patients at H—, S—, C—, and the neighbourhood, in consequence of the death of a practitioner, is decidedly disgraceful.

The letter of *Mr. Dawson*, on the payment of Poor-law Union medical officers, shall be published nextweek.

A Native Indian and a Member of the Profession, (Calcutta.)—The particulars shall be forwarded in a private letter.

Thanks for the communication of *Mr. W. S. G.* The Solicitor-General stated in the House of Commons, on Monday evening last, that such depositions are not illegal. We believe that the learned gentleman is somewhat singular in that opinion.

C.—The conduct of G. appears, from the statement laid before us, to have been exceedingly reprehensible; but we have found that the publication of *ex parte* representations is sometimes attended with great injustice. In a case of this kind, C. ought to request a professional friend to write to G., and demand an interview, and then let an authenticated account of the affair be published by the representatives of C. and G. In this manner, the question would be treated as in a court of honour; and ultimately, the adjudication might offer a useful admonition to professional delinquents.

A Constant Reader cannot be a member of the profession, or he would well know to whom he might apply in such cases. By all means avoid the advertising quacks.

A Subscriber for the Last Four Years, (Worcester.)—The return was made by the Poor-Law Commissioners, and in substance it resembled the qualifications which were described in the order issued in March, 1842.

Censor (Glasgow) is thanked for his communication. The tread-wheel appears to be the proper punishment for both the impostors. They are tolerably well-matched. The colleges are not anywhere endeavouring to protect the legally-qualified members of the profession against the impositions which are now everywhere practised by a host of quacks.

Argus.—An application was made for two tickets, in order that they might be put into the hands of two reporters. The dinner taking place on Wednesday night, and *THE LANCET* going to press on Thursday afternoon, a single reporter—without sitting up the whole of the night—would not have been enabled to write an account of the proceedings in time for the printers on the following morning. This was the sole cause of sending for two tickets. In making the application, the Secretary inadvertently stated that Mr. Wakley intended being at the dinner, instead of his sending to the dinner. But the parties must have known full well for what purpose the tickets were required; otherwise, if publicity was wanted, why did they not send a reporter's ticket? We state it as a positive fact, which admits of no denial, that no ticket was forwarded for a reporter of *THE LANCET*, and we believe none was sent to any publication in London. *Argus* may forward his report of the proceedings.

The midwifery statistics forwarded to us by *Dr. Waddy* shall be published in the next *LANCET*.

Communications have been received from—*Mr. Amesbury*; *Mr. Bonnington*; *Dr. Evans*; *Mr. Holman Creed*; *Dr. Gardner*; *Mr. Robinson*; *Mr. Fenton*; *Dr. Conolly*; *Dr. J. H. Bennet*; *Dr. John Taylor*; *Mr. Thomson*, (Aberfeldy); *Mr. Brown*, (Bath); *Mr. Markwick*; *Mr. Willson*, (Newcastle); *Mr. Paine*; *Mr. Parson*; *Mr. Smith*, (Clifton); *Dr. Waddy*, (Birmingham); *Dr. Carmichael*, (Dublin); *Mr. Martin*; *Dr. Brett*; *Dr. Ormerod*; *Justitia*; *Censor*, (S. G.); *Dr. Searle*, (Bath); *W. Alpha*; *A Constant Reader*; *Mr. Carllie*; *Mr. Cookson*; *Mr. Goodall*; *Mr. T. Martin*; *Mr. W. Baker*; *Mr. Cochrane*; *Mr. C. J. Gibb*, (Newcastle-on-Tyne); *Dr. Bartley*, (Bristol); *Dr. MacGregor*; *J. S.*; *A Victim of too many Medical Corporations*.

ST. BARTHOLOMEW'S HOSPITAL.

MEDICAL CASES TREATED AT THIS HOSPITAL.

Reported by E. L. ORMEROD, M.B., Cambridge,

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

PHLEBITIS FOLLOWING PARTURITION; SUPPURATION IN THE EYE-BALLS; DISSECTION; REMARKS. SYMPTOMS OF COLLAPSE; COAGULA FROM INFLAMMATION; NATURE OF SECONDARY ABSCESSSES.

CASE 7.—S. M.—, aged thirty-eight, admitted March, 1846, Faith back ward, under Dr. Burrows. A woman habitually of florid complexion, the mother of four children; lost her husband in the fourth month of her last pregnancy, which circumstance caused her so much distress, that she attempted to produce abortion, but without effect. She had a natural labour on Feb. 1st, followed, however, by some pains in the abdomen, and on Feb. 3rd, by a rigor attended with perspiration.

The next day, she noticed a hard lump in the right popliteal space, which on Feb. 6th was hot and red; and the swelling occupied a space as large as the palm of the hand. The lochia, which had been getting daily scantier, now ceased; milk had not been secreted at all. The swelling increased till Feb. 9th, when some pus was let out by incision from the popliteal space. On Feb. 11th, the whole lower extremity began to swell, hard cords being traceable down the thigh in the course of the vessels, till the 16th, when the pain and swelling began to abate. All this time she had repeated rigors; and till Feb. 15th, when she was admitted into the hospital, an antiphlogistic regimen had been strictly pursued.

Till Feb. 28th, the progress of her disease was marked by a constant succession of rigors, pain in the left shoulder, and pain and swelling of the thigh; while the amount of stimulants was increased day by day. It was now noticed that the inferior part of the anterior chamber of the left eye was occupied by a grey deposit, while a smaller one of the same kind existed in the right. The left iris was dull; the eye in pain, and sightless; the pupil contracted and irregular. The next day she had lost sight of both eyes; the left eye was less firm on pressure than the right; and now the left knee-joint was swollen.

On March 2nd, the grey deposit had disappeared from the left eye, that in the right remaining just visible; in both, the irides were dull, but on the next day the right recovered its brilliancy.

With some difficulty, a free puriform discharge was obtained from around the left knee by March 5th, but the rigors continued; she had most severe pain in the eyes, and she lay extended in the bed in a state of the most complete exhaustion, her feet stretched out in a line with her tibiae by the weight of the bed-clothes.

On March 6th, she had a severe rigor, not followed by reaction; and soon after, began talking with great volubility for an hour or so, cautioning every one not to come near her, as her disease was infectious. She was calmed by a cold lotion applied to her head, with a large increase of the amount of stimulants, and then sank gradually and quietly till the evening of the following day, when she died at eight p.m. The body was examined at her late home sixty-six hours after death. The body presented the usual smell and appearances of commencing putrefaction; the limbs were relaxed, the blood generally coagulated. Brain not examined. Left eye removed from the orbit. The veins posteriorly contained only blood; their coats exhibited no evidence of any organic change having taken place in them. The anterior chamber was full of a puriform, opaque fluid. The lens was healthy, and appeared beautifully transparent in front of the mass of stringy pus which occupied the situation of the vitreous humour. The choroid coat and ciliary processes were covered with a closely adherent layer of an opaque creamy substance. No traces of increased vascularity could be anywhere detected. The costal cartilages were partially ossified. The left pleura was free, while there were a few old adhesions about the right apex. A little reddish serum was found in each cavity. The lungs were generally œdematous, with some bloody congestion posteriorly, and in front emphysematous. The bronchi and pulmonary arteries and veins were healthy. The pericardium contained a few drachms of serum. Heart of natural size; left valves a little thickened, but quite efficient. The right side of the heart contained dark coagula, and the walls were stained

No. 1190.

of the very deepest purple, while the coagula on the left side were white, and the lining membrane of the cavities looked quite pale, as contrasted with that on the right side. The liver was generally large and flabby, the left lobe singularly small. No deposit of any kind was found in its substance, but the blood in the hepatic veins had little flocks of fibrin floating in it. The spleen was large and dark, but contained no deposits. The kidneys were large, especially the right, which was at least two-and-a-half times the ordinary size of a woman's kidney. The tunics parted easily, leaving the surface smooth. On section, a little greyish-yellow deposit was seen in the cortical structure of the right, and in a more marked degree among the pyramids; but this latter appearance was most observable in the left kidney, where the ends of the pyramids were quite yellow, and gave issue on pressure to a creamy fluid. The peritonæum contained a few ounces of reddish serum in its cavity, but exhibited no other morbid changes. The hollow viscera were not examined internally; externally they appeared healthy, only the caput coli, instead of being closely fixed, was attached by a long mesentery to the walls of the abdomen. The uterus was four inches long, walls about three-quarters of an inch thick, displaying on section one or two large veins completely filled with firmly adherent coagula, but containing no pus. The lining membrane of the uterus was dark, rough, and smeared with a fetid creamy fluid. The os uteri was large, round, and soft, with one small fissure posteriorly. The ovaries were of natural size, displaying no evident corpus luteum, but several opaque white granules. The right Fallopian tube contained a little reddish fluid, the canal was pervious; the left, not examined, externally resembled the right. The ascending cava was healthy, only stained, from above the junction of the common iliac veins, but at this point a coagulum firmly adhered to its walls, and from a little below this, running along the right external iliac down to the popliteal vein, which was as far as the examination was carried, the coats of the vein were found three or four times the natural thickness, and the cavity filled with pus. The right internal iliac, in the same way, as far as examined, was found filled with pus, which, hereabouts, seemed confined to the vessel, there being no deposit of pus beneath the pelvic fascia; but a large quantity of pus escaped from the popliteal space, as the vein was exposed. The right inguinal glands were found healthy. In the left internal iliac the blood was coagulated into cylindrical, hard, partially-adherent masses, contrasting strongly with the recent coagula in the external iliac on the same side, but on descending to the left femoral vein, the coagula were again evidently of a date long antecedent to death, friable, fibrinous, and smeared on the surface, where not adherent, with pus. The left knee-joint was full of thick, green pus, beneath which the cartilages appeared healthy, and did not exhibit the least trace of vascularity; only a few vessels were seen on the lower end of the femur. The ligamenta mucosa were likewise quite pale.

This case has been selected to illustrate the effects of inflammation of the systemic veins, in contrast with the case of inflammation of the portal vein, which has just before (case 6 of these reports) been related. But beside the anatomical details, there are some points in the above narration on which it seems worth while to dwell.

The most prominent symptom, perhaps, was the constant succession of rigors, always, till the day before her death, followed by reaction. On that day, for the first time, or if not exactly the first time, at least, in so marked a degree as then first to strike the sister of the ward, the rigor was followed by no heat; and had her symptoms allowed any hopes of a favourable issue of the case before that, all that was seen afterwards tended to show that the rigor not followed by reaction, had been an exact index of the rapid failing of all remaining constitutional power. As far as it is allowable to do so from a single case, we would refer the reader to Hunter, vol. iii. p. 424, for the full development of the principles which this fact in part illustrates. It will be recollected, that in case 6 the rigors to the last were followed by reaction.

This case gave an opportunity to contrast the condition of coagula formed during life, and as a result of inflammation, with those that we are more familiar with as contained in the heart and large vessels after death, under ordinary circumstances. Coagula, laminated, cylindrical, of various colours, a spot of hæmatosine occurring in the middle of masses of fibrin, need only to be seen to be distinguished from the more ordinary coagula which, even if occurring in veins at so great a distance from the centre of the circulation, are characterized by their dark hue, the fibrin, if any be discernible, running

down one side like a white string, distinct from the rest of the coagulum. Here, besides, were adhesions to the coats of the veins, and the coagula were smeared with pus, sufficiently indicating the nature of the process which had produced them.

Considering how few things, if any at all, happen as the result of accident, it is worth while here to call attention to what might readily be overlooked; but which, in connexion with any theories of the formation of coagula in the heart, is of great interest—namely, the existence of white fibrinous coagula on the left side of the heart. The almost invariable rule is, that white coagula, if found anywhere, are found in the right auricle, and with diminishing frequency in the other cavities of the heart, in the order of the circulation; but here the blood was fluid in the right auricle. The same thing was observed lately in a case of suppurative inflammation of the kidney, accompanied by inflammation of the renal vein. The true explanation would seem to turn on the more or less arterial state of the blood in the different cavities; but we merely mention it at present to return more fully to its consideration on some future occasion.

A question naturally suggests itself in reference to this, as well as to the preceding case. What was the nature of these deposits? Were they the result of inflammation; or was the pus merely deposited in those particular situations? The answer probably would be widely different, according as different observers have met with cases which substantiate their views. For it is in very few cases that the question can be definitely answered either way, and each one, as he has seen proved in a single case, is inclined so to explain the other cases in which proof cannot be had. If anything can be inferred from the two cases now before us, it would appear that sometimes one, and sometimes the other, may occur. Proof is absent in both; but the arguments, though not conclusive, are worth consideration.

In the first, we have inflammation going on to ulceration and suppuration about the extremity of a vein, and the same process, repeated higher up in that vein, whether or not continuous along the whole track of that vein. It would require strong evidence to show that the extensive suppuration in the liver resulted from anything but inflammation of those veins in their further progress, which had been shown all along to be so ready to take on inflammatory action. In the second, we find organs, far apart from each other, become the seat of suppuration. The liver, lungs, and spleen, are free, while the kidneys are quite gorged with pus, and the sight is lost by disorganization of the eyes from a similar cause. There was no evidence of inflammation in the anterior chamber, at least during life, and certainly none after death, allowing, however, for the changes which decomposition might have produced in removing any other evidence of inflammation.

But, again, the appearances presented by the kidney were totally unlike those produced by suppurative inflammation of the kidney, and the knee-joint, which was examined, was, saving the pus, in a perfectly healthy state; and thus, although the spleen and liver were both free from purulent deposits, yet there seems no way of accounting for the deposits that existed elsewhere, except as the result of deposition of pus from the blood in those parts.

With all the difficulties of the subject in the face of this last supposition, we would offer these two cases, as having, at least, the probable explanation which we have respectively assigned to them;—illustrative of abscess, by either deposition of pus, or secondary inflammation, albeit the parallel is not exact between the pathology of the portal and the systemic veins.

UNIVERSITY COLLEGE HOSPITAL.

SURGICAL CASES TREATED AT THIS HOSPITAL.

Reported by J. BURFORD CARLILL, M.B., London,
formerly House-surgeon to the Hospital.

EXTRAVASATION OF URINE.—CASES AND CLINICAL REMARKS.

CASE 1.—Thomas S—, aged fifty, a bricklayer, a robust muscular man, of irregular habits, was admitted under Mr. Quain on the 5th March last. He had an attack of retention of urine two years ago, but since that period, until very recently, he had passed his urine without difficulty.

On the 23rd February last, after drinking to excess, he found himself unable to void his urine: he was brought to the hospital, and was relieved by the house-surgeon. He returned home, and the next night was obliged to call upon a neighbouring surgeon for assistance; on two subsequent occasions a catheter was introduced by the same gentleman. A day or

two after this, the man noticed a slight yellow discharge from the urethra, and felt some scalding on making water; he also perceived that his penis became gradually swollen.

On admission, March 5th, ten p.m., the penis and scrotum were enormously swollen, hard, and of a dusky-red colour. The posterior portion of the scrotum and the perinæum were not altered in colour, and but slightly swollen; urine, in small quantity, escaped from the urethra, mixed with pus, on the patient making a violent effort to evacuate the bladder. He described himself as feeling as though "he made water, but the foreskin prevented its escape," which was, doubtless, owing to its becoming infiltrated in the cellular tissue. From the thickness of the abdominal walls, it was not possible to ascertain the condition of the bladder. Incisions were made by the house-surgeon in the most distended portions of the penis. On his arrival at the hospital, Mr. Quain passed a catheter down to the perinæum, where, he said, it came in contact with a rough surface, and its further progress was obstructed; foetid pus mixed with urine dropped from the instrument.

Operation.—Mr. Quain then cut down through the perinæum upon the end of the catheter, and gave vent to the urine and pus: the parts cut through were in a sloughy state; the instrument was not passed into the bladder, as the escape of urine appeared free. A long incision was likewise made through the back part of the scrotum, at the raphé, and the fore-part of the prepuce was freely divided, that part being still very thickened and tortuous, so as to prevent the glans penis from being seen. Very little blood was lost. The tongue, at the time, was rather brown in the middle; pulse soft, but not quick; skin cool. He was ordered a laxative enema, to be followed by an anodyne, and a draught of citrate of potash combined with hyoscyamus; the perinæum and scrotum to be constantly fomented.

7th.—The urine escapes freely through the perinæum, but very few drops come through the urethra; the scrotum and penis are less tense. He was ordered beef-tea, two glasses of wine, and half a pint of porter daily.

11th.—Sloughs separating, leaving a healthy granulating surface.

18th.—To-day, in consequence of the advance in the granulating process, the urine flows chiefly through the urethra, only a small portion escaping by the perinæum.

29th.—The wounds perfectly healed; no difficulty in voiding urine by the natural passage.

After this date he suffered for a short time from a febrile affection, attended with derangement of the digestive functions, and copious deposit of lithates from the urine, probably attributable to confinement in the hospital; he was speedily relieved, however, by a little appropriate medical treatment.

In his clinical observations on this case, it was observed by Mr. Quain, that there were some peculiar circumstances deserving attention. There was little appearance of mischief on inspecting the back part of the scrotum, where, in general, the thickness of parts in cases of extravasation of urine is greatest. The fore part of the scrotum and the prepuce, especially the latter, were very much distended. There was evidence that sloughing and putrefaction were advancing. The point of the catheter came into contact with a rough or ragged surface, foetid pus welled forth from the handle, and the instrument when withdrawn was found to be blackened.

The necessity of speedy and decided interference on the part of the surgeon in such cases was apparent. The objects to be attained are, to give the urine a free exit at the point at which the urethra has given way, or behind that point; and to make incisions for the removal of sloughing cellular membrane. The operation in the perinæum to attain the first object is the same in all, or at least the great majority of cases; a free incision is to be made into the urethra, through which the urine is suffered to escape, as after lithotomy; no instrument is passed from the perinæum into the bladder, the continued presence of one in that organ being generally injurious. The extent of the incisions for the accomplishment of the second object must vary with the extent to which the urine has been infiltrated, and this is in proportion to the time during which the patient has been left without relief, and the closeness of the stricture in the urethra. In one case, there is a circumscribed swelling in the perinæum, attended with burning pain, every time urine is voided (abscess in perinæo); in another, the swelling is more extensive, is elongated, and reaches across the perinæum; in a third, the back part of the scrotum is likewise affected. In these different cases (examples of each of which have, within a short time, been in the wards of the hospital) the urine escapes by the urethra with more or less facility, and only a small portion of that fluid issues from the natural canal into the

cellular membrane. But when the retention is complete, the patient makes violent and uncontrollable efforts for evacuation, and at length the bladder is emptied, as in the case above detailed. In the man Thomas S—— the scrotum and prepuce were gradually more and more distended, and the difficulty in evacuating urine at the same time increasing, the further progress of the disease was arrested by the operation. If he had made earlier application, his sufferings would, doubtless, have been much less; for the sloughing and suppuration would have been less extensive. The influence of a further delay will be fully illustrated by the following case, reported by Mr. Stocks, one of Mr. Quain's dressers at the time when it occurred.

CASE 2.—George H——, admitted December 31, 1841. On his admission, the perinæum, scrotum, penis, and lower part of the abdomen, up to the navel, were of a dusky-red hue, tense, and swollen. The penis, especially, was enormously swollen, and had on its dorsum a black slough of the size of half-a-crown; there was present an indistinct feeling of fluid; the bladder was found by percussion to be greatly distended, reaching midway between the pubes and navel. His countenance was pale and anxious; his eyes fixed and glassy; the pulse 120, weak and thrilling; tongue brown and dry. The urethra was laid open from the perinæum by Mr. Quain, and incisions were freely made in the middle line in the scrotum, penis, and above the pubes; dark-coloured fluid, of a foetid urinous smell oozed from the incisions, and gas also made its escape. The poor man experienced great temporary relief; but notwithstanding the utmost care, and the use of brandy, ammonia, and morphia, he sank in a few days, and thus verified the prognosis pronounced by Mr. Quain on his first admission. On post-mortem examination, the sloughing of the cellular tissue was found to be more extensive on the right side than on the left, occupying the whole of the abdomen, and reaching as far as the scapula, and towards the spine; whereas, on the left side, it did not reach much higher than the navel. The disorganization of the cellular tissue below a line drawn from one crista ili to the other was complete; nothing but a mass of slough, of the consistence of a poultice, was to be seen; and this condition extended onwards to the peritonæum, which was itself disorganized. Above this line the sloughing was not so complete. The kidneys were studded with small granular deposits. The bladder was empty and much contracted, its cavity not being larger than a cricket-ball. The muscular coat was enormously hypertrophied, being not less than three quarters of an inch thick; and the prominence of its fasciuli gave it the appearance of the inside of the ventricles of the heart. The membranous part of the urethra presented several sloughy openings with ragged edges, and the natural appearance was completely changed.

In this case, the progress was rapid. There can be no doubt, considering the violent efforts the patient whose case is first detailed was seen to make to evacuate urine, coupled with the circumstance, that, as he himself said, "he made water, but the skin prevented it from coming away," he would, if unrelieved for a further time, have been brought into the condition of H——.

With the last case, (that of H——,) another, in which the progress of the disease was much slower, may be contrasted. The case now to be noticed is remarkable, likewise, by its unexpected and singular termination.

CASE 3.—John P——, admitted May 9th, 1845. The swelling had been coming on gradually for a fortnight, and on admission, it extended over the perinæum, scrotum, penis, and above the pubes. His health had not very much suffered, for in this case the urine dribbled away *per viam naturalem*. The usual incisions were made, and the treatment above indicated was adopted, under which the patient improved steadily until June 17th, when he was attacked with peritonitis, which carried him off in forty-eight hours. Simultaneously with the setting-in of peritonitis, it was noticed that the flow of urine became remarkably diminished. These facts were accounted for at the post-mortem inspection, when it was found that a purulent collection existed in the coat of the bladder, communicating pretty freely with the cavity of that organ, and by a small hole like that made by a pin with the peritonæal cavity. In this case, the time during which the disease had continued before the patient was subjected to any treatment was unusually long. He walked to the hospital, though with great difficulty; and his statement was clear, to the effect, that swelling had come on after difficulty of making water, and that it had existed for a fortnight. But it is to be remembered that the urine escaped the while by the urethra in such quantity as to prevent distention of the bladder;

and there does not appear to have been any of that violent forcing or muscular contraction, under the influence of which the urine in other cases bursts forth into the cellular membrane of the body. Moreover, the urine "dribbled away" involuntarily for some time before the swelling began; the infiltration, therefore, was slow and gradual, and complete retention did not exist at any time. Somewhat more than a fortnight after his admission, P—— was doing well in all respects, his health was good, and granulations were fast filling up the track of the incisions, from which sloughs had separated,—when, suddenly, everything was changed; the patient was agitated and depressed in spirits; his countenance became sunken, his skin cold and clammy; he lay on his back, his knees drawn up; he suffered intense pain in the abdomen, and the pain was increased by slight pressure. In short, all the symptoms of extreme mischief in the abdomen were present; he had peritonitis, and from the suddenness and violence of the seizure, the peritonitis was evidently of that altogether intractable kind which is occasioned by the effusion of an irritating fluid into the abdomen. He was in the condition which is liable to occur after protracted typhus fever, when the contents of the intestines escape through an ulcerated opening. The question now arose, what was the cause of this change? Could it have been that the sloughing had extended inwards through the wall of the abdomen, and reached the peritonæum, or that some of the lotion used to dress the sinus in this situation had passed inwards? This was not likely, for there was no evidence in the general condition of the patient, (who had been advancing rapidly to recovery,) or in the nature of the discharge, (which was healthy pus,) to lead to the belief that the muscles were affected; and without the muscles being deeply affected, the peritonæum could not have received the exciting cause of inflammation from this quarter. As the patient was suffering from disease of the urinary organs, it was reasonable to suppose that the mischief was in those organs.

On examination after death it was found that the suppuration had not extended beyond the cellular membrane of the wall of the abdomen; the muscles were quite sound; and it was apparent that the cause of the inflammation within must be looked for elsewhere. The abdomen being laid open, the peritonæum exhibited signs of violent inflammation. It contained a quantity of serum; the intestines were smeared over with dirty lymph, and they were distended with air; on careful examination, a small circumscribed swelling was discovered at one side of the urinary bladder, near its upper part, and on slightly pressing that organ, fluid was projected from the swelling by a very minute opening, not bigger than a pin-hole. The parts were removed for further investigation, and it was discovered that an abscess, of the size of a small walnut, had formed in the wall of the bladder. The abscess communicated on one side freely with the interior of the bladder, and on the other side with the peritonæal cavity by the little opening before noticed. It now became evident that when the bladder contracted to expel its contents, urine was forced through the sac of the abscess into the peritonæum, and this was the cause of death. In the history of the case it was observed that urine was evacuated by the urethra in diminished quantity at the time of the attack; this circumstance was owing, doubtless, not to a diminution of the secretions, or to retention, but to the escape of a portion into the abdomen. When the urine escapes from the urethra in the place at which this disaster usually occurs, it appears to occupy in all cases the same, or nearly the same, position in the perinæum, the scrotum, and the prepuce; and both sides are equally affected. But when there is an extension upwards to the abdomen, some differences will be noticed. In H——'s case, an extreme one, the whole anterior part of the abdomen was affected on both sides, though not equally. In others, too, when the extravasation of urine rises but little above the pubes, both groins immediately above Poupart's ligaments are equally affected, and the openings are required here for the escape of sloughs. The incisions in P——'s case were only made in the middle line above the pubes. There is now a patient in the hospital in whom the slough and suppuration on the abdomen occupy an unusual position.

CASE 4.—Edward C——, admitted May 2nd, 1846. In this case, the urethra had been laid open in the perinæum by a surgeon, before his admission, and there was free escape of urine. The treatment consisted in supporting the scrotum on an appropriate pad, covered with oilskin, and applying poultices to promote the separation of sloughs; and in the administration of brandy and morphia, in the manner explained in Mr. Quain's clinical remarks. But the point which this case is intended to elucidate chiefly, is the variation in the

seat and extent of sloughing continually noticed. In this man an incision was required on the left side, about the level of the crista ili, and gave vent to a considerable quantity of dark-coloured fetid sloughy matter, while the whole space on either side above Poupart's ligaments, except in this particular situation, does not, on the most careful examination, afford any indication of mischief, either in appearance or to the touch. In all these cases, the appearance of the part, diffused swelling, darkness of hue, and a boggy feel, indicate the place at which incisions are required.

(The patient, since the above was written, has left the hospital, able to void his urine in a good stream through the urethra.

Besides the incisions, which should be at once resorted to in cases of extravasated urine, the local treatment used in these patients consisted in the application of warm poultices till the sloughs were separated, and careful support of the scrotum, should that part be affected; afterwards, astringent lotions of sulphate of zinc were usually applied. As regards the general treatment, the patients at first are in a state of high fever; the skin is hot, the pulse very quick, tongue coated, often dry and brown, and in most cases the countenance wears an expression of agitation and apparent anxiety concerning their condition. Soon, however, the pulse becomes small, and the skin cold, or even clammy; this change probably accompanies the mortification which goes on in the parts through which the urine has been infiltrated. While the fever is present, the bowels should be unloaded by an enema, and Dover's powder given to procure rest. Afterwards, when the low state comes on, the principal resources are stimulants with opium, until, with returning health, food is taken in sufficient quantity. The form of stimulant is not a matter of indifference; brandy or gin is almost always resorted to by Mr. Quain. He states that he has long discarded port wine; it disagrees with most stomachs, particularly empty stomachs. He has repeatedly seen persons who had been low, and apparently sinking, revived, so to say, under the use of the simpler form of alcoholic drink. Alcohol is easy of digestion, and is therefore, on this ground, suited to the depressed state of these patients. It is food for respiration, and perhaps it is on this account, in addition to its stimulating influence, that the temperature of the patient becomes raised under its use. But these are reasonings *à posteriori*; after the fact has been ascertained, and the fact itself is the important matter in a practical point of view. Opium is of the utmost importance in these, and in some other diseases affecting the urinary organs, allaying pain and the apprehensions about themselves which these patients so generally feel, and procuring sleep, of which they are nearly altogether deprived. The patients, whose cases are above noticed, took half a grain of muriate of morphia in a draught, or a quarter of a grain repeated at the interval of four hours.

In the cases above noticed, the urine escaped from the membranous part (so named) of the urethra, and it very rarely occurs at any other part. Occasionally, however, the urethra ulcerates in the erectile tissue of the penis, (corpus spongiosum,) and the urine escapes into that structure. A case was mentioned in illustration of the disastrous effects of extravasation of urine in this situation, and the evils of this form of the disease were referred to the infiltration of urine and pus into a part of vascular system.

ROYAL FREE HOSPITAL, GRAY'S-INN ROAD.

ECTROPIUM, WITH THREATENED LOSS OF VISION, AFTER SEVERE BURN; OPERATION; CURE.

A YOUNG woman, aged twenty-seven, epileptic, was admitted, in May, 1845, under the care of Mr. Gay. Three months before, during a fit, she had fallen on the fire and burnt the side of the face and neck most severely. The wounds had almost healed, and a large cicatrix resulted, which had gradually everted and so firmly drawn down the edge of the lower eyelid, that it could not in the slightest degree be restored by means of pressure. Granular inflammation of the conjunctiva followed, and rapidly spread over the sclerotic and exposed corneal portions, threatening a loss of vision, and presenting so disagreeable an aspect, that the young woman wished to subject herself to any treatment that might be likely to prove a remedy to the disease and deformity. The malposition of the lid was maintained partly by slight adhesions of the skin to the malar bone, partly by the dermal contraction, and partly by two tense and prominent bands, which arose from the skin covering the lower jaw, tended

downwards over the neck and shoulder, and terminated by subdivisions which lost themselves in the skin covering the scapula and clavicle. From the condition of the parts, it was very obvious that a cicatrix produced by the removal of a portion of the tarsal conjunctiva would not of itself be a sufficiently powerful antagonistic force to those which kept up the ectropium; but that some operation was required which should set free the lid by separating the adhesions of the skin to the malar bone, and, if possible, should give increase of surface to the skin of the cheek and corresponding side of the neck. This was accordingly done in the following manner, suggested by, but differing from, the operation of Dr. Ammon: A semilunar incision was made through the skin, commencing about an inch external to the temporal angle of the orbit, and carried around to a point about half an inch below the inner angle, the lowest portion of the curve being just below the inferior edge of the malar bone. This flap of skin was carefully dissected from the subjacent textures to within a very short distance of the tarsal cartilage, when the eyelid was readily restored to its natural position. A horizontal fold of conjunctiva was then removed, the lid secured by adhesive plaster in its right situation, and the cut edge of the flap stitched to the tissue immediately below the orbit, leaving a wide gap to be filled up by new material. The conjunctival affection was treated by a ten-grain solution of nitrate of silver, and began to disappear; but a stop was put to its cure by the partial return of the ectropium, which accrued upon the cicatrization of the new sore.

The skin of the neck and the bands by which it was traversed now appeared to be the principal remaining obstacles to the complete restoration of the lid; and Mr. Gay suggested a similar operation to that performed on the face, which was, to embrace that portion of the skin which dragged mostly on the integuments of the face, and which would, at the same time, allow of the removal of the principal cellular band. This was cheerfully acceded to by the patient, and performed as follows:—A semilunar incision was made through the skin, commencing about an inch and a half behind the angle of the jaw-bone, descending to about midway between the clavicle and the jaw, and terminating just below, and about midway between, the symphysis and angle of that bone. This flap was readily dissected up, and the tense band at the same time completely cut away. The patient's head was drawn towards the opposite shoulder, and confined by bandages in that posture; the lower edge of the flap of skin was retained by a suture at least two inches above its former site, thus leaving a large gap to be filled up, as in the former operation, by new granulation; the parts were covered with water dressing; and the patient was put to bed.

The flap thus made consisted partly of sound skin, and partly of cicatrix; and although each portion was of the same thickness, whilst the former retained its vitality, the latter sloughed, a circumstance which gave rise to some anxiety, lest the extensive loss of skin thus occasioned, and the large surface for cicatrization, should rather aggravate than cure the deformity. The wound healed, and the eyelid, which, immediately upon the completion of the operation, had resumed its natural position, became again semi-everted. This partial ectropium did not, however, remain beyond a few days, after which, the lid began to restore itself; and after the lapse of a month from the last operation, its position and mobility were as perfect as before the accident, and the patient discharged.

The particulars of the foregoing case may present some interest, inasmuch as they show, that, aggravated as some cases of ectropium, from cicatrices, may be, they are not beyond the hope and prospect of remedy.

They further show, that by repeatedly shifting circular flaps of skin, increased extent of surface may be obtained, and by these means, the effects of most extensive contractions may be successfully counteracted; and in cases where important organs are implicated in these cicatrices, and their functions thereby either impaired or destroyed, such measures, backed by favourable experience, may be fearlessly recommended.

It is most desirable that portions of skin selected for the formation of a flap for shifting should comprise as little as possible of cicatrix; for the fresh arrangement of its vessels renders it most prone to slough. In healthy skin, the arteries enter its structure by comparatively a few large vessels, which immediately anastomose most abundantly, and form a rich capillary plexus, horizontal to the plane of the surface; hence its vitality is maintained, although a large superficies of skin may be dissected from the subjacent tissue; but, in regard to a cicatrix, it must be very obvious that its vessels must be

obtained from innumerable small arteries yielded to it from the textures below; and it is more than probable that the peculiarities of its structure, its failing to secrete healthy epidermic cells, and its liability to slough on being dissected up, result from the want of—as there cannot be the same necessity for—that free anastomosis of its capillaries within its own texture, which follows this peculiar disposition of its supplying vessels.

NEWCASTLE-ON-TYNE INFIRMARY.

CASES IN THE HOSPITAL PRACTICE OF DR. WHITE, PHYSICIAN TO THE INFIRMARY.

Reported by Mr. CHARLES J. GIBB, House-pupil.

ENDERMIC APPLICATION OF MORPHIA IN NEURALGIC PAINS.

CASE 1.—George B—, aged fifty-seven, a keelman, tall, stout, rheumatic-looking, admitted April 2, complaining of a severe aching pain in the left hip, and posterior part of the thigh, which is much worse at night, and frequently assumes a lancinating character, darting down to the foot. This pain has been of twenty-nine years' duration, but never so severe as lately. The patient is quite lame, and walks with difficulty; sleepless; no complaint of thirst or fever; whitish tongue; bowels regular; has frequently taken medicine, but without much benefit. To have three grains each of blue pill, aloes, and acetous extract of colchicum, with five grains of Dover's powder, every night: five grains of the iodide of potassium thrice a day, and a small blister to the most painful part of buttock, after which, the abraded skin to be sprinkled over with a grain of the acetate of morphia every morning.

6th.—Pain considerably relieved; sleeps better; bowels free. To continue.

10th.—Says pain is almost gone; walks with very much less halt; sleeps well; appetite good; bowels free. To persist, and as the vesicated skin is dry, to re-apply the blister, and continue the morphia powder.

15th.—No pain for the last two days; blistered skin nearly well; bowels confined, and tongue furred, with slight thirst. To omit pills and iodide, and have three grains each of blue pill and aloes every night, and a dose of common purging infusion twice a day.

20th.—Feels himself well, and says he is a better man now than he has been for the last thirty years.

Dismissed, cured.

CASE 2.—Joseph C—, aged fifty-six, a joiner, pretty healthy-looking, and of swarthy complexion; admitted as an out-patient March 3rd, with sharp stinging pains proceeding from the right buttock down the leg to the foot, which benumb and partially disable the extremity; sleeps well, pains being easier at night; ankle becomes oedematous towards the evening; health good; urine natural; bowels free; no thirst. Was cured when here nine years ago; remained well until about two years ago, when the pain returned, without any evident cause. To take two grains of blue pill and four of aloes every night, and the mixture and volatile tincture of guaiacum thrice a day; and to have a small blister on the hip, dressed every morning with a grain of the morphia.

8th.—Easier; bowels free. To continue.

16th.—Blistered skin has been dry the last few days; pain greatly banished; guaiacum disagrees slightly; bowels free. To repeat the blister and morphia, omit the medicines, and have a mixture with twenty drops of turpentine thrice a day, and a teaspoonful of castor-oil every night.

23rd.—Pain almost gone; skin discharges yet; no effects from the mixture; continues well in health. To go on with remedies.

April 1st.—Pain completely gone for the last few days; only slight heat of urine; bowels free.

Dismissed, but to continue castor-oil for a short time.

CASE 3.—Robert B—, aged forty-eight, a seaman, rather distressed-looking, admitted July 25th, with a severe aching pain, and soreness of the whole skull, not affected by outward circumstances, but frequently amounting to extreme pain; no tenderness of scalp; slight inflammation of throat from a cold; bowels confined; pulse quick, and system seems generally deranged. Has been ill, with varying intensity, for eight years; has not had syphilis. To take four grains each of blue pill and aloes every night, and a compound mixture of magnesia and rhubarb twice or thrice a day.

30th.—Feels "his body more free and light," but pain continues; bowels freely open. To continue remedies.

Aug. 7th.—Is passing blood by the anus, and is slightly purged; languid and oppressed state of the body disappearing; pain a little easier, except at intervals. To omit pills, and continue mixture.

14th.—Pain as severe as ever; bowels regular; no more blood with motions after the omission of the pills. To continue the mixture and resume the pills.

17th.—Head in much the same state. To apply six leeches to the temples.

19th.—No easier; state of system considerably improved. To apply a small blister to each temple, and have the abraded skin sprinkled over with half a grain of morphia every morning.

25th.—Pain almost gone; tongue clean; pulse soft and regular; bowels free; appetite good. To continue.

29th.—Pain entirely gone; feels himself well, and wishes to leave. Dismissed cured.

Remarks.—This mode of treating those pains which appear to depend principally upon nervous irritation, or, it may be, chronic inflammation, and are confined in their extent, has been extensively employed here, and in no cases has it been attended with any disagreeable effect; but, on the contrary, with the most surprising benefit in many, or, I might say, in most of those patients, who, from their condition, seemed to be suitable for its application. The pain is generally soon relieved, and a comfortable feeling of ease, with sometimes a little drowsiness, is experienced. In fact, in sciatica, or, indeed, in any case where the pain can be distinctly traced along the nerve, this plan is often the only one that affords even partial relief. The application must be used as near the trunk of the nerve as possible, particularly when the pain most nearly centralizes. It sometimes requires to be re-applied nearer and nearer the terminating branches, as the pain is gradually expelled. Hence, in sciatica, the buttock first, then the knee, and, lastly, the foot, sometimes in succession, require the vesication, and subsequent sprinkling on of the morphia. It is quite certain that this treatment has entirely succeeded when leeches, blisters, moxas, belladonna externally, and arsenic, iron, iodine, turpentine, and guaiacum, have entirely failed. Dr. White has had frequent opportunities of testing its power over pains situated about the upper parts of the body, and does not consider that the locality, as regards the contiguity of any of the most sensitive organs, or, indeed, of the sensorium itself, has much, or any, influence in heightening the constitutional effects of the drug, but he does, nevertheless, watch it then with great care, and uses the application, in such cases, with somewhat less freedom than when, by its narcotic touch, he endeavours to dispel a sciatic pain. The secretions and states of the different viscera are, of course, during its use, to be carefully examined and increased, or corrected when faulty. To Dr. Greenhow, of North Shields, I believe, the merit is due of first applying morphia endermically over the region of the stomach for pains in that viscus.

BIRMINGHAM LYING-IN-HOSPITAL.

MEDICAL AND STATISTICAL REPORT.

By J. M. WADDY, M.D. Lond., M.R.C.S., Senior Surgeon to the Hospital.

BEFORE entering on the following statistics, it is well to remark, that as the benefits of the charity are limited to married women, many injurious complications of labour are, to a great degree, avoided; but the class of patients attended upon are, for the most part, poorly fed, clothed, and lodged, and many of them are employed in manufactories, and exposed to circumstances, of a moral and physical nature, extremely detrimental to their health and comfort.

The early age at which some marriages appear to have taken place, will strike the reader; but the freedom of intercourse between young persons of both sexes employed in factories, especially at meal-times, and after work is over in the evenings, tends to the early development of sexual inclinations, and often induces early, ill-assorted, and compulsory marriages. These early marriages are extremely prejudicial to health,—are embittered by constant disappointments, and are often associated with extreme poverty and wretchedness. No wonder, then, if in persons thus circumstanced, labour should often prove tedious, difficult, and dangerous, and the offspring weak and sickly, having, in birth, the germ of future ill-health and premature old age, and the promise of an early grave.

The marriage of factory girls with apprentices, whose low wages are scarcely sufficient to procure subsistence for them—

selves, and which are quite inadequate to the support and proper maintenance of a family, produces very often scenes of misery and wretchedness, surpassing, in their cold reality, the woes of fiction. Such scenes rarely leave their victims untainted in morals, never unprejudiced in health; and it is a subject worthy the attention of the statesman, to find a remedy for a system so burdened with social evil, and which, whilst it continues, must, in many instances, constitute an almost impenetrable barrier to the reception of moral and religious truth.

In Manchester, and in many other of our large manufacturing towns, the nature of the employment, together with the great number of hands employed, are such as to admit of a system of strict moral discipline being enforced, with a proper separation and classification of the sexes. This, however, cannot be done to any great extent in the number of small manufactories with which Birmingham and its neighbourhood abound. The following are some of the results which presented themselves in the practice of the hospital during the last year:—

TABLE I.

Age of marriage.—Of 528 females, one had married at fourteen years of age; four at fifteen; 13 at sixteen; 44 at seventeen; 85 at eighteen; 91 at nineteen; 97 at twenty; 76 at twenty-one; 55 at twenty-two; 36 at both twenty-three and twenty-four; and 33 at twenty-five; beyond which age the number of marriages greatly diminished, and only one married respectively at the ages of thirty-two, thirty-four, thirty-seven, and thirty-eight.

Of 574 males in Birmingham, it was also ascertained that one had married at fifteen years of age; three at sixteen; 12 at seventeen; 28 at eighteen; 42 at nineteen; 84 at twenty; 52 at twenty-one; 60 at twenty-two; 52 at twenty-three; 51 at twenty-four; 44 at twenty-five; 34 at twenty-six; and 31 at twenty-seven; beyond which period there was a material diminution; and only one married respectively at the ages of thirty-nine, forty, forty-two, and forty-four.

TABLE II.

Age at the commencement of menstruation.—Of 623 females, in one the catamenia occurred at nine years of age; 2 menstruated at ten; 15 at eleven; 46 at twelve; 87 at thirteen; 130 at fourteen; 115 at fifteen; 105 at sixteen; 67 at seventeen; 43 at eighteen; 10 at nineteen; and two at twenty.

TABLE III.

Ages of 708 women registered for attendance during confinement, (at the drawing out of the table.)—One at sixteen years of age; two at seventeen; four at eighteen; six at nineteen; 27 at twenty; 21 at twenty-one; 33 at twenty-two; 36 at twenty-three; 45 at twenty-four; 37 at twenty-five; 38 at twenty-six; 35 at twenty-seven; 41 at twenty-eight; 34 at twenty-nine; 52 at thirty; 28 at thirty-one; 27 at thirty-two; 39 at thirty-three; 40 at thirty-four; 31 at thirty-five; 23 at thirty-six; and 27 at thirty-seven; beyond which age a marked diminution in the numbers took place, except that at forty years 21 women were registered.

TABLE IV.

Previous labours.—Of 641 of the above women registered, 38 were primiparous; 104 had had one child; 94 two children; 70 three; 75 four; 77 five; 53 six; 28 seven; 43 eight; 25 nine; 20 ten; 7 eleven; 3 twelve; 2 thirteen; one fourteen; and one sixteen children.

TABLE V.

Previous abortions.—Of 268 women, 32 had aborted at two months; 139 at three months; 48 at four months; 22 at five months; 12 at six months; and 15 at seven months.

TABLE VI.

Intervals between deliveries.—Of 275 women, three had an interval between their confinements of ten months; one of eleven months; 51 of a year; 100 of a year and a half; 156 of two years; 87 of two years and a half; 51 of three years; 16 of three years and a half; 19 of four years; 6 of four years and a half; 5 of five years; 3 of five years and a half; one of eight years; and two, respectively, of ten, twelve, and thirteen years.

TABLE VII.

Duration of labour.—Of 470 labours, 10 had terminated in an hour from their commencement; 32 in two hours; 34 in three hours; 63 in four hours; 51 in seven hours; 45 in six hours; 47 in seven hours; 26 in eight hours; 28 in nine hours; 18 in ten hours; 17 in eleven hours; 27 in twelve hours; 17 in

thirteen hours; 8 in fourteen hours; 12 in fifteen hours; 2 in sixteen hours; 2 in seventeen hours; 3 in eighteen hours; 5 in nineteen hours; 3 in twenty hours; 3 in twenty-two hours; 8 in twenty-four hours; one, respectively, in twenty-three, twenty-seven, thirty-three, and forty-four hours; and 5 in forty-eight hours.

TABLE VIII.

Presentations.—Of 487 presentations, 468 were of the vertex, in six of which the face was towards the pubis; in five, prolapse of the funis occurred, in three of which the children were still-born, and the hand presented with the head in two instances; 6 were shoulder or arm presentations, in which cases four of the children were still-born; 16 were breech-presentations, in which cases five children were still-born, and 5 were footling cases.

The vectis was used once, and the forceps twice—once in impaction of the head, and once in a retarded labour.

TABLE IX.

Time of expulsion of the placenta.—In 334 cases, this happened in five minutes after the birth of the child; in 22 in eight minutes; in 85 in ten minutes; in 51 in fifteen minutes; in 18 in thirty minutes; in 4 in forty minutes; in 3 in an hour; in one in an hour and a quarter; in 2 in an hour and a half; and in one in four hours, (this patient died with puerperal mania.)

Four placentæ were decomposed; five adherent, of which one was extracted in half an hour; two in an hour and a half, without hæmorrhage; and two in three hours, with hæmorrhage.

TABLE X.

Intervals between menstruation and confinement.—In 11 cases there was an interval of six months; in 6 of seven months; in 42 of eight months; in 110 of nine months; in 70 of ten months; in two of eleven months; and in two of twelve months. Ten patients had not menstruated since their previous confinement; three menstruated up to the period of quickening; and two menstruated during their entire pregnancy.

In one case, in the first year's practice of the hospital, convulsions took place three weeks before labour; the patient was relieved by bleeding, &c., and did well.

Puerperal convulsions occurred in two patients.

Two cases of monstrosity occurred, and a child was born with but one ear.

Death took place in one child from hæmorrhage from the funis, which had been carelessly tied by a midwife.

Severe hæmorrhage occurred in four cases; hour-glass contraction in one instance.

Slight hæmorrhage in three patients; hæmorrhage before birth in one.

A child was suddenly expelled, and labour quickly terminated by a severe rigor.

One patient died a few weeks after childbirth from the combined effects of hæmorrhage and starvation; from being an affectionate mother, she gave her children what she ought to have had herself.

One patient walked to the hospital, a distance of four miles, during her labour, and was safely delivered within ten minutes after her arrival.

One female has had seven preternatural presentations, and only one cranial. Two of her sisters lost their lives by cross births.

Labour commenced, in one instance, with a severe rigor, lasting two hours; rupture of the membranes cured the rigor, and the child was born by one long-continued pain. This woman has had six children, all born in the same manner.

In one case, a tumour occupied the pelvis; but receded prior to the birth of the child. In another case, a tumour, situated apparently in the uterus, was attached to the parietes of the abdomen. Both women did well.

One woman suckled three months; another four months; and a third during the whole term of pregnancy; but, in the last case, the infant was very feeble, and died within a few hours of its birth.

One woman had great obliquity of the uterus; and the pains were suspended for twenty-four hours after its full dilatation. Ergot was given, and the labour terminated rapidly and favourably.

Among the deaths were—one from phthisis; one from typhoid pneumonia, during the presence of which delivery took place; one from puerperal mania, (this patient had previously been afflicted with insanity); and one—as mentioned above—from the effects of hæmorrhage and starvation.

As I have been anxious to present these tables in a connected form, I have interspersed but few observations. I think the table of menstruation marks the period of the first flow rather earlier than might have been expected.

Out of 628 females, we find marriage took place in upwards of 500 persons previous to the twenty-fourth year of their age. Yet few pregnancies took place before that period. The greatest number of pregnancies range from the twenty-fourth to the thirty-fourth year of age. The largest number of marriages are at the nineteenth and twentieth years; and yet only six individuals were pregnant at nineteen years old, and only twenty-seven at twenty. Surely these facts show that the powers of procreation are feeble in the female of tender years; and where Nature indicates a fact, we do well to attend to her instruction.

From a record of the hours in which labour terminated, I find 201 females were delivered between ten A.M. and ten P.M., and 296 between ten P.M. and ten A.M. I do not, however, consider this table as affording any conclusive evidence of the hours in which labours terminate. We must wait for additional facts.

I shall have to offer some observations on uterine hæmorrhage, which will probably appear in a future report.

FOREIGN DEPARTMENT.

M. HÉLOT ON THE SYPHILITIC AFFECTON OF THE TESTIS.

Diagnosis.—After what we have said on the commencement, course, and termination of the venereal testicle, it must be easy to distinguish this affection from all others that attack this organ. Nevertheless, in order to render these points more practical, let us further consider the value of each symptom or lesion, and not conceal the real difficulties which may present themselves under certain circumstances.

The first difficulty we meet with is in interrogating our patients. It is singular how little information follows our questions in certain cases. Nevertheless, it is of the greatest importance to arrive at the correct history of the case; for information derived from previous syphilitic symptoms materially assist the surgeon in cases that might otherwise embarrass him, or when the anatomical characters of the lesion are not sufficiently marked, to allow him to give an opinion on the nature of the affection.

What are the affections of the testicle which are liable to be confounded with the syphilitic disease of that organ?

In the first place, let us treat of the gonorrhœal affection.

Let it not be expected that I am about to enter upon a discussion which might be necessary to establish the difference between syphilis and gonorrhœa; but as an affection of the testis may occur in one or the other disease, so must we point out the distinction between them. The commencement and period of their occurrence constitute at once points of essential difference. In the gonorrhœal epididymitis, the attack comes on suddenly with the attendant train of inflammatory symptoms; it shows itself during the course of gonorrhœa, or at the moment of its disappearance. On the contrary, the commencement of the syphilitic testicle is essentially chronic; it appears, as we above remarked, long after the primary symptoms, constituting a consecutive affection. The gonorrhœal and syphilitic affections are thus two distinct complaints, except where the one terminates in the other; but the course, lesions, and terminations of these two affections show no further relation between them.

In the syphilitic affection of the testis, the organ is, even at the commencement, hypertrophied; in the gonorrhœal form, the testis, on the contrary, commonly preserves its elasticity and its size; the epididymis is principally affected, and if, in exceptional cases, the testis itself participates in the inflammation, an inflammatory swelling follows, quite at variance with the chronic enlargement of the syphilitic complaint. In the gonorrhœal orchitis, the tumour is painful, the skin of the scrotum red, tense, and shining; the cord, when it is affected, becomes painful to the touch. In the syphilitic testicle, the enlargement is most commonly indolent from the commencement to its termination, and pressure with the hand on the testis and cord is unattended with pain.

The anatomical characters of the two affections are equally opposed; thus, in the gonorrhœal affection, it is always the epididymis in which the complaint commences, and in the majority of cases, the body of the testis remains free from disease; the contrary happens in the syphilitic affection of the organ.

We have previously pointed out that the syphilitic affection is characterized at its commencement by layers of induration. It is true these kernel-like bodies may occasionally (but in exceptional cases) show themselves in the epididymis; we must therefore take care not to confound them with the induration which remains long after gonorrhœal orchitis. The latter diminishes gradually, or at least does not extend to the testis, and generally disappears entirely. In cases where the induration of the epididymis persists, it forms a small knot attached to the epididymis, and no ill consequences follow: this induration, then, is one of the terminations of gonorrhœal orchitis. In the syphilitic testicle, when induration commences in these layers, if by chance a layer should occur in the epididymis others will be met with in the testicle itself, and we soon observe them amalgamate, forming one regular and uniform swelling. The syphilitic testicle thus sometimes commences where the gonorrhœal epididymitis ends. We may meet with the induration arising from gonorrhœal epididymitis confounded with that of the syphilitic affection; but does this establish a common bond of union between the two affections? Surely not; for two complaints may successively attack the same organ, and one testicle, the epididymis of which may be affected by gonorrhœa, may present, at a later period, the character of the syphilitic affection, provided the patient has been the victim of syphilis. It is no less true that the syphilitic affection of the testis shows no disposition to attack the organ which has previously suffered from the gonorrhœal affection, and it is by no means rare, as we have previously stated, to meet with one testicle affected with the syphilitic complaint on the right, and to find the left testis suffering from the induration consequent on an old attack of gonorrhœal orchitis.

After what we have stated above, it is impossible not to recognise a radical distinction between the syphilitic and gonorrhœal affection of the testis, and the opposite conclusion comes to by M. Castelnau (*Annales des Maladies de la Peau*, 1844) has no foundation. This writer wishes to establish that the syphilitic testicle is merely the chronic stage of the gonorrhœal affection; he admits, however, that in certain cases we observe a syphilitic affection of the testicle come on, at various periods, after patients have suffered from gonorrhœa, although, during the period of discharge, acute orchitis did not occur. In M. Castelnau's opinion, the syphilitic testicle is gonorrhœal orchitis, chronic at its commencement. In this hypothesis there is a natural affinity between gonorrhœal orchitis and syphilitic affection of the testis—a fact by no means admitted by us. That the syphilitic testicle may recognise gonorrhœa as its *primary symptom* (supposing it gonorrhœa) to be syphilitic, is an incontrovertible fact; but it is a very different matter to go beyond this, and state that every venereal testicle is under the exclusive dependence of a preceding gonorrhœa. Such a proposition would require direct proof, and we have been unable to find it in the memoir of that surgeon.

Simple hydrocele may readily be distinguished from the syphilitic testicle. The shape of the swelling, its large size, transparency, and elasticity, will prevent the surgeon from mistaking the complaint. In hydrocele, moreover, by the finger we can ascertain the condition of the testis. Under certain circumstances, however, the great distention of the tunica vaginalis prevents our exactly recognising the state of the organ, and it is only after puncturing the sac that we can determine if the testis is itself indurated and enlarged; in fact, determine if we have to treat a true hydrocele or an effusion merely symptomatic of an affection of the testis. We should, however, state, that the effusion into the tunica vaginalis in cases of syphilitic affections of the testicle is in general so slight, that the diagnosis is not thereby sufficiently masked to prevent us readily discovering the induration and enlargement of the organ. In examining the transparency, the extent of the shadow thrown by the testis may enable us approximately to judge of its dimensions.

But there is another variety of hydrocele, designated by Pott, Boyer, Velpeau, and many other writers, by the name of hæmatocele, which may more readily lead us into error. In these cases, the nature of the liquid, being similar to a solution of chocolate, prevents any transparency. Thickening of the tunica vaginalis (which is sometimes so great that it puts on the hardness and resistance of cartilage) takes off that elasticity so characteristic of simple hydrocele. The tunica vaginalis has been seen from five to six lines in thickness. Even in these cases the swelling is more supple and elastic than is the syphilitic testicle; it yields more readily under the pressure of the finger, and it is fully easy to recognise that the swelling is not so solid as in the syphilitic affection, in which the hardness is more evident, deeper, and more uniform. The

size of the swelling may assist the diagnosis, for, in general, hæmatocele, with or without thickening of the tunica vaginalis will acquire double or treble the size to which the syphilitic affection of the testis arrives. Besides this obscure fluctuation of hæmatocele, which is evident to the practised touch, the surgeon may detect behind the tumour, the presence of the testis, which gives the patient a sensation, on pressure, similar to that felt on the sound side. At this part of the tumour, occupied by the testis, we find, moreover, in many cases, a greater degree of elasticity: this sensation is produced by the body of the testis, which is not covered by the hypertrophied tunica vaginalis. In the syphilitic testicle, on the contrary, pressure on the testis does not produce any pain, but when complicated with effusion, the testis is felt harder and more resistant than in ordinary cases. Moreover, the commencement and course of hydrocele takes place in a different manner; in fact, the testis remains long, distinct, and easily recognised, while in the syphilitic testicle it is the organ itself which enlarges, and when effusion takes place, it is only a secondary effect.

The scrofulous affection of the testicle may, under certain circumstances, be mistaken for syphilitic affection of the testis, and the diagnosis may present great difficulties. Thus, for example, a patient having had syphilis, may be attacked with a scrofulous affection of the testis; what, then, are the characters drawn from the tumour which may tend to clear up the case, and decide whether we have to treat one or the other affection? First of all, in the scrofulous testicle there are two varieties of swelling, one formed by the tuberculous infiltration of the whole organ, the other formed by the development of encysted tubercles, either in the epididymis or in the body of the testis.

We have remarked, that in the syphilitic affection of the testis the epididymis is rarely diseased; in the scrofulous affection, on the contrary, the complaint commences usually in that organ, and extends only to the body of the testis at a subsequent period.

The scrofulous testicle commences by isolated enlargements; but these nodules become chestnut-shaped, very prominent, standing out in relief, as if attached to the epididymis or testicle. The induration we observe in the syphilitic affection of the testis is almost invariably contained in the thickness of the body of the testis itself. Notwithstanding this character, drawn from the situation of the affection in the epididymis in the scrofulous disease, and in the body of the testis in syphilitic affections,—notwithstanding the form of nodules, which present differences thus marked, still the diagnosis may be very difficult, particularly at the commencement of the complaint. It becomes more easy when the swelling has acquired a certain size; for then, in the syphilitic affection, the induration is complete, the testicle uniformly hard, and the hypertrophy so inconsiderable, that we do not recognise any longer the natural elasticity of the organ. In the scrofulous affection, on the contrary, the nodules, (when they exist,) in becoming more prominent, often lose their hardness; and we meet with the other portion of the organ retaining its natural elasticity. In the tuberculous infiltration of the testicle, the swelling is more regular and rounded, approaching, it is true, to the syphilitic character; but its hardness is less evident: the testicle retains a certain proportion of its natural suppleness, which contrasts strongly with that cartilaginous hardness of the syphilitic affection of the testicle. Moreover, it is rare for the testicle to be infiltrated with tubercles, without the body of the epididymis, at the same time, presenting prominences in different degrees, from a state of induration to suppurative softening. We have seen, in the syphilitic affection of the testis, the cord generally remaining in a healthy condition, or if it enlarges, it does so in a gradual and uniform way, presenting no inequalities or prominences; whereas, in the scrofulous affection, particularly in the advanced stages, it is not uncommon to find the cord studded with tubercles, resembling a bead necklace. Although the course of one or the other affection is similarly chronic, nevertheless it presents differences which may be useful in forming a diagnosis. Thus the syphilitic affection of the testicle is more indolent than the scrofulous, which presents, from time to time, inflammatory accessions, characterized by a sense of tension of pain, which is augmented by the touch. The ordinary termination, by resolution, of the syphilitic affection of the organ, opposed as it is to the suppuration of the scrofulous disease of the organ, is likewise very important in differential diagnosis.

The syphilitic is often difficult to be distinguished from the cancerous affection of the organ. How many tumours of the testis have been removed by the knife, which might

have been cured had the true nature of the complaint been suspected. The rapid development in the encephalic tumour of the testis, the considerable size it will attain, its softness, which may often impose on the surgeon, leading him to believe it fluctuating; the unequal resistance it presents, the darting pains which occasionally come on, mark a striking contrast with that uniform hardness, indolent character, and moderate size of the syphilitic enlargement of the organ. The cord in the cancerous affection is often knotted, hard, and unequal, and we know how uncommon the uniform hypertrophy of the cord is in the syphilitic affection. The engorgement of the glands in the iliac fossa is observed sometimes in the cancerous affection of the testis, but never happens in the complaint we are treating of. Authors, and, among others, Sir Astley Cooper, have described, under the name of scirrhus of the testis, a variety of cancer which might be more easily confounded with syphilitic affections of the testicle, as its development is slower than in encephaloid disease, and presents, from its commencement, hard nodules; but these are hard from their formation, and become more and more so in scirrhus affections, which we do not observe in the venereal testicle. Notwithstanding the characters above given, the surgeon, amid all his doubts, has no other proof than a rational treatment to follow, in extricating himself from his uncertainty.

We should never forget that judicious remark of Dupuytren, that "the alternate increase and diminution of the swelling in the syphilitic affection is opposed to the durative and refractory augmentation of cancerous swellings, and that the simultaneous or successive affection of both testicles, ought to induce the surgeon to believe the affection syphilitic."

Another remark made by Dupuytren should be borne in mind; he says, that "in cases of relapses, when the cancerous testicle has been removed, it is almost always the cord which becomes affected; whereas, in the syphilitic affection, it is usually the other testis." In support of this opinion, two observations are reported in his "*Leçons Orales*," when two patients having had each a testicle removed, as it was supposed, for a scirrhus affection, returned to him to be treated for a similar affection of the testis, and for which they were successfully treated by acute syphilitic remedies.

Notwithstanding all that has been said relative to the syphilitic affection of the testis, the diagnosis must always remain embarrassing in certain cases, so that it is very important, as above stated, not merely to take into consideration primary symptoms, but the successive secondary affections, when they exist, for syphilis has a determinate and regular course, which may elucidate our diagnosis.

Prognosis.—If we take into consideration the probability of the syphilitic affection of the testicle terminating in resolution, it can absolutely be considered a severe complaint; nevertheless, its duration can never be determined; the resolution of the affection rarely takes place spontaneously, and when it has not been complete, or the treatment sufficiently prolonged, relapses are far from uncommon. When the affection has lasted a long time, we have remarked only an incomplete resolution, and in other cases atrophy of the organ has followed.

Pathological Anatomy.—According to Sir A. Cooper and M. Ricord, the alteration affects, principally, the fibrous and cellular tissues of the testis and epididymis. Its development is due to hypertrophy of the tunica albuginea, and its fibro-cellular prolongations, which partition the testicle, forming those divisions in which the seminal vessels are contained. These are merely hypotheses, and I have been unable to discover in the annals of science any anatomical or pathological observations which confirm them. Even although testicles have been removed by the knife, which a well-regulated internal treatment could have cured, still these operations have not taught us anything relative to the anatomical characters of the lesion; and this might be expected, since those surgeons who have performed the operations were ignorant of the nature of the affection.

Treatment.—We have said that the syphilitic testicle was a consecutive affection of syphilis, that it was, in the successive order of symptoms, on the borders of the secondary and tertiary symptoms; consequently, it is sufficient to state, that we must employ the treatment applicable to those two periods of the affection.

M. Ricord is in the habit of combining the mercurial treatment with the employment of iodide of potash. I consider the combined use of these remedies better than their administration singly. We have frequently seen the employment of the iodide alone bring about only a slow resolution, which the use of mercury has expedited. M. Ricord prescribes one or

two pills every night, containing five centigrammes (about three-quarters of a grain) of proto-ioduret of mercury. During the day he gives the iodide of potash in doses of one or two grains in ptisan. It matters little, however, what preparation is given, provided the patient continues the treatment uninterruptedly and regularly, and for some time after a complete cure has been effected.

When effusion has taken place into the tunica vaginalis, it is not usually necessary to puncture the swelling, or inject the sac. Most frequently this consecutive hydrocele disappears of itself, and it is only in cases where the fluid is not absorbed after the cure of the testis that we feel called upon to tap the swelling which may inconvenience the patient, or inject it to effect a radical cure.

We should not neglect topical remedies to favour resolution, such as mercurial frictions on the scrotum, or the application of a bego plaster with mercury, which must be renewed from time to time. Compression by means of Frech's plan with strips of the same plaster will assist in dispersing the swelling. The following is the best we have tried. It is well, before applying the compression, to evacuate by a lancet the fluid in the tunica vaginalis, if it be collected in large quantities; seizing the testis with one hand, bind a strip of plaster round the cord just above the testis with the other, forming a ring, to prevent the escape of the testicle, thus avoiding the compression; then, by means of other straps, we encircle the body of the organ by subsequent turns, so as uniformly to cover it. This dressing ought to be renewed as often as the strapping becomes loose.

How far is the mercurial treatment to be pushed? Generally, it ought to be continued some time after the disappearance of every symptom. Nevertheless, however, as in some cases, the hypertrophy seems to be permanent, there is a limit beyond which we should not carry the mercury, so that when we have varied sufficiently the mode of administration, if we find the tumour cease to feel the influence of the remedy after it has sensibly diminished, and now remains stationary, it will be useless to insist on carrying the remedy further. I terminate this article by saying, that the difficulty of differential diagnosis of tumours in the testicle, and the frequency of syphilitic affection of the organ, ought to render the surgeon very circumspect on the necessity of amputation. And ought we not to follow the wise, enlightened conduct of the great surgeon of the Hôtel Dieu, who put his patients under mercurial treatment even in cases where he had many reasons to suspect the cancerous nature of the affection, from fear of removing by the knife an organ which he might have preserved?—*Journal de Chirurgie*.

ON THE TREATMENT OF

CHRONIC DISEASES OF THE SKIN.

By THOMAS HUNT, ESQ., M.R.C.S. Eng., Herne Bay.

SUPPLEMENTARY PAPER; CONTAINING AN INQUIRY INTO THE GROUNDS OF THE OPINION THAT "CERTAIN LOCAL DISEASES ARE SALUTARY TO THE SYSTEM AT LARGE, AND CANNOT BE CURED WITHOUT RISKING THE GENERAL HEALTH."

"The best advice," observes M. Rayer, "which can often be given to patients advanced in life, and of infirm constitution, is, not to attempt the radical cure of such an infirmity as chronic eczema, if the disease be at all endurable. The removal of these natural drains of the system is often followed by serious symptoms of a different kind." Mr. Erasmus Wilson coincides in this opinion, and both authors even propose to restore the eruption by counter-irritation after it has been cured, to prevent injury to the health, where there is reason to believe that it would result from the drying up of eruptive discharges of long standing.

In turning from these respectable authorities to examine the opinions of so experienced an observer as Mr. Plumbe, one is struck with the remarkable circumstance, that although the latter author has allotted a distinct section of his work to a class of "diseases exerting a probably salutary influence on the system," yet this division (comprehending porrigo favosa, strophulus, lichen, prurigo, urticaria, herpes, and furunculus) does not include eczema, the privileged disease of Rayer and Wilson, to which the former author also adds lichen.

These views, though not exactly in accordance one with another, do, nevertheless, strongly countenance the theory that certain local diseases are salutary to the system at large, and cannot therefore be cured without risk. Opinions closely coinciding with this hypothesis are to be found in the

writings of many respectable authorities in medicine, and probably hold a controlling influence over the views of many practical men, to an extent of which they are not fully aware. Many surgeons hesitate to undertake the cure of chronic ulcerations of the lower extremities, attended by profuse discharges of long standing, under some vague apprehension of serious consequences.

If there be any foundation, whatever for these grave forebodings, it is highly desirable that the profession should be furnished with a definite diagnosis of every salutary, protective, and critical disorder, or at least of the circumstances under which it becomes endowed with these singular prerogatives. For assuredly our attention has not as yet been directed to any very distinct beacons, whereby to forewarn us whenever the too busy exercise of our calling is likely to prove disastrous to our patients and confounding to ourselves. On the other hand, if these apprehensions be not founded in truth, and cannot be justified by an appeal to facts, it is high time that so sorry a bugbear should be stripped of its terrors.

It will suffice for the practical purposes of this inquiry to confine our attention as much as possible to the question,—Is it in any case dangerous to accomplish the radical cure of local disease?

The subject has wide and extensive bearings. If it be unsafe to cure *some* diseases, because they are occasionally liable to repulsion, revulsion, or translation, the cure of *all* diseases to which the human frame is subject, whether acute or chronic, local or constitutional, may fairly be challenged; for what disorder can be named, which has never been known, under medical treatment, to disappear and give place to another? Local maladies are often succeeded by fever, and the decline of fever is yet more frequently followed by local affections. Gout and asthma, epilepsy and insanity, hæmorrhoidal affections and hemiplegia, are occasionally observed to give place, not only to each other, but to every other disorder from which we have learned to distinguish them. And as we never can tell whether the ghost of the departed distemper shall appear in a form more terrible, or less so, than its defunct prototype, it is evident, that without a tolerable acquaintance with the prevailing phenomena of morbid metastasis, no physician or surgeon can prosecute his duties with well-founded satisfaction or confidence.

That profound thinker, John Hunter, was fully aware of the existence of the "principle" of revulsion and metastasis; and he reckons the proper understanding of its nature and effects to be "as useful a part of the healing art as any, and even more so; for it is probably the least known, as being the least intelligible, and therefore the more use may be derived from its investigation." (Hunter on the Blood, vol. ii. p. 134, 1812 ed.) Whatever intricacies may be connected with the pathological analysis of this question, (and it is not denied that there are difficulties in the subject,) its practical bearings involve nothing that is either recondite or mysterious. Yet even these appear to be little understood; else the evils to which our attention is directed would not only have been, by this time, better understood, but more easily avoided. Notwithstanding the revolution effected in the treatment of local diseases by the writings of the late Mr. Abernethy and others of his school, there is perceptible, even in the present day, a prevailing want of system in the general management of these disorders. Cases of metastasis through mismanagement, although comparatively rare, are far too numerous to be passed over as anomalies; and it will now be attempted to show, that to mismanagement alone are attributable a large share, if not the whole, of the unfortunate contingencies presented by the records of modern surgery, as incident to the treatment of local diseases.

Let us examine the facts. Patients, in whom inflammation of the lower extremities, with œdema of long standing, had been indiscreetly treated with cold lotions and bandages, have been for the first time seized with epilepsy. Others, suffering for years from ulcerated legs, have been seized, upon the healing of the ulcers, with sickness and vomiting, headach and giddiness, or fatal disease of the heart. In two cases related by Dr. Parry, the immersion of a gouty foot in cold water, which produced instant relief from pain, and a proportional abatement of the inflammation, was, in a few hours, followed by hemiplegia. And the cure of cutaneous diseases has been known to issue in different forms of dyspepsia, asthma, and dropsy. It is granted that, in most or all of these unhappy cases, it would have been far better not to have attempted the cure, than to have exposed the patient to so calamitous an alternative. But, was the alternative necessary?

It will be admitted by every one instructed in medicine, that *some* of these cases were treated indiscreetly, and pro-

bably might have been safely cured by a more enlightened and systematic procedure. The writer claims the same construction for *all* the cases, and for all similar cases whatsoever. We are too generally satisfied with having effected the cure of obstinate chronic disorders, without having studied the art of curing them safely; and when length of days and multiplied misfortunes begin to crowd the memory with the spectres of unfortunate cases, we shrink, like M. Rayer, from the consequences of our own success, and advise our juniors rather to refrain from attempting the cure of such infirmities, than to run the risks so sadly realized in our own experience.

Further, it will be granted, that *some* of these cases were not actually cured. The writer contends that *none* of them were cured. "As disease is a wrong action of the living parts, the restoration to health must first consist in stopping the diseased dispositions and actions, and then in a retrograde motion towards health." (Hunter.) But in these cases, and in all others of a similar nature, the "wrong action" of the living parts is not righted, but only diverted; the "restoration to health" does not occur at all, for neither the first condition occurs—namely, "stopping the diseased dispositions or actions," nor the second, "a retrograde motion towards health." On the contrary, there is nothing stopped at all; but the local action, the morbid dispositions, continue to exist, though diverted, and the retrograde action is directed towards disease, and not "towards health." That kind of treatment which only changes the locality of morbid action from one part of the body to another, and thus merely *translates* disease, can scarcely be called *curative*. The symptoms, under these circumstances, should be considered as modifications of one common action. The enemy is still lurking in the system, repulsed, but not subdued.

Yet, assuredly, it is the business of the surgeon to cure and eradicate diseases, not to set them playing at hide and seek with each other, whatever amount of amusement or of information he may derive from their freaks. And so long as local diseases are tampered with, or repelled by external applications, without a thought of the morbid condition of the general system, or treated on any principles which fall short of a full and comprehensive view of the whole case, so long we may expect to hear occasionally of serious or fatal cases of metastasis; and of translations of disease from external to internal organs, from the skin to the viscera, and from the extremities to the brain. A little reflection on the pathology of spontaneous eruptions will render almost self-evident the proposition, that whatever course of treatment will cure them radically will also cure them safely. An imperfect course of mercury may not only heal a syphilitic sore, but dissipate the secondary maculæ; yet it will not protect the system from future disease. But such a course as radically cures the disease, by destroying the very disposition to it, puts the system into a condition at once sound and safe. In like manner, by hastily healing the skin in eczema or psoriasis, without radically curing the disease, we may expect either a return of the cutaneous affection, or, in rare cases, something still more serious. But it has been shown, in the preceding papers, that by a gradual and protracted use of arsenical medicines, the very disposition to morbid action may be absolutely taken away, and that the patient will then remain, as in the former case, safe as well as sound. Not once in the whole course of his practice has the writer had occasion to regret the healing of cutaneous eruptions, ulcers, or fistulæ, on the principles of treatment which he has adopted for the cure of local diseases. In so far as these principles are involved in the treatment of chronic cutaneous affections of constitutional origin, they have already been elaborated with sufficient minuteness. Their application to the multifarious forms of local disease, of whatever origin, which, under their guidance, may be safely as well as successfully treated, would exceed the limits as well as the design of this paper to discuss. But it will be found that a strict regard to the following rules will ensure safety as well as success in the treatment of those local maladies which, in the present state of our science, are susceptible of cure; excepting, of course, specific and malignant diseases, and cases in which the constitution has been broken down and the vital powers irreversibly exhausted, from what cause soever.

I. Local disorders of local origin may be safely treated locally, if the general health be sound.

II. Local disorders of constitutional origin cannot be treated locally without risk.

III. Disorders of mixed origin, partly constitutional, partly local, require first general, afterwards local treatment.

1. Under the first rule are comprehended all diseases of the skin, of whatsoever form, which result from external injury or violence, from heat or cold, the rays of the sun, or the friction

of the wind; from pediculi, acari, ascarides, chigre, fleas, bugs, bees, wasps, ants, &c.; also ulcerations or superficial abscesses, resulting from intertrigo, friction, pressure of the dress, &c. &c. So long as the health is good, it is obviously safe and judicious to treat these simple local affections by topical applications alone. But it is important to bear in mind that local affections, thus excited, may, by long continuance, either contaminate or disturb the general system; or, they may even come to be salutary sources of counter-irritation: in either of which alternatives, the state of the system must be rectified by proper remedies, in addition to topical applications. Indeed, it is probable that many of the unfortunate revulsions after local treatment have occurred in such cases as these. Issues and setons, and accidental ulcerations,—the discharges from which, having been copious and long protracted, are suddenly suppressed, to the injury of the health,—are familiar instances of this class; and various cutaneous eruptions, of irritable character and wide extent, healed at the expense of the lungs or digestive organs, are not less common. Thus it happens sometimes that such disorders as porrigo favosa, scabies, chronic eczema, impetigo, prurigo, and other diseases of dirty origin, excited and sustained by the presence of pediculi or acari, exposure to weather, or uncleanly habits, may chance to prove preservative to the general health, by the very extent of their irritation; relieving certain internal ailments, perhaps long forgotten, or keeping in check by diversion some disposition to morbid action which may have unconsciously sprung up in the system during the existence of the local disease, aggravating its character so long as the current of increased vascular action is determined towards the skin, but ready to attack some internal organ predisposed to disease when the skin is liberated from its sources of irritation. It is quite possible that circumstances of this kind (which must now and then occur among the poor recently admitted, on an improved diet, into hospitals, or workhouses) may have furnished cases of metastasis, and thus have given rise to the notion that these cutaneous affections are sometimes critical, and therefore better left alone. Now, if the rule of treating local diseases of this kind locally be too strictly adhered to, it is obvious, that by drying or soothing the skin, we may be instrumental in diverting or directing the morbid current towards the vital organs. To prevent this, it is only necessary, in all cases of protracted and extensive cutaneous disease, to assume the fact of some general lesion, and to combine with the topical treatment such a course of internal remedies as shall stimulate the secreting organs. Sulphur and antimony, separately or combined, are often found useful in these cases, the phases of which, however, are too various to admit of specification, and must be treated on general principles. The same remarks apply to the case of ulcers of the legs, or fistula in ano, of long standing. The ulcer may have originated from the friction of a boot, or a kick on the shin, or the bursting of a varicose vein, and through neglect or mismanagement may have degenerated into an extensive wound, discharging large quantities of sero-purulent fluid, which, if suddenly thrown back upon the system by such local treatment as shall heal the wound, may excite symptoms of congestion in some internal organ. All this may be easily prevented by medical management and appropriate diet. In the same manner, a fistula, as frequently happens, may have originated in a local cause. A spicula of fish-bone or the core of an apple—perforating the coats of the rectum under pressure of the sphincter, and constipation—may have lodged there and produced fistulous ulceration. The patient endures it for months or years, suffering only from occasional abscesses, and perhaps hæmorrhoidal discharges, and meanwhile getting relieved possibly of certain other complaints, headach, asthma, or cough, which had previously harassed him. Finding no apparent disease of the liver or lungs, the surgeon operates for the fistula; the operation succeeds, and the original malady returns, or in lieu of it, convulsions, vertigo, or dyspnoea. The surgeon is blamed for operating; but this was not the error. The mistake consisted in neglecting to inquire into the patient's previous state of health, and so failing to prescribe for the whole case. Operating surgeons are liable to forget this important pre-requisite. A lady had a steatomatous tumour, which, having existed for a considerable period, began to grow with unusual rapidity. She consulted a surgeon, who proposed to excise the tumour. Consent was obtained, and the operation performed,—simple and easy work enough. It was prognosticated that it would heal in three or four days. But it happened that the lady was out of health at the time. Amenorrhœa had long existed, dyspeptic symptoms had prevailed, and the whole system was deranged. None of these affairs were inquired into by the surgeon, or obtruded upon his notice by the patient. The

result was deplorable. The wound did not heal, but suppurative inflammation supervened, first in the cellular tissue, thence it extended to the conjunctivæ, the membranes of the eye generally became involved, and the retina did not escape. The irritation was communicated to the brain, and, for some time, the lady's life was despaired of. The eye sloughed away bodily, and the patient narrowly escaped with her life, and the loss of one eye. This was not a case of metastasis; but it illustrates the principle, which ought never to be lost sight of by the surgeon—namely, that the treatment of a local disease, *per se*, is often fraught with danger, whether from metastasis or other sources. We must prescribe for the whole case, or perils await us on every hand.

2. Local diseases of constitutional origin cannot be treated locally without risk.

The case is widely different from the preceding, wherein a local disease comes before us, not as a result of local irritation, but purely as a constitutional affection, thrown upon the skin by some impulse from within. In the former case, local treatment is absolutely necessary, although, occasionally, it must be conjoined with attention to the general system; but in this class of local disease, local treatment is dangerous, and may peril the internal organs. Everything must be accomplished by such remedies alone as will act upon the whole system. It is to diseases of this class that the term, *salutary*, is applied by writers on the skin, and the cure of them is said to be sometimes attended with risk. As the preceding papers treat almost exclusively of the management of such of those diseases as pertain to the skin, the writer is particularly anxious to direct attention to the circumstances under which the treatment of these peculiar affections may be considered, in any degree, unsafe. And here, the principle already laid down as a postulate, that whatever course of treatment will cure a disease radically, will also cure it safely, is especially applicable. But it has already been shown that these diseases cannot be cured radically by external applications; and as the eruption is not the disease, but only the index of something wrong within, the dangers to which the fortress is exposed are not diminished, but positively increased, by removing the sentinel.

A candid examination of facts will both illustrate and establish this opinion. The facts which are presented to our notice are of two opposite classes, both, however, testifying to the same effect. In the cases already detailed, the entire treatment was conducted on the assumption of a constitutional affection. In the majority of instances, local treatment was not resorted to at all; in the rest, very sparingly, and always with a view to relieve and comfort the patient, never to repel the eruption. And in no one instance, among the hundreds that have been thus treated, has there been any subsequent metastasis. On the contrary, all the patients whose general health had suffered under the eruption have experienced a marked relief in that respect, since the skin has become sound. How widely different is the experience of M. Rayer: "The removal of these natural drains from the system is 'often followed by serious symptoms of a different kind.'" How are these contradictory results to be explained or reconciled? Nothing can be more plain. It was Rayer's plan to treat these diseases with topical applications from first to last, placing little reliance upon internal remedies, and always using them with extreme caution. Accordingly, his array of local remedies is truly formidable. Among the directions for the treatment of this very disease eczema, (which he describes as sometimes salutary to the general system,) the very first remedy he speaks of is "the simple emollient cold or tepid bath;" next, "the vapour bath and the steam douche." Then follow, in rapid succession, "the warm, sea, and alkaline bath; fomentations of linseed, marshmallow flowers, poppy-heads, and milk, decoction of althæa, with the addition of a little acetate of lead; sulphureous baths; the waters of the baths of Louische; sulphureo-alkaline ointment; soothing washes; poultices of floury potatoes, ground rice, crumb of bread, &c.; slight escharotics; ablutions of nitrate of silver, diluted muriatic acid; ointments of red precipitate, of the lesser celandine, clematis, spurge, &c.; blisters; ointment of zinc; protochloride of mercury."

All these external remedies are proposed, and some of them extolled, before one word is said about attention to the general system, or of the indications of constitutional treatment! Afterwards bleeding is mentioned, but with cautious reservations; purgatives follow, but warily: dulcamara and arsenic are at length introduced, but their use is proposed with still greater caution. (Rayer, on the Skin, p. 302, *et seq.*) Who can wonder at the results—"insanity" in one case, "serious symptoms" in others, and relapses, or utter failure, in most of

the inveterate cases! The testimony of Rayer is valuable. Respectable in point of authority, veracious in character, and minute in detail, it abundantly confirms the views which have been advanced; and instead of showing that eczema is sometimes a salutary disease, or that its cure should not, under certain circumstances be attempted, it just serves to prove only that disappointments and dangers must ever attend the treatment of local disease of constitutional origin by topical remedies.

It is not necessary to inquire whether the term "salutary" is in any case strictly applicable to disease; it is enough that our countryman, Mr. Plumbe, does not hesitate to attempt the cure of what he terms salutary diseases, by attacking their proximate cause; and the success of such enlightened practice produces a corresponding effect upon his views on this subject, which are at once bold and sensible. "The accounts," he premises, "of the imminent peril of checking or repelling eruptions of the kind under consideration, (papulous,) given by different authors, require to be received with some degree of caution," (p. 237.) And he goes on to express an opinion, doubtless well-founded, that the accession of other diseases upon the decline of these is rather a cause than an effect of their recession.

It is very doubtful whether it is ever wrong, to attempt, on sound principles, the cure of any disease, whatsoever its nature or wheresoever its seat. Rumours of dangers, loose and indefinite accounts of cases, and general impressions resulting from them, should never be allowed to influence the mind. It is a question of fact and of minute inquiry. The following case, related by the late Dr. Parry, is too loosely detailed to prove of any real value; but the high authority on which it is presented to us, and its apparent discordance with the views now contended for, entitle it to a more critical examination than the unquestioned facts of the case may merit. "A man, long affected with psoriasis, had tried, for several months, all the remedies which could be devised, but ineffectually. The liquor arsenicalis in a few days cured the eruption, but immediately produced ascites, with paucity of urine. These complaints were removed by the squill, but the eruption then returned. The same processes were twice repeated, with precisely the same effects." (Elements of Pathology and Therapeutics, p. 397.) No mention being made of external applications, or other remedies beside arsenic, it must be presumed that none were used. Still, the sudden cure, "in a few days," of a case of psoriasis of long standing by arsenic, or any other internal remedy, is a very extraordinary event, and, in fact, so contrary to experience, as to engender the suspicion that there is some mistake or omission in the narrative. Admitting, however, for the sake of argument, that arsenic was the sole agent employed, it may be confidently asserted that it neither cured the disease, nor was administered discreetly. The disease returned again and again; it was, therefore, not radically cured, and is not a case in point. Still, it may be urged, that, under the operation of arsenic, the cutaneous affection was repelled with serious symptoms. Let it be granted, for argument's sake, that it was. But then the medicine was not discreetly administered. If it really dissipated long existing psoriasis in the short space of a few days, the dose must have been very large; and, in very large doses, arsenic arrests the action of the kidneys, and occasionally produces dropsy; but it is only in large doses, such doses, in fact, as should never, in any case, be administered for any purpose. This assertion is not made at random. Otto Tachenius, in relating the effects of accidentally inhaling the fumes of arsenic during his experiments in the sublimation of metals, says, "Sanguinem minxi, cum indicibili ardore," (Ottonis Trachenii Hippocrates Chemicus, cap. xxiv. p. 213, 1668.) Metzger relates a case of poisoning from arsenic in a young woman, who, among other symptoms, suffered from strangury. (Christison, p. 308.) Dr. Platner, of Pavia, speaks of suppression of urine as one of the symptoms of another case, fatal in five hours. (Ibid., p. 310.) Dr. Astbury inferred, from an instance which fell under his notice, that it may bring on dropsy. (Ibid., p. 317.) Hahnemann and others testify to the same effect. (Ibid., p. 318.) The case in question, therefore, was one in which an overdose of arsenic produced paucity of urine, and dropsy, and this sudden invasion of morbid action became the cause, not the effect, of the recession of the cutaneous disease. The case supplies an argument against the employment of arsenic in excessively large doses, but proves nothing towards establishing the salutary nature of psoriasis, nor yet adduces even the shadow of an argument against its being radically cured by small and decreasing doses of arsenic.

3. Disorders of mixed origin, partly constitutional, partly

local, require, first general, afterwards local treatment. There is no reason to suppose that any of these local affections are protective or salutary to the system at large; yet under improper treatment they have occasionally given place to affections of the vital organs. In this class may be also included local diseases of uncertain origin, which, with others of a more obviously blended character, may be treated safely by first rectifying any disorder of the general health which may complicate the local malady, or which may be inferred from its existence alone: and secondly, by such topical accessories as may be necessary to complete the cure. Pertaining to this class are a large proportion of old and obstinate ulcerations of the lower extremities, originating in a cachectic condition of the system, and yet, from long habits, indisposed to heal when the system is righted, without aid from poultices, bandages, or other local management. The mechanical treatment suggested by Whately, Baynton, Spender, and others, though founded on good surgical principles, and often successful, will yet not only occasionally fail, but is liable, when successful, to endanger the vital organs, unless adopted with this limitation—that the system must first be prepared for their operation. The constitutional tendency to morbid action must previously be duly corrected, and “a retrograde motion towards health,” as Hunter expresses it, must be established before the mechanical management can be undertaken with both success and safety. Under such a system, judiciously and watchfully pursued, these different cases may generally be conducted to a most satisfactory termination. No surgeon who has a practical acquaintance with these principles of treatment, ever dreams of amputating a simply ulcerated leg, or fears for the result of healing it soundly.

These are the conditions on which it appears to the writer safe and judicious to attempt the radical cure of local diseases, however protracted, complicated, or inveterate. And this opinion has been long confirmed by his uniform experience. As regards all the recorded cases of metastasis or conversion of disease under treatment, it will be found probably, without one single exception, that either the treatment is not fully detailed, in which case nothing whatever is proved, or the management of the case has not been conducted with a due regard to the principles propounded in the preceding pages. These disasters, therefore, not only exist as an opprobrium to the profession, but they reflect especial disgrace upon individual management. It must be admitted, there may be some excuse for this. The knowledge of chronic affections must always be pursued “under difficulties,” which do not inculcate the study of acute diseases. In the latter the patient is generally submissive and obedient under treatment, and the whole case, always of short duration, is brought under observation from its commencement to its close; whereas, in chronic disease, the reverse of all this often occurs; and the surgeon, meeting with little that is either satisfactory or instructive, loses that interest in the case which is essential to method and perseverance.

It remains only to be observed that, as compared with the general results of chronic local affections, cases of metastasis or conversion are of exceedingly rare occurrence, even under careless treatment: so rare, indeed, that except for incidental and purely practical purposes, and independently of considerations suggested by a knowledge of the existence of widely-spread prejudice, the subject would scarcely have been deemed entitled to formal or elaborate investigation. Moreover, there is reason to apprehend, with Mr. Plümbe, that in a majority of these cases, rare as they are, the cause is mistaken for the effect; and that the retrocession of the local action is merely the result of some previous change in the interior, wholly independent of the condition of the skin as a cause, yet incidentally restraining or suspending its abnormal tendencies.

In practice, however, we much more generally find—that what might, indeed, have been expected from physiological considerations—namely, that where the skin is extensively diseased, the interruption of its functions, instead of proving salutary to the system at large, more or less disturbs the general health; that the suppression of its exhalations is either reflected upon the bowels, and diarrhoea complicates the skin disease—or upon some other organ which sympathizes with the skin; and that when the skin is restored, the general oppression is relieved, and the patient appears in improved health: Such has been the uniform experience of the writer. And this is equally true of cases of ulcers of the legs, and of anal fistulae. The system is far more commonly worn down, under the influence of local irritation, than relieved by it on the principle of counteraction, and it naturally recovers its healthy tone on the removal of the exciting cause. The ex-

ceptions to this rule are probably exceedingly rare, but, being curiosities in their way, are sure to be recorded when they do occur; while the cases in which the rule holds good—namely, where the local disease distresses the general system—occur a thousand times as often, too often, indeed, to obtain especial notice, or perhaps as much of observation as their practical importance may merit.

Upon the whole, therefore, it appears that the fear of the metastasis of local disease, under enlightened treatment, if not a mere bugbear, has certainly little foundation in fact; and that in the rare cases where such a tendency may be supposed to exist, it may be counteracted by watchful and judicious management. It seems scarcely necessary to add, that medical practice ought to be founded at least on rational deductions, and should never be diverted from its legitimate object by vague apprehensions, which in all probability will never be realized. “Semper in praeliis maximum est periculum qui maxime timent.” (Sallust, Bell. Cat.)

Herne Bay, February, 1846.

ILLUSTRATIONS OF INFLAMMATION, ULCERATION, & INDURATION OF THE UTERINE NECK.

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PENETRATION OF ULCERATION INTO THE CAVITY OF THE OS.

CASE 1.—Inflammation, ulceration, and induration, of the uterine neck, of several years' duration, in a married lady without family; peculiar cerebral symptoms, the result of the uterine disease; their gradual disappearance; ulceration in the cavity of the os.

On the 4th of March, 1846, I was consulted by Mrs. H—, a tall, pale-looking married lady, aged twenty-seven. She had been requested to see me by a physician in town, who had attended her some time previously for a neuralgic affection. On inquiry, I found that her history was as follows:—

As a girl, her health was good. She had menstruated early, and continued to do so regularly and easily during four or five days every month, until she married, at the age of twenty-one. Very soon after marriage, (within a couple of weeks,) she was seized with acute inflammation of the vulva and vagina, for which she was obliged to have medical advice. The inflammation subsided under general treatment in the course of a few weeks, but left upon her a slight vaginal discharge, which she has had, more or less, ever since. Previous to marriage, she had never suffered from whites. She does not remember whether she experienced any other uterine symptom after this first attack of acute inflammation. Eighteen months later, she again suffered from a similar attack of vaginal inflammation, which again subsided under general treatment, leaving behind it, however, a rather more abundant vaginal discharge than that which previously existed. She also distinctly recollects having experienced soon after this a sensation of bearing-down, and pains in the lower part of the back, hypogastrium, and side. These symptoms have existed, with greater or less intensity, ever since, as also the leucorrhœal discharge. Soon after their manifestation, the general health began to fail. Slight dyspeptic symptoms showed themselves for the first time; various neuralgic pains appeared in the head and face, and she became nervous and hysterical. For the last two or three years, the nervous symptoms have been gradually gaining ground. She has become so timid, that she dares not walk out, either in a town or in a public promenade; she is frightened at all the persons she meets, without knowing why. Her brain often feels bewildered; fantastical ideas flit through her mind; her memory fails her; and she experiences singular and irrational impulses. Sometimes she becomes cold and chilly, and faints. She has been continually under medical treatment for some years, having successively placed herself under the hands of various medical men. She has been treated for neuralgia, hysteria, and for diseased liver; and all without any further result than temporary alleviation of the symptom attacked—indeed, the morbid nervous sensations have latterly been gaining ground. Four months ago, she consulted an experienced uterine pathologist, who carefully examined her per vaginam, and stated that the uterus was low, but was not inflamed nor otherwise diseased, and that all she had to do was to remain

as quiet as possible, and to attend to her general health. When I first saw this lady, she was pale, thin, and weak; and the following symptoms were present:—tongue white; anorexia; constipation; pains in the lumbar, hypogastric, and inguinal regions; leucorrhœa, pelvic weight, and bearing-down, especially after fatigue; catamenia scanty, but not painful; there was a very peculiar, absent, wild expression about the eyes; she scarcely ever looked before her, or towards the person to whom she was speaking, but on the ceiling, or sideways.

On examining digitally, I found the cervix voluminous, evidently hypertrophied, retroverted, and low down in the vagina. The os was open, and presented around its orifice the peculiar velvety sensation of ulceration. On using the speculum, I found the vulva and vagina red and congested, and the latter containing muco-pus. The cervix was soon reached, and fairly brought into view; it was so large as to scarcely enter the No. 2 conical speculum, indurated, very red and congested, and presented an ulceration covered with pus of the size of a shilling, and dipping deeply into the cavity of the os uteri.

Treatment.—Regular weekly cauterization of the ulcerated surface with the pernitrate of mercury, or the nitrate of silver; cold astringent vaginal injections; cold hip-baths; cold-water rectal injections; an occasional mild aperient; a mixture containing small doses of carbonate of soda, and a vegetable bitter, which was subsequently changed for iron in varied forms; rest in the horizontal posture; light diet. I was very anxious to commence the treatment by the application of a few leeches to the cervix, owing to the great extent of inflammatory hypertrophy that existed, but my patient would not consent to their application, and became so fearful and excited on the subject, that I was obliged reluctantly to discard all idea of resorting to them.

Under the influence of the above treatment, a very rapid amelioration took place. Within three weeks the ulceration began to cicatrize at the circumference, and, at the same time, the cervix itself began to melt, as it were; diminishing in size as the ulceration healed, and rising in the vagina. The various local symptoms enumerated gradually subsided also; the general health rapidly improved, and the abnormal cerebral sensations above mentioned became less marked and less distressing.

On the 15th of April the ulceration had healed entirely around the os; but on separating the lips as far as possible with the bivalve speculum, it could still be seen within the cavity of the os. The pernitrate of mercury was therefore carried into the cavity, to the depth of a quarter of an inch. The internal application of caustic was subsequently twice repeated.

On the 1st of May, the ulceration of the cavity of the os appeared perfectly healed, although a rather florid hue could still be distinguished in the interior. The cervix had nearly regained its natural size, and was perfectly soft, and of a natural pale rosy hue; it had risen so high in the vagina that the index could scarcely reach it. The vagina was healthy, and there was no leucorrhœal discharge. The bearing-down had entirely disappeared, as also the pain in the side and in the hypogastrium; but there was still a little pain in the back on fatigue. The general health was very much improved; the tongue had become clean; the appetite had begun to return, and the bowels were regularly moved without medicine. The cerebral symptoms, although not entirely subdued, were much ameliorated. The memory had become stronger; the ideas were more under control, and less fantastical; and she had not, to the same extent, the nervous dread of meeting in the streets persons she did not know. She was, however, still pale, weak, and thin, and as she wished to spend the summer with relations at the sea-side, I readily acceded to her desire, considering nothing more likely firmly to re-establish her general health than a residence on the sea-coast, and sea-bathing.

Remarks.—The above case presents many points of interest. The appearance of acute vaginal inflammation immediately after marriage, followed by constant leucorrhœa, renders it probable that there existed more or less uterine inflammatory disease from that period up to the time when I was consulted. At all events, the presence of the various symptoms which I have enumerated, as experienced subsequently to the second attack of vaginitis, eighteen months after marriage, proves, in the most conclusive manner, the existence, at that time, of ulceration of the cervix, and of its concomitants and sequelæ. It is thus evident that this lady had been suffering under severe uterine inflammatory disease, perhaps for six, but certainly for four years previous to my seeing her. I have not, therefore, the slightest doubt, that the neuralgic, hyste-

rical, and dyspeptic symptoms, for which she was successively treated, all had their origin in the uterine affection. The only symptom which could be construed into an indication of diseased liver, was the pain in the right side, in the region of the ovary. In ulceration of the cervix, sympathetic pains in each side, in the region of the ovaries, are nearly as universal as pain in the back. This ovarian pain may exist on one side only, or on both. Singularly enough, when on the right side, it is very often mistaken, as with Mrs. H—, for a symptom of liver disease. This is a gross mistake, but one that is often fallen into when an accurate examination of the case is not made, although the free edge of the liver is several inches above the region where the ovarian pain is felt.

The long-continued existence of uterine disease had deeply affected the mental functions when I saw this lady, and from the nature of the sensations which she described, and the expression of the countenance, I question whether insanity would not have followed, had not the disease been checked. It is well known to all pathologists, that confirmed uterine disease, or even mere functional disorder of the uterus, is not an unfrequent cause of insanity; and that when such is the case, it is only by restoring the integrity of the uterus and of its functions that the insanity can be cured.

It will have been remarked, that the ulceration persisted for some time in the cavity of the os, after it had been cured on the cervix around the os. The circumstance of the ulceration of the cervix extending into the cavity of the os, or, rather, co-existing in that cavity, is of very common occurrence, as I have stated in my treatise on uterine inflammation, pages 34–38. In many cases, the internal ulceration heals along with the external; but this is not always the case, and sometimes, as with the above patient, the ulceration internal to the os remains, and has to be treated alone; indeed, occasionally, the limited ulceration that exists within the os is very obstinate and difficult to heal. Here it is that the bivalve speculum has often a decided advantage over the conical or any other speculum. Opening to the extent of two inches, as it does, the lips of the cervix may be dragged asunder, so as to allow the operator to ascertain, ocularly, the state of the cavity. The latter may be ulcerated, even when the eye fails to detect a lesion, owing to the depth of the ulcer. This may be suspected when a drop of pus remains within the lips of the os, after the cervix has been carefully wiped, or if a drop or two of blood oozes from the cavity of the uterine neck, on a bougie or sound being passed half an inch up it. When this is the case, a pointed stick of the nitrate of silver, or a very small dossil of lint tied to a small piece of wire, and dipped in the fluid caustic, must be carried up the cavity of the os, as high as the point which appears to be still the seat of ulceration—that is, for about a quarter or half an inch.

Unless the internal cavity of the cervix is thus carefully examined, and its integrity ascertained, relapses will necessarily often occur. I, consequently, never dismiss a patient as cured without using the bivalve speculum, unless I can clearly see into the cavity of the os without it, which very frequently is not the case. I should have much wished to have kept Mrs. H— in town for a week or two longer, until the redness which I have alluded to had disappeared; but she was so anxious to leave, that I could not insist. I merely told her that I did not consider her quite safe,—that she must continue to use cold-water vaginal injections night and morning during the summer, and that she must be again examined, in case there were the slightest return of the former symptoms. In this instance, menstruation was never painful or much disturbed—an unusual circumstance.

I cannot conclude these observations without remarking how little the pathology of these affections can be understood, when we find an enlightened and experienced accoucheur examining carefully this lady only a few months before she came to me, and telling her that there was nothing amiss with the uterine system, and that the falling of the womb was merely the result of weakness. In reality, the lowness of the womb was the result of chronic hypertrophy, itself the result of long-continued inflammation and ulceration of the cervix. Indeed, as I have elsewhere stated, such is the cause and explanation of nine cases out of ten of partial uterine prolapsus.

The following case is a good illustration of the above remarks on the penetration of ulceration into the cavity of the os uteri.

CASE 2.—*Ulceration of the cervix, extending deeply into the cavity of the os uteri. Symptoms obscure. Obstinacy of the internal ulceration.*

On the 1st of February, 1846, Mrs. F—, aged thirty, the wife of a tradesman, delicate-looking, and of rather

sallow complexion, applied to me for advice. She stated that she had long felt very weak and poorly, and attributed the change in her health to an attack of bowel complaint, which she experienced the previous autumn. Since then she had lost strength and flesh, had had no appetite, and had been generally unwell. She had also suffered from whites and from a pain in the lower part of the back, the result of weakness, she considered. The above account of her symptoms, coupled with the expression of the physiognomy, inducing me to suspect the existence of uterine inflammation, I at once directed my inquiries to the state, past and present, of the uterine system. It appeared that, although of delicate constitution, she had always enjoyed tolerable health up to within the last five or six months. Menstruated at fourteen; she continued to do so regularly and easily both until and after her marriage, which occurred at the age of four-and-twenty. She has since had two children. The last was born two years ago. The labour was rather tedious, but natural, and she soon recovered. She nursed her child during seven months, when it was weaned. During that time she does not recollect having experienced any uterine pain, or having suffered from leucorrhoeal discharge. The catamenia returned, as usual, on her ceasing to nurse, and have continued to make their appearance regularly until the present epoch. From the time that she had the bowel complaint last autumn, however, they have been painful, scanty, and have lasted six days instead of four. Since that epoch, also, she has had a slight leucorrhœal discharge. On questioning her minutely, I also found that it was more especially since then that she had experienced the pain in the back; and that she had also had pain low down in the hypogastric region, although her attention had not been directed to the circumstance. She stated likewise, on inquiry, that she experienced pelvic weight and heaviness after any fatigue, or after standing long.

The presence of these symptoms necessitating further scrutiny, I examined digitally, and found the cervix rather low in the vagina, voluminous and retroverted, but soft, or, at least, elastic. The lips of the os uteri were widely open, so as to admit the extremity of the medius, and presented the peculiar soft velvety sensation of ulceration. No great sensibility on pressure. The uterus appeared small and healthy. As there was evidently inflammation and ulceration of the cervix, I told her to procure a letter for the Western Dispensary.

On examining her there on the 10th, with the speculum, I found, as I had anticipated, that the os uteri was ulcerated; the ulceration extending on both lips, and into the open os, so as to present, externally, a surface a little larger than a shilling. The ulceration was not unhealthy, the granulations being small and florid; the cervix itself was greatly enlarged, but not indurated, the hypertrophy being evidently inflammatory. The mucous membrane of the cervix, and of the upper part of the vagina, was of a deep-red hue, and covered with thick yellow muco-pus. Tongue rather white; appetite bad; bowels costive.

Treatment.—To take a mild, saline, opening mixture daily; to use a sulphate-of-zinc injection twice a day. Periodical cauterization of the ulceration with the permittate of mercury, or the nitrate of silver. Rest in the horizontal posture as much as possible. Mild diet; no stimulants.

March 1st.—The leucorrhœal discharge is much less abundant, and less purulent; the cervix, which is higher in the vagina, is still large to the touch, although less than it was at first; the vagina and cervix are less injected; the ulceration on the cervix appears healed at first; but on expanding the bivalve speculum, it is found still to exist in the cavity of the os, which is large enough to admit the extremity of the middle finger; the pain in the back is much less; there is scarcely any in the hypogastric or inguinal regions; the general health is much ameliorated; the appetite and digestive functions are improved; the bowels are less confined, and the rest is better. The periodical cauterization and astringent injections to be continued. Citrate of iron to be taken internally, instead of the saline mixture.

14th.—The local and general improvement continues; the menses have just appeared, and are easier and more abundant than they have been for many months.

April 1st.—The ulceration is healed externally, and in all that part of the cavity of the cervix which the eye can reach, when the lips of the os uteri are fully expanded by the bivalve speculum; but there are still a few drops of muco-pus issuing from the os, and on introducing the extremity of the uterine probe into the os, its contact is followed by the effusion of a drop or two of blood. The ulcer evidently still existing in the interior of the cavity of the cervix, a pointed stick of

nitrate of silver was pushed into the os for nearly half an inch.

This internal cauterization of the cervix was resorted to three or four times, at the interval of a week, along with cold-water vaginal injections, with complete success. On the 11th of April, every trace of inflammation and ulceration of the cervix had disappeared, inside of the cavity of the os as well as outside; the cervix is still rather voluminous and retroverted, but soft in its entire extent, and high up in the vagina; the mucous membrane of the cervix is rather more rosy than usual, and there is on it a scanty white secretion; she has no pain in the hypogastrium, nor in the inguinal regions; she has neither any pain in the back, nor any sensation of bearing-down, except after fatigue, when she still feels slightly the two latter symptoms; the tongue is quite clean; the appetite and rest good; she is very much stronger—indeed, quite well. I recommended her to continue the cold-water injections, to avoid fatigue, and to be careful as to diet.

In the middle of May, I again examined this patient, as a precautionary measure, and found that the cicatrization had remained perfect; and there was complete absence of local inflammation or irritation. She was evidently quite well and safe from relapse.

Cambridge-square, Hyde-park, June, 1846.

ON THE USE OF THE STARCH BANDAGE IN VARIOUS SURGICAL DISEASES.

By ALFRED MARKWICK, Esq., M.R.C.S. London.

In a paper lately published in *THE LANCET*, (p. 240,) I called the attention of its readers to the use of the starch bandage in the treatment of fractures, and attempted to prove that its advantages were due to the great solidity and support it gave to the fractured limb; to its preventing the displacement of the bones; to the facility with which it can be split open, for the purpose of examining the state of the injured member, and applying such remedies as the case may require; and though last, not least in importance—to its enabling the patient to leave his bed, and move about from place to place, and attend to his accustomed avocations, without either risk or danger, in the majority of cases: his strength being by this means kept up, while those cachectic and debilitated states of the constitution consequent on a prolonged decubitus are prevented.

In the present communication, I propose adverting to its application in those cases in which, as in fractures, the chief indication is to keep the part motionless. These are—dislocations, sprains, and other injuries of the joints; diseases of these parts; ruptures of the muscles and their tendons; re-sections of bones; necrosis and caries; certain deformities, either congenital or acquired, or from vicious cicatrization; aneurisms; varicose veins; hernia; indurated testicle, &c. I shall consider each of these in the order in which they are here given.

It is not my intention to enter into a full description of every species of luxation: I shall confine my remarks to the subject of treatment, and more particularly to that portion of it which more directly concerns us in this paper.

There are some dislocations in which it is almost impossible to prevent a repetition of the displacement by the ordinary means—as, for instance, in the dislocation, forwards, of the sternal end of the clavicle. Now with the starch bandage we can effectually overcome this difficulty.

The indications in this accident are, to keep the shoulder outwards and forwards, and the sternal end of the clavicle in its proper situation. The best apparatus for fulfilling these indications is a starch bandage, consisting of a combination of a portion of Dessault's bandage for fractured clavicle and the anterior figure-of-8 bandage. The former, which should only be sufficiently starched to prevent it from getting slack, will keep the shoulder outwards by means of the axillary pad, while the latter will bring it forwards and keep the sternal end of the bone in its place by its firmness and solidity—properties that are due to the starch, with which it should be abundantly covered, especially over the sterno-clavicular articulation. Should more firmness be required to effect this object, a piece of paste-board or stiff leather, previously soaked in warm water, and starched, may be applied, and secured by a second figure-of-8 bandage. The arm is then to be supported in a sling. As the axillary pad, by pressing on the vessels of the arm, has a tendency to produce œdema, it is always advisable to commence by passing a roller around the limb from the fingers upwards.

This example will, I think, sufficiently show the importance of the starch bandage in the treatment of luxations.* I may, however, state, that it does not, as in fractures, constitute a distinct apparatus; on the contrary, the contentive means and mode of treatment, in each particular case, remain the same, the only difference being in the starch with which the bandage is covered, for the purpose of increasing its solidity and strength, and preventing it from becoming loose.

Sprains and other injuries of the joints constitute the next class of cases. When called to a case of sprain immediately after it has happened, the first thing to be done is to elevate the limb, and place it in the most easy and comfortable position for the patient, and then to adopt such measures as are calculated to prevent, if possible, the occurrence, or, at all events, to check the violence, of the inflammatory action. The immediate application of cold, and persevered in for a sufficient length of time, seems to be the most effectual means of preventing the afflux of the fluids towards the part, upon which the inflammation depends. When the inflammatory period has passed, no time should be lost in placing the joint in a starch bandage, which is to be applied in the manner directed in the first paper, with or without the pasteboard splints, as the case may be. This apparatus, by accurately moulding itself on all the inequalities of the articulation, forms for it a continuous, permanent, and immovable splint, which not only keeps it perfectly free from all motion, but likewise gives it that support by which the patient is enabled to get about much sooner, and with far greater safety, than he, by possibility, can do when a *movable apparatus* is employed. If, instead of being sent for immediately after the accident, as I have supposed to be the case in the foregoing paragraph, we do not see the patient until some time afterwards, when there is considerable tumefaction and ecchymosis, the same precautions are necessary with respect to the perfect quietude of the joint; but the employment of cold, which was so beneficial in the preceding instance, is here more injurious than useful. Recourse should, in these cases, immediately be had to either general or local bloodletting, or both, to the extent required by the severity of the injury, and the size of the joint affected, followed by warm, emollient, sedative fomentations and poultices; and then, when the inflammation has been subdued by these means, the application of the starch bandage should be forthwith proceeded with. If the case has become chronic, and there is effusion of serum into the synovial membrane, together with considerable stiffness and weakness of the articulation, then the remedies recommended as applicable to the preceding stages must be replaced by others of a stimulating character, such as friction with camphorated and ammoniated liniments, blisters, &c., with a view to promote the absorption of the effused fluid, and the joint placed as quickly as possible in a starched bandage, which will, in the majority of cases, be found the most powerful and effectual resolute means. In this stage, the ligaments are considerably relaxed and weakened, and, in order to regain their strength and firmness, require to be kept perfectly quiet, and well supported. Nothing can be better suited for this purpose than the starch bandage, from the uniform pressure it produces, and the solidity and immobility it possesses.

Pulpy thickening of the synovial membrane.—From the nature of this affection, it is evident that perfect rest must constitute the only means upon which we can at all calculate for producing any benefit. Mr. Scott employs for this purpose strips of plaster, but they are not sufficiently efficacious, and, moreover, are not free from disadvantages. One of these, is their great tendency to produce excoriation, and hence to necessitate their frequent removal; and another, if possible, still greater, is, that when abscesses are present, they prevent the free escape of the matter, and become filthy and offensive in consequence. The starch bandage is an admirable remedy in these cases, as it can be so applied as both to produce the effect desired, and allow of a free discharge of all purulent matter, and, at the same time, to check its further accumulation.

Ulceration of the cartilages.—As ulceration cannot be put a stop to, but, on the contrary, is aggravated by friction, it is clear that the only means by which we can arrest or check its progress is to keep the joint in the most perfect state of im-

mobility. This constitutes the most important part of the treatment, and must not be neglected. By adopting this course, we sometimes succeed in entirely curing the disease, provided we are called upon to treat it at a sufficiently early period. But if our advice has not been sought until the process of destruction has farther advanced, and caries has, in all probability, commenced in the heads of the bones, then we have but little, if any, chance of effecting a perfect cure; and we must endeavour, by every possible means, to stop the further progress of the disease, so as to bring about ankylosis. The starch bandage is the best apparatus that I know of for restoring the joint in the first stage, and for arresting the ulceration, and securing the termination by ankylosis in the second. It may be applied either entirely round the joint, or openings may be left in it, for the purpose of applying such remedies as the nature of the case may require, or for the escape of the matter from the various sinuses. Nothing can be more congenial to the patient, or more likely to produce beneficial results, than the moderate but equal pressure which this bandage produces on all parts of the joint. "It will," as Sir B. Brodie says, when speaking of pressure in scrofulous diseases of the joints, "promote the healing of the sinuses, and by more completely preventing the motion of the joint, will lessen the chance of fresh suppuration, and favour the union of the ulcerated bony surfaces."

*White swelling.**—This disease has its origin in the cancellated structure of the bones, consequently is generally met with in those situations in which this tissue is the most abundant—viz., in the knee and elbow joints, and in the small bones composing the tarsus and carpus. The tarsus and the knee are the most frequently affected.

The treatment in this affection is much the same as that required by the last-mentioned disease, the indications at the commencement being, to arrest the progress of the ulceration and prevent the other structures from becoming affected; and, at a more advanced period, when these have become diseased, and abscesses have formed, to endeavour to save the limb by promoting ankylosis. Absolute repose, therefore, of the affected joint is of the utmost necessity, as the slightest motion irritates the diseased bones, accelerates the ulceration in them, and hastens its extension to the adjoining parts. The starch bandage will prove an invaluable apparatus to the surgeon in these cases. It readily admits of the application of external remedies, such as issues, blisters, or other counter-irritants, and also of the free exit of the discharge produced by these, or resulting from the abscesses that may have formed; while at the same time it gives to the joint the necessary support, and prevents all motion between the articulating surfaces of the bones. In cases where large abscesses have formed, it will be found of great service, by the uniform pressure which it produces, in dispersing the purulent matter which they contain, and in suppressing its further secretion, and by this means bringing the parts into the condition necessary for the production of ankylosis.

For the therapeutic treatment of the diseases of the joints, I must refer to the various surgical works, and especially to Sir B. Brodie's elaborate treatise, in which it is fully described.

Rupture of the muscles and tendons.—As the perfect restoration of the use of the limb will depend on the close approximation of the lacerated parts, it follows that in the treatment of these injuries, the member must be placed in such a position as will perfectly relax the ruptured muscle or tendon, and bring its severed extremities in close apposition, and a suitable apparatus must be employed to maintain them in this condition. The starch bandage will be found the most efficacious one for this purpose. It retains the limb in the requisite state for the perfect coaptation of the ruptured surfaces, and prevents the contraction of the muscles, upon which a separation frequently depends.

Let us take, by way of illustrating its advantages, one of the most serious of this class of accidents—viz., a case of rupture of the tendon of the rectus femoris muscle. In this, there is generally considerable subsequent weakness and lameness in the limb, owing to the inability of the ordinary remedies to keep the parts in a necessary state of extension. Now if a starch bandage be employed, it will overcome every difficulty, and fulfil every indication. During its application the limb must be completely extended, and the coaptation made, by depressing the upper portion of the muscle, and raising the

* Since writing the above, I have been much interested in reading in THE LANCET for March 14th, a report of a case of "Remarkable Disease of the Ankle-joint," related by Mr. Harding to the Westminster Medical Society, in which a marked good effect had resulted from keeping the joint perfectly motionless by means of an apparatus, formed after the manner of Mr. Smee's moulding-tablets, of a roller saturated with a mixture made by rubbing together prepared chalk and gum masticage. I need not say that the starch bandage would have produced equally good results, and with less trouble.

* White-swelling is a term that has been applied by various authors to very different diseases, such as inflammation of the synovial membrane, pulpy thickening of the same, ulceration of the cartilages, and caries of the heads of bones. It is, however, to the last that it is the most applicable, from the circumstance that the colour of the skin remains the same.

patella by means of graduated compresses. The starch bandage will also be found of great service in cases of spasmodic affections of the muscles, as in chorea, &c.

Re-section of the heads of bones.—This operation is had recourse to when we wish to remove the disease in them without sacrificing the limb. It must therefore be performed before the surrounding soft structures become implicated, and before the patient's health is seriously affected. After the operation, when the wound has nearly or quite healed, the joint requires to be confined in a certain position, and kept perfectly quiet for some time, during the formation of the fibrous tissue, by which the bones eventually become united. The starch bandage in these cases is a very useful apparatus.

In caries and necrosis of the bones also, and in the inflammation which precedes them, the firm and equable pressure which this bandage produces will be of great service in checking the accumulation of matter, and in securing the perfect repose of the limb, by which means a considerable degree of irritation will be prevented.

Congenital Deformities.—The first of these that I shall mention is spina bifida. The treatment consists in evacuating the fluid of the spinal tumour, and then replacing and maintaining the protruded membranes within the vertebral cavity. The advantage of pressure and puncture in these cases was fully exemplified by the success the late Sir Astley Cooper obtained from it in two instances.*

Although I have not had an opportunity of witnessing the effects of the starch bandage in the affection under consideration, I can but think, that if properly applied, and care is taken to protect the integuments, covering the tumour with some soft material, in order to prevent inflammation and excoriation, it would prove an exceedingly useful and effectual apparatus. It certainly recommends itself for trial.

Another frequently congenital deformity is club-foot, of which there are three varieties. In these cases, the object in the treatment is to overcome the inordinate contraction of the muscles, by which the different varieties are produced. This can be effected, in many instances, when the child is not too old, by apparatus, which both restrain the further action of the muscles, and tend forcibly to bring the foot into its normal position. In some cases it is necessary previously to divide the tendons. Most of the mechanical contrivances that are employed for this purpose are costly, and consequently beyond the reach of the poorer classes. In the starch bandage we have a cheap and convenient remedy, one equally efficacious, and therefore equally, if not more valuable.

There are certain other non-congenital deformities, produced either by the permanent contraction of the muscles or by the shortening and rigidity of the fasciæ, or by the gradual contraction of the cicatrices, resulting from burns or extensive ulceration, for which the starch bandage will be equally applicable, after an operation has been performed, for the purpose of overcoming either the contraction of the muscles or of the cicatrices, or counteracting the gradual shortening of the fasciæ. To this class belong contracted fingers and various kinds of spurious ankylosis, as of the knee and elbow joints.

The deformities arising from burns are frequently very considerable, and often perfectly irremediable. Thus the bones have been known to be dislocated, the joints firmly flexed or bent backwards, the head drawn on one side, the chin united to the integuments covering the sternum, and the thigh to the abdomen. It is always advisable to prevent these sad results as much as possible, by the application of bandages during the process of cicatrization, so as to keep up a constant extension in the opposite direction to that in which the deformity is about to be produced. I knew of no apparatus that will be found so effectually to attain this object, and with so little inconvenience to the patient or the practitioner, as the bandage under consideration. It may be applied over the ordinary dressings.

In aneurisms and varicose veins it is extremely useful. In the former, its even, but firm pressure, equalizes the circulation through the limb, and by lessening the impetus with which the blood is sent into the aneurismal sac, prevents its dilatation, and promotes the coagulation of its contents, and its subsequent obliteration. In the latter, the support it gives to the limb prevents any undue accumulation of blood in it, and enables the dilated and distended veins to contract on their contents, and propel the blood onwards towards the heart, while its firm and unyielding nature effectually secures them from all external injury.

In umbilical and ventral hernia there is no more certain

means of preventing the protrusion of the bowel than the starch bandage. It is applied in the following manner:—The little patient being suspended in the air, in the horizontal position, by two assistants, the surgeon proceeds to return the intestine into the cavity of the abdomen, and having done so, places over the hernial aperture the apex of a graduated compress, upon which firm pressure is made by an assistant. He then takes up a fold of the integuments on each side of the graduated pad, while another assistant passes round the body a linen band, about six or seven inches wide. The whole is then firmly secured by a well-starched roller.

The application of this bandage may be extended to other herniæ, both in children and in adults.

In indurated testicle its advantages are very apparent. It produces much more firm and equal pressure than any strapping can do, and does not cause that painful excoriation of the skin which this does invariably.

I might mention several other cases in which it would be beneficial; but I have already given sufficient examples to show its value and importance.

Langham-place, April, 1846.

REMARKABLE CASE OF ABSCESS OF THE HEART.

PAIN IN THE LEG THE ONLY SYMPTOM OF DISEASE DURING LIFE.

By T. HOWITT, Esq., Surgeon to the Lancaster Infirmary.

OBSERVING in THE LANCET for May 16th last, (p. 548,) the history of a "rare case of abscess of the heart," by Mr. Chance, I am induced to send the particulars of the subjoined case. I have transcribed it just as it was entered in my note-book at the period it occurred. I still possess the morbid specimen; and as it appears from Professor Owen's statement to Mr. Chance, that there is not one similar in the museum of the College of Surgeons, I purpose to deposit it there.

On November 18th, 1833, at eight P.M., I was requested by my lamented friend, Mr. John Merriman (then house-surgeon to the Lancaster Infirmary) to visit Samuel P—, eight years of age. I found him suffering from most acute pain, which he described as deeply situated towards the centre of the calf of the right leg, having commenced suddenly about twelve hours previously. So far as we could learn, it had not been produced by any external agent, he having had neither blow nor fall. Upon a careful examination of the part, we could detect neither swelling nor redness, nor any symptom indicative of inflammation, neither was there any spasmodic action of the muscles to account for it. Occasionally the pain remitted in severity. When he complained of violent throbbing, our examination did not appear to cause any increased pain; his bowels had been relieved by a dose of castor-oil exhibited by Mr. Merriman this morning; no headach, no pain in the chest or abdomen, no thirst, pulse 110;—in fact, this pain in the leg was the only complaint the boy had to make.

Supposing, from the history, that matter might be about to form under the periosteum, we directed six leeches to be applied over the seat of the pain, and small doses of calomel and opium every four hours.

19th.—Nine A.M.: No relief; the pain as acute as yesterday, yet no swelling or redness, except around the leech-bites, which had bled pretty freely. Having during the night voided two large lumbrici, he was ordered a turpentine injection, and the calomel and opium to be continued; pulse 120.

20th.—Nine A.M.: The pain in the leg still continues; his general condition is much the same, but he appears a little dull and stupid, not answering questions very readily, though quite correctly; pulse 130, more feeble. The mouth not being at all affected by the calomel, we imagined the dulness he evinced to be the effect of the opium, and mercury with chalk, combined with rhubarb, was substituted for the calomel and opium. The bowels had been twice relieved by the turpentine enema, and three more lumbrici voided.

21st.—Nine A.M.: No mitigation of the pain in the leg, nor any further evidence as to its cause; the limb preserves its natural heat and size. I directed it to be well rubbed with hot turpentine, and then enveloped in a warm poultice. In other respects, little variation from yesterday. Pulse 130, feeble.—Eight P.M.: Decided symptoms of coma now making their appearance. Pulse 140; pupils contracted; the patient lying upon his back, constantly moaning; with difficulty roused, but when roused, quite sensible, and still complaining of his leg. Ordered a small blister to the nape, and a teaspoonful of wine to be given occasionally. Bowels relieved by an enema.

22nd.—Nine A.M.: Rallied a little; less stupor; perfectly

* For a detailed account of these cases, see the second vol. of the "Medico-Chirurgical Transactions," and Cooper's "Dictionary," article, spina bifida.

sensible, and answered questions more readily; blister discharging; pulse 130. No cessation of the pain in the leg. Wine to be continued.—Eight p.m.: Much the same, but in addition he complains of pain in the bowels, which have been relieved, and are soft upon pressure.

23rd.—Nine a.m.: Considerably more stupor; when roused he answered a question correctly, but instantly relapsed; pulse 150, more feeble; pupils very much contracted. From this time he gradually sank, becoming quite insensible to all stimulants; tongue and mouth dry; lips, gums, and teeth, covered with sordes; he lay upon his back, constantly uttering a low moan; his legs and arms occasionally convulsed until the evening of the 24th, when death closed the scene.

The case being one which had interested me a good deal, and being anxious to make out, if possible, the origin of the severe pain which, throughout, had been the only symptom of any disease whatever, until the supervention of coma, with some difficulty I prevailed upon the parents to allow an inspection.

Post-mortem, sixteen hours after death.—Our attention was first directed to the seat of the pain—the calf of the right leg, where we could discover nothing abnormal, there not being the slightest alteration in any of the tissues, nor any indication of inflammation in the bone, periosteum, nerves, vessels, or muscles. Abdomen: the intestines free from any trace of disease; kidneys and bladder healthy; but all the mesenteric glands considerably enlarged, some of the largest, when cut into, containing a cheesy matter; the mesenteric vessels gorged with dark venous blood; pancreas indurated; liver and spleen healthy. Upon opening the chest, the pericardium instantly attracted our attention as appearing very much distended; and, on cutting into it, there gushed out, as near as we could guess, a pint of grumous fluid and pus, containing a number of curdy flakes, the whole interior surface being lined with a layer of cheesy, scrofulous-looking matter, apparently soft, coagulated lymph, one-sixteenth of an inch in thickness. The pericardium investing the heart was covered with the same matter, and to the same degree of thickness. On examining the external surface of the heart more particularly, we discovered a rounded eminence, situated just at the junction of the right auricle with the right ventricle, and which was darker in colour than any other portion. Upon making a crucial incision into this prominence, there flowed out about a tea-spoonful of ill-conditioned pus, with a few curdy flakes. This small abscess communicated, internally, by a small, ragged opening, with the right auricle, which contained a mixture of pus and blood; there was no communication with the sac of the pericardium; the lungs were perfectly sound. Head not examined.

The above case has frequently been named by me to many of my professional brethren, as a most anomalous one; yet in many respects it bears a striking similarity to the one detailed by Mr. Chance. The publication of such cases, although, perhaps, leading to no very useful practical result, (in the present state of our knowledge,) demonstrate to us what very formidable disease may be progressing in a vital organ, even to the rapid destruction of the life of an individual, without the manifestation of any symptom likely to lead to the detection of so fatal and insidious an enemy—a fact I have several times seen exemplified in diseases of the brain. Are we in the present case to consider the pain in the leg as sympathetic of the diseased heart?

Lancaster, May, 1846.

REVIEWS.

A Practical Manual of the General, Chemical, and Microscopic Characters of the Blood and Secretions of the Human Body, in Health and Disease. By JOHN W. GRIFFITH, M.D., Physician to the Finsbury Dispensary. London: R. and J. Taylor. 1846. 12mo.

It is a fact of some significance, that at present, no subject, whose development is subservient to the progress of medical science, attracts more attention, or (in virtue of its recent ominous advances) is more deserving of unremitting research, than the chemistry of organic bodies, and especially that of animal structures and secretions. For many years has THE LANCET shown itself to be impressed with a conviction of this truth, constantly insisting on the value of the investigation, and the practical advantages which it promises to fulfil, invariably recognising its extensive and varied applica-

tions, and omitting no opportunity of inculcating the necessity of adequately studying its results, in order to possess the qualifications of an efficient medical practitioner. By some we were deemed enthusiastic and speculative in these admonitions; but the fruits of this ceaseless iteration are daily becoming more manifest, and the profession is now everywhere admitting the soundness of those sanguine expectations to which THE LANCET was confidently and hopefully committed. Testimonies of its worth and importance are repeatedly being presented to our notice, and all those who are anxious concerning the title of medicine to hold the rank and dignity of an inductive science, have accepted the aid supplied by analytical chemistry. The first physiologists are eagerly seeking to perfect their acquaintance with the normal composition of the blood and its secreted fluids; and the best pathological observers, equally interested in this proceeding, are engaged in earnest searches into the nature and properties of diseased products. Already, indeed, they have done much by its assistance in their respective departments; the work of physiological and pathological chemistry has become so general, and the labourers are so active, that materials are constantly accumulating, and require, from time to time, well-concerted arrangements of the facts elicited, and clear expositions of the theories educed. Other indications of the success and prevalence of the undertaking are not unfrequent. The discoveries of chemistry and the microscope in medicine have been so changing and progressive, that the very reports and text-books form a curious series in medical literature, some loaded with information, and adapted to the exigencies of profound and practised inquirers, others, more rudimental, relating the most prominent facts and instructions, and so, either suited to direct the efforts of inquirers who are less deeply versed, or calculated to initiate the student. With this multitude of books we have no fault to find. On the contrary, the increase of such treatises is a source of congratulation, as displaying the kind and extent of feeling in obedience to which they have arisen, and in this spirit we gladly hail one more such publication—the unpretending little book whose title is above quoted.

In the more simple and initiatory form of text-book, it is indispensable to perspicuity that the subject should be divested (as much as is compatible with its usefulness and integrity) of redundant and irrelevant details; and the duty of compilation should, if possible, be undertaken by one, whose labours have aided the progress of the science, and who has felt the relative and absolute import of each observation as it was revealed. A truthful retrospect of the past seems to demand this. The Manual of Dr. Griffith, tried by these tests, claims from us a very favourable consideration. It completes an elementary work on the blood, and other secretions of the human body. The first Part contained a systematic account of the natural and unnatural conditions and components of the urine, and was published some time ago. Considering, as the author intends, that the two Parts are to be associated so as to constitute a whole, we must observe, respecting the disposition of his subject, that, unless he was actuated by notions of expediency or convenience, with regard to his own plans, the inducements which led him to enter upon it with a history of the urinary secretion, are not very manifest. The peculiarity, however, may be overlooked as a trivial defect of arrangement. The first Part furnishes a succinct epitome of all the important results that had been obtained up to the date of its publication, and, with some few exceptions, (which are remedied in the concluding portion,) is even up to the present level of our information.

The second Part presents the same concise and complete relation of the conclusions deduced from past inquiries into the normal composition and pathology of the blood and other secretions. The treatment of these is prefaced, as in preceding monographs on this subject, by a well-arranged description of

the properties of those proximate constituents which are common to the animal solids and fluids. The protein and gelatinous compounds, the fatty and extractive matters, and the inorganic constituents, are considered with regard as well to their microscopic as their chemical characteristics; and in these, as in other narrations, Dr. Griffith shows himself to be aware of the importance of combining the use of the microscope with the employment of chemical analysis. Successive sections are devoted to the blood and other human secretions and excretions. Their physical characters, obvious and microscopic, and, more particularly, their chemical qualities, are detailed; the adventitious ingredients which intrude into their composition are treated as their comparative consequence demands; and directions, as ample as the most searching practitioner can require, are adduced for conducting the qualitative analyses of healthy and diseased fluids. The whole is clearly and tritely written, and the two Parts are provided with four plates, presenting trustworthy delineations of the microscopic appearances described in the text. In short, the Manual is an useful addition to our stock of elementary treatises on chemical physiology and pathology, and will prove of service to those whose professional engagements do not allow them time for perusing the more comprehensive works of Simon and his coadjutors in this department of science.

BRITISH MEDICAL JOURNALS.

CASES OF POPLITEAL ANEURISM CURED BY COMPRESSION ON THE CARDIAC SIDE OF THE TUMOUR.

DR. PORTER records, in the *Dublin Journal*, two of these cases, and adds to their details some interesting observations. The first case presented nothing unusual; the second occurred in the person of a medical gentleman, and is rendered remarkable by the cure of the disease, occurring after pressure had been removed; the result being attributed to the effects of its previous application. Dr. Porter enters at some length on the advantages of this method of treating aneurism. He shows that much ignorance prevails on the subject, having evidence to show, that by some, compression of the tumour itself has been strangely enough confounded with that applied on the trunk of the artery; by others it has been tried in cases to which it was inapplicable, and in which it could not possibly succeed; and by others it has been improperly and wrongfully employed altogether: errors which our readers are not likely to commit, as the method has been several times described in the pages of *THE LANCET*.

The tedious character of the progress of the treatment he contrasts with that by ligature, and shows, that if the latter has, in this respect, a superiority, the former is infinitely more safe in practice. The inconvenience which is sometimes complained of may be diminished by a diminution of the amount of pressure, and by an alteration in its seat. In indicating the difficulties of the application of a ligature, he directs attention to a point which, though previously noticed, has not been sufficiently dwelt upon. He says,—

"There is a remarkable condition of an artery which I do not recollect to have seen described, although it must be familiarly known, and doubtless has often been a source of perplexity to every operating surgeon: it is where it forms an abnormal but close adhesion to its adjacent structures, and particularly to its accompanying vein. Every surgeon, in operating, must have observed that it was more difficult to detach from its connexions and to denude an artery in some patients than in others; and the dissection of dead subjects will exhibit the same phenomenon, if carefully sought for. I am wholly uninformed as to its exciting cause, its progress, and its course; and it would only be a conjecture to attribute it to some species of chronic inflammation rendering the cellular coat of the artery thicker and shorter, and disposing it to contract close adhesions to every surrounding structure. However explained, the result is but too evident in many

cases where arteries and veins lie in close juxtaposition, and become so mutually adherent as not to permit of separation even by the knife; or, as I have heard it forcibly expressed by a distinguished anatomist, "to possess but one and the same wall." This condition I was formerly in the habit of regarding as existing only between the popliteal artery and vein, where I had heard it spoken of, and seen it demonstrated by anatomists as the natural and ordinary state of the parts; but some years since I was led to modify that opinion by observing, in the dissection of a case of axillary aneurism, this very adhesion established between the subclavian artery and vein at the only point where the vessels came in contact, and where it must have proved a source of insurmountable embarrassment had an operation been attempted."

The author then mentions having observed similar appearances in other cases, and suggests how far this very "state of chronic inflammation" may be a predisposing cause of aneurism, and thus be present in those cases in which it would prove most embarrassing. The most practical point in the communication of Dr. Porter is, that a great amount of pressure is not required; that which he employed was barely capable of communicating an impulse from the artery to the instrument; and this may be gradually increased if found to be necessary.

ANALYSIS OF THE LIQUID OF SPINA BIFIDA.

DR. PERCY gives, in the *Medical Gazette*, the results of his analyses of two specimens of this fluid.

"1. Odour precisely similar to that of fresh brain; specific gravity, 1010°; temperature, 59° Fahr.: restored slowly, yet completely, the colour of reddened litmus paper.

"Analysis taken for 1000 grains:—

Solid residue	17.50
Water	982.50
Albumen	4.24
Indeterminate organic matter . .	4.44
Chlorine, carbonic and sulphuric acids, potass, soda	8.58
Phosphate of lime	0.24
	1000.00

"2. Was as pale and liquid as water, and contained some flocculent matter suspended; odour very slight; specific gravity between 1005° and 1010°.

"Analysis tabulated for 1000 grains:—

Solid residue	9.1
Water	990.9
Organic matter	1.5
Fixed saline matter	7.6
	1000.0°

"STATISTICS AND TREATMENT OF INSANITY AT ST. PETERSBURG BY DR. HERZOG.

"The treatment and the general management of the unfortunate inmates of the Asylum for the Insane, in the Russian metropolis, appear to be conducted on the most humane and scientific principles. From the ample tables, it appears that here, as elsewhere, the bachelor is more liable to insanity than the married man; while, at the same time, the proportion of the insane is much greater in the higher and in the educated classes of society, than among shopkeepers and the artisans and labourers of a still lower grade. More than one half of the cases proved incurable. Of those who recovered, the great majority belonged to the lower classes; and complete returns to health were especially frequent among those individuals who, at an early period of their disorder, had disturbed the public peace, and had been in consequence transferred to the asylum. The richer classes, of course, refrain as long as possible from placing their friends and relatives in such institutions, and continue to hope for a cure under imperfect treatment at home, till recovery becomes almost impossible. A full and lengthy account is given of the entire management of the institution:—"The female lunatics are chiefly busied in the household duties; while the males, during the summer months, are busily occupied with the hay harvest, and in winter, when the severity of the season confines them to the house, they manufacture thousands of pill-boxes, and articles in pasteboard, for the supply of the shops of the apothecaries. The more educated are occasionally employed in illuminating manuscripts, and some write to the dictation of others."—*British and Foreign Review*.

THE LANCET.

LONDON, SATURDAY, JUNE 20, 1846.

WE return, infinitely more in sorrow than in anger, to the flag of quackery now unfurled, and flaunting over the Royal College of Physicians.

In our present remarks we will know no names; we are tired of names; individuals are not to be shamed. We might well nigh say that there is no morality, no integrity, no high and noble spirit left amongst us. We are, if recent events are to be the test, utterly and completely degraded. Look at the Royal Society, look at the Sydenham Society, and observe what now passes in both for scientific probity and medical literature. What does FARADAY think of the late proceedings at the former? What does LOUIS think of the latter, when he sees the twaddling and obscene book of PAULUS ÆGINETA placed by the side of his own modest work? The writing which ought never to have been disinterred from its long and merited sepulture, and a book which will never die! What can our readers think of science and of medicine, if they take these things as specimens?

The noble, the exalted republic of medicine, is degraded to the lowest quackery, to the vilest and most debasing anarchy, and the heads of the profession sit by the while, idle and insensible. We say this most advisedly. Of MESMER, HAHNEMANN, and PRIESSNITZ, the first is the worst, for he adds buffoonery to folly; and yet the Royal College of Physicians have chosen to expose the members of the profession to the contagion of one tainted by this worst leprosy. If Mesmerism is to take the place of legitimate medicine, for consistency's sake let every memento of HARVEY be removed from the sight, and let a portrait and a statue of MESMER, large as life, be quickly prepared to take their place; and next, let HAHNEMANN come, and then PRIESSNITZ; for we could point out those who are still in our ranks, and who yet openly profess themselves the supporters of these mockers of the true physician.

Those who have lived seven years in the profession must have observed its rapid degradation and tendency towards quackery,—in its popular medical books,—in its appeals to the ignorant and unprofessional public, and—in the derogating and degrading remarks of many of its members on the power and value of medicine; thus it is that the faith of the legitimate practitioner has become a byword and a reproach. Titled ladies have become the abettors and enactors of mesmerism. On a recent occasion, Lord ROBERT GROSVENOR presided at a public meeting of the "English Homœopathic Institution;" Sir E. BULWER LYTTON prostitutes his talents to foster the WATER DEATH! and the ignorant and foolish of the laity are become the judges of what ought to be a learned and scientific profession.

There is only one remedy, and this is with ourselves. It is not in such proceedings as have recently disgraced the Royal Society; it is not in the publication of such trash as "Paulus Ægineta;" not in the setting up of mesmerism at the Royal College of Physicians, that the remedy will be found. All these things are closely blended; all are either open or latent quackeries. It lies in the cultivation of science, knowledge, honour, probity, and integrity, amongst ourselves. We equally and forcibly appeal to all, to the high and the low in the profes-

sion, and we say, raise one united voice against these profanations of your science and of its legitimate offspring, your noble, godlike, and beneficent art.

We have much to urge as to what the profession is, and what it must become, before it can be entirely rescued from the fangs of quackery. It must become scientific; it must cease to be mere empiricism, taking this word even in its best sense. We must follow the track of the other and more certain sciences, in their march from what the great French philosopher, M. COMTE, calls the *superstitious* ages of knowledge to the ages of *certain and fixed* science. We must imitate, not only TYCHO BRAHE and GALILEO, the great observers of *facts*, but we must follow KEPLER and NEWTON, the discoverers of *laws* and *principles*. We must observe facts in medicine, subject the objects of medicine to our glasses, to deduce laws, and to detect principles of action; the mere observer, the boasted "mere practical man," must yield to the scientific practitioner. And we are already farther advanced in this brilliant path than the overt and covert enemies of legitimate medicine will allow. When a man speaks slightly of medicine, he should at least know all that is known in the healing art; at least be sufficiently elevated to take a clear view of all that medicine and medical men have ever done for the human race. Are the abusers and vilifiers of medicine—the men who say there is little or nothing in the present sum of medical knowledge—are they the men of this class and of this position? Moreover, the public must be taught that there is something more in medicine than is dreamt of in the philosophy of the faded dowagers, egotistical *littérateurs*, and titled lordlings, who presume to judge, knowing not the while the difference betwixt an artery and a vein. We would ask one mistaken though benevolent supporter of quackery, Lord ROBERT GROSVENOR, how he can reconcile it to his conscience, at the same time to be the chief supporter of a homœopathic dispensary and of a regular hospital? One of the two must be wrong, for they are directly and irreconcilably antagonistic.

And medical men, too, practitioners must become examples of strict and unbending integrity and devotion to their profession; the higher the men and their stations, the more notable ought they to be in this respect. We do not want science only, we must have scientific probity also. We want men of whom it could be said, as it was remarked of one of the judges in the law, "as well might you attempt to turn the Thames from its course, as he from the path of honour." This was said of Lord DENMAN, who belongs as it were, by consanguinity, to medicine. We want such men, and we want such principles.

What *can* be the state of science at the Royal College of Physicians, at the Royal Society, or at the Sydenham Society? Is it not palpably of the very lowest order? Is it not calculated to scourge our profession to its very core? Is the noble idea of legitimate medicine, of scientific probity, of a worthy medical literature, extinct? Must we despair? Is there no remedy?

The one great remedy, we repeat it, is in a *sound practical physiology*, and in the right application of this to the practice of medicine. We do not mean a book-physiology, the trashy cant physiology of the day, but experimental physiology, medical or clinical physiology in its widest sense, that shall bear the same relation to medicine, which surgical anatomy, the nature of which all understand, does to surgery.

Comparatively speaking, there is no quack surgery; why should there be any quack medicine? We have said wrong, we are in error, mesmerism is a glaring exception to this observation. Mesmerism turns everything into quackery. It shuts the eyes in the head and opens eyes in the stomach; it destroys all sensation, yet induces clairvoyance; and, most blasphemous extravagance, it pretends to annihilate distance and time, and to make its victims, prophets! But, what is more to our purpose, it pretends to admit of the amputation of a limb, or the extraction of a tooth, or the performance of parturition itself, without pain. It aims at quacking surgery as well as medicine.

But let such drivel and its drivelling supporters be fully confronted by the scorn of all sane and sound men in the profession. Let the profession combine against all the quackeries, and against the modern triad particularly, but more especially against this most monstrous specimen, the mesmeric. Let us unfold another banner, and let its motto be, SCIENCE, PROBITY, BENEVOLENCE. We may yet rescue medicine out of the hands of silly lords and ladies, and writers of romances, with their culpable alliances among quacking physicians. We have only to make it HARVEIAN as opposed to MESMERIC, or to any hybrid offspring loathsomely engendered of the two. Happily this "brood of folly, without father bred" cannot in its own hybrid nature propagate its kind. Let the present race of quacks not die out in slow exposures, but let them be destroyed; and let the proposed desecration of the name of HARVEY be the date, and, in a measure, the cause, of a new era in medicine. In twenty years, the bi-centenary of the death of the discoverer of the circulation will arrive. It may be long to look for; but twenty years, though a life to an individual, is a brief date in science; and we trust that at such a time a somewhat more grateful offering will be given to his memory than has been devised for the coming occasion.

SINCE we wrote last week, we have visited the tomb of the immortal discoverer of the circulation of the blood, and have bent with reverence over the mortal remains of the most heroic and noble nature that has ever belonged to the profession of medicine. In the rustic church in which HARVEY lies buried, two centuries have almost passed with but little mark of change. The tomb built by his brother ELIAS, the rich merchant of London, is still the same as when it received the remains so dear to medicine and to science, except that time has gathered around him and his brethren, their gallant race through many generations. The last male descendants of the merchant were three sons of Admiral Sir ELIAS HARVEY, all of whom died during their father's lifetime. The Admiral himself, who commanded "the fighting Temeraire," as she was called, at the battle of Trafalgar, died full of years and honour in 1816. He left numerous daughters, but with him the direct male line of the HARVEYS became extinct. As we said, the church and the family tomb continue otherwise much the same as when the corpse was borne from the College of Physicians, in Ave-Maria Lane, and attended to Hempstead by "as many of the Fellows as were able," and when his loving gossip AUBREY saw him "lapt in lead," and "helped to carry him into the vault."

Though the village of Hempstead is not more than fifty miles from London, it is somewhat difficult of access. Even the

country folk, within a few miles of the place, are unable to give a clear direction to it, or tell the distance at which it lies. We thought this augured but few pilgrimages to the spot, or the necessary inquiries would have made it better known. This we found to be the case. The parish clerk informed us, on our arrival, that within a few years the neighbouring medical men had discovered the burial-place of their great master, and occasionally came thither, and that sometimes gentlemen from Cambridge would drive over; but as for a medical visitor from London, such a thing seemed beyond the old man's comprehension. We did expect to hear that, occasionally, pilgrims from the Continent, or from America, journeyed there; but the only foreigners we could glean intelligence of, were two Italians brought there by some member of the family, to take a cast from the monument surmounting the tomb. This indifference to our immortal dead is not creditable to us as a profession. It is unjust to the dead, and ungrateful too; for no medical man has ever lived, or can ever live since the time of HARVEY, without acquiring honour from his name, and respect as the depositary of his discoveries. It is also unjust to the living, and to those of future times, who, by such forgetfulness, are, in a measure, as it were, robbed of one incentive to great deeds, in the admiration and honour of posterity. Yet this neglectful sentiment is too rife everywhere within the boundaries of the profession; it is the truth, and we say it, though with grave regret. Look at modern works on physiology; let each one of our readers turn to that which he has been accustomed to read, and see if, in the section treating of the circulation, the name of HARVEY is even so much as mentioned. We know it will not be found in the great majority of such works. Is this right,—is it noble on the part of those who take the place of teachers? But can we wonder after this that the pilgrims to his tomb should be few and far between.

It was not always thus. His contemporaries, in the latter part of his life, and his immediate successors, were not stinting in their reverential homage. To this the handsome monument, surmounted by a marble bust, placed over his grave by the College of Physicians, and the handsome edition of his works, published at the charge of the College in the succeeding century, testify. The bust at Hempstead conveys a different idea of HARVEY from that presented by the beautiful portrait by JANSSENS, or the bust given by MEAD to the College of Physicians, to replace the statue destroyed by the great fire. The features are broader, more massive, and of a more venerable appearance than in the portrait. The beard, particularly on the under lip, is thinner, and the fine wire-woven wrinkles of extreme old age are seen in greater profusion about the countenance. We have no means of knowing positively, but, from the appearance of the head, it was probably copied from a cast taken after death.

This is hardly the place or the season to estimate the rank of HARVEY in science. It would seem preposterous to do that which may be supposed to have been done perfectly long ago. But we do not think it ever has been done to the full measure of what is his due, and therefore we throw out a hint or two of his greatness, for the consideration of his medical brethren, and men of science. To estimate the discovery of the circulation fully, we must remember, that after the revival of learning, and the promulgation of the Baconian method of

philosophy, HARVEY's was the *first* great discovery that was made. Indeed it was the first great and noble step of physical science, and though giants in mind have lived since, with all the facilities which use and example in the inductive method have given, only one greater and more complete discovery—the discovery of gravitation—has ever been made. Nor let it be forgotten that HARVEY was the first great practical master in modern science, and that his discovery derives an added greatness from this, apart from its own intrinsic merits. BACON described the *method*, HARVEY executed the first great problem.

But a noble characteristic of HARVEY lay in his love for his profession, and in his desire for the maintenance of its honour. The elder physicians looked upon the profession as a thing apart and above their individual interests, as an Idea to be ministered to, and revered by, all its members. They drew their dignity from the faculty to which they belonged, instead of seeking individual advancement as the one great point of professional life. This noble idea has been well nigh lost in modern times, but it must be restored if the profession of medicine is ever again to take its due rank. HARVEY was a bright example in this respect. During his lifetime he laboured for the honour of medicine, and endowed with his wealth the College of Physicians, presenting them with a museum and a convocation room out of his private purse. So great was his love of medical science, that though urged not to do so, he preferred to give his paternal estate to the College, rather than to leave it to his brother ELIAS, who desired it greatly. Many men have in modern times amassed larger fortunes than that of HARVEY by the profession, and have passed away, scarcely leaving a memento among the ranks from which they rose. We look for anything like the conduct of HARVEY in vain, except among his immediate successors, or in the ages near his own, when such liberality was in a manner hereditary. Let our readers mark one eminent purpose of the gift of his estate by HARVEY; it was to found an Annual Oration in praise of past and future benefactors of the College of Physicians, and this was meant, probably, by the founder, as an inducement to future liberality. Is it not humiliating, that in modern orations, though we have so enormously increased in numbers, the names to be lauded by the annual orator are almost all belonging to ages long past. Above all, let our readers, and let every member and fellow of the College of Physicians, consider whether it is not to the last degree monstrous, that such a recreant as the proposed Orator for the present year, should have to insult the old names, and to receive for the insult he will commit, as the follower of Mesmer, a gratuity from that very paternal estate which HARVEY gave to the fellows of the College—a sacred gift—with the most perfect love, and faith in their future honour. A greater desecration than the one now proposed by the President and the Treasurer of the College can hardly be imagined.

WHAT next? It is literally a fact that a project is on foot with a view to form a Company for the establishment of a "BRITISH AND FOREIGN ORTHOPÆDIC INSTITUTION." Yes, a "British and Foreign Orthopædic" Company. Has the world gone mad, that men thus presume and dare to speculate in folly? If the "provisional committee-men" have the power of seeing an inch beyond their noses, they will get their hands

out of this trap as quickly as possible, or dearly will they be made to pay for Mr. AMESBURY's "patent spine supports."

Mr. AMESBURY has some notions of practical mechanics, and has invented several curious, and even some useful machines, and he would have been an excellent cabinet-maker; we can award to him no further claim to distinction; the solving any of the problems in pure dynamics is a subject entirely out of his line, or rather, appears to be above his comprehension, and therefore it is that his anatomical knowledge has been of so little use to him, as is the case with many others, in orthopædic practice. Yet, with such qualifications he is to be the "*consulting surgeon, and general professional manager*" of the British and Foreign Orthopædic Institution. We suspect the bubble-system has had its day, and we do not find the medical men of the present era burthened with such a superabundance of cash as to induce them to risk it in such visionary and stupid schemes as the one under consideration.

The capital of the company is to be £250,000, that is, *if they can get it*, in 10,000 shares!!! Conditional arrangements have been made "*for the purchase of various interests*" belonging to Mr. AMESBURY: here the cat peeps out of the bag! Ten per cent. is promised to the proprietors on their capital "*WHEN IT IS PAID UP!!*" but how this return on the capital is to be obtained is yet to be discovered. But the whole project is too extravagantly, too grossly absurd, to demand from us an additional word of comment. Adieu, then, to the "British and Foreign Orthopædic" Humbug.

EVERY one conversant with medical matters knows well that some years ago JOHN ELLIOTSON felt it to be necessary to withdraw from the posts of Professor of Medicine in University College, and of Physician to the North London Hospital. Again and again he made it his boast that when forbidden to practice mesmerism in the College and the Hospital, he instantly sent in his resignation. He has even claimed, in some sort, the honours of martyrdom, for the spirit he supposes himself to have displayed on that occasion. In what character, then, we ask, does he appear as the Orator on the forthcoming celebration at the College of Physicians. We have no doubt he will be ready enough to boast that the change is not with him, that he will parade the fact of his being listened to, for the first time since his recusancy, by a body of professional men, as an indication, nay, as a certainty, that the profession is willing to receive him and his vagaries, in his own person, back again to its bosom.

Indeed, we ourselves admit that he is unchanged, that he is still as deserving as ever of his bad preëminence in the pariahship which he had formerly achieved. His career in recent years affords ample testimony to the truth of this. During this period, quackery has, indeed, been his inglorious characteristic. He has appealed, not to his profession, but to the public,—the foolish, wavering, frivolous portion of the public, on a subject which he himself feigns to consider transcendently scientific. Yet, let any one mark his doings, and it will be found that for the purpose of substantiating his extravagant and absurd notions, the very meanest and most meagre intelligence is pressed into the service. No idiocy is too glaring, no ignorant egotism too contemptible, to receive the most fawning welcome as constituting irre-

fragable evidence of the truth of animal magnetism; while, on the other hand, when learned and scientific persons examine mesmerism and find it to be nought, and worse than nought, their evidence against this pseudo science is not to be received, they are then, forsooth, prejudiced, ignorant, or unfamiliar with the asserted phenomena of mesmerism.

Another gross feature in his case is, that frequently unprofessional persons are inducted into the post of the physician, and engaged in conjunction with the mesmerists in curing or treating disease. We have the agreeable spectacle of a pseudo-learned doctor administering mesmerism in the morning, and taking a home dose from the lady. In fact, as mesmerism—carried out to the full extent of the fanaticism of its disciples—cures everything, and neither requires will nor skill, a mesmeric old lady will be a much more efficient antagonist to disease than an anti-mesmeric man of science. His notes of cases do not tell us, that in the cure he received the aid and counsel of Mr. or Dr. So-and-so, but the perseverance or charming enthusiasm of Mrs. This or Lady That. It would, indeed, but for his present insignificance, be a struggle for existence between this mountebank and those he once called his brethren.

In his writings of late years never does he miss an opportunity of ridiculing medicine and medical men, of stating in any given case how long a medical treatment it received in vain, and under what an array of pompous doctors the poor patient had passed without benefit. Never does he miss an opportunity or possibility of attacking the profession individually or collectively. As a class, they are, to his distempered fancy, fools and bigots, and some of the best men it contains are his most egregious specimens. But we give quotations from his trashy works, which will show what he deserves at the hands of medical men; and how he has latterly been engaged in preparing himself for the Harveian oratorship, the legitimate office of which it is to eulogize the benefactors of medicine.

Of his former colleagues at University College, it is stated, in his trumpery work, that,—

"Mammon is their god. Mammon they worship day after day. If their benches are full, they luxuriate in the sight, and count their rent-roll. They confine themselves to the dry detail of their own particular department—they move in the same jog-trot manner year after year, and if aught occurs to interfere with their preconceived ideas or premature theories, they either boldly pronounce an anathema against the enunciator of the new facts, or they *figleaf* truth, flutter through their little day, and die enveloped in their ignorance."

When, on some silly occasion, two or three medical men were claimed by an itinerant lecturer as tacit converts or as not violently opposing mesmerism, the following is their greeting:—

"Innocent imbeciles! These of all men we pity. These are the pickers-up of the crumbs their bolder brethren let fall; men who are guided by the opinions of their neighbours, and never think for themselves; who stand aloof, and ultimately locate themselves just where the popular breath may waft them. They conduct themselves just like cows in a field towards a recently erected rubbing-post. First they are suspicious and alarmed, and stand at a distance; by degrees they approach and make their awkward attacks, and lastly they quietly put it to its use."

The following passage, written in 1843, has the signature of JOHN ELLIOTSON affixed to it: and if any evidence were wanting it would clearly reveal the authorship of the preceding elegancies.

"Now that five years have elapsed, and the ordinary facts of mesmerism are, *out of the medical profession*, established and known to hundreds of thousands, the sight of a wise doctor or surgeon, so far behind the world as to be ignorant of and to doubt mesmerism, and to pour forth his silly objections, and to try his little devices to prove to us the existence of imposition in a true patient, is to me as exquisite as a sight of a little dog, very serious with its own shadow, and at last working himself up into a frenzy with it, determined to demolish it—the wicked dog, whose existence he would have all others believe."

We hope this will be noted by the "little dogs" at the College of Physicians, who are quoted as—

"Trammell'd and bound in Custom's changeless rule,
Absurd by system, frivolous by rule."

We give a specimen of Dr. ELLIOTSON's honesty in pretending to use mesmerism clandestinely, when called in by a professional man: the vituperation of the profession is an incidental matter:—

"Not knowing at that time the superiority of Mr. JOHNSON's character, but knowing the complete ignorance, and the irrational and coarse feeling, of the medical profession at large, in reference to mesmerism,—and well aware of the equally gross ignorance and prejudice of the public, fostered so assiduously by medical men, I did not mention mesmerism, presuming it would be rejected. However, without any remark, I proceeded as if to press the pit of the stomach in the ordinary way under the bed-clothes with one hand, but I took the opportunity of *pointing my fingers upon it*, and keeping them there for some minutes. The effect of *this little mesmeric proceeding* was, that the hiccup ceased for an hour."

The next quotation, referring to Dr. COPLAND, a Fellow of the College, would show that Dr. ELLIOTSON can blush for others, if not for himself.

"I really blush at the gross absurdity of the profession to which I belong, the want of common sense and judgment, and the want of common feeling and even decency, which they publicly exhibit on this subject."

Speaking of the loss of his practice, in consequence of the mesmeric humbug, Dr. ELLIOTSON naively says,—

"The medical profession was the cause of *what every honest and upright man must deplore* (!) The people were led on by the medical men. They displayed their animalism, and the million copied the proceedings of their masters. Why, every lecture delivered on the subject throughout the country was interrupted by 'the medical Chartists,' who appealed to the ignorance and prejudices of the auditory, and denounced the science as unworthy a moment's consideration, forgetting all candour and decency, and by their hootings and yellings, converting the 'Halls of Science' into temporary menageries."

We might go on ad infinitum, but we are sick of such loathsome and vulgar trash. Will the College of Physicians, after this exposure, permit the author of these slanderous libels to stand before them for the performance of one of the most honourable functions belonging to their body? We have

felt bound to write so much, in the hope of averting from the profession such a scandalum magnatum. At the eleventh hour, at the last minute of the twelfth hour, something should be done by the authorities to rescue the College from its threatened degradation. Will it be possible that Drs. BUDD, CHAMBERS, COPLAND, HALL, TODD, and WATSON, and the many other fellows of the College who have been by name singled out for vilification by this firebrand Mesmeriser, will meet him, and brand themselves impostors in the most solemn convocation, the most public consultation, as it were, of the medical year? We cannot, we will not, believe it, until the degradation has actually taken place.

MEDICAL JURISPRUDENCE.

A NURSE DISEASED BY AN INFANT.—IS SECONDARY SYPHILIS CONTAGIOUS?

To the Editor of THE LANCET.

SIR,—In the last number of your valuable journal, you deemed it your duty to make some comments on evidence given by Dr. Bull and the writer of this, in a trial which lately took place in this city, and which has been published in several of the medical periodicals, under the head "A nurse diseased by a syphilitic infant."

My object, in seeking the insertion of the following observations, is not for the purpose of vindicating myself—which would be of less interest to your readers than it would be of consequence to me,—but, laying aside personal considerations, to state this case at full length, and correctly, in which form it has not hitherto appeared.

Julia Walsh, a woman of good constitution, the wife of a peasant labourer, both bearing an excellent character, got a child to nurse, which, at the time, was in wretched health, and was observed to have some sores on the mouth, around the anus, and on the scrotum. It was also remarked that the mother of the child had an eruption on her skin, and a sore on her breast. Shortly afterwards, the nurse having perceived a sore on her nipple, and that the rash on the child became more general, went to a quack, who pronounced it to be chicken-pock, which he would readily cure, and gave her twelve pills, which made her mouth sore. Her alarms not being quieted, she remonstrated with the father of the child on her condition. He accompanied her to the man who was in attendance on her, promised to pay him for curing the nurse and child, and at the same time put his own wife under his care; from which it may be inferred that he was of opinion that they were all suffering from the same complaint. Shortly after this, she went to Dr. Ahern, of this city, who at once pronounced that both the nurse and child laboured under syphilitic disease. The symptoms which then presented themselves, as appears from his testimony, were an ulcer on the nipple, with a syphilitic rash on the breast, and ulcers at the angles of the mouth. When she presented herself, some time after, to Dr. Bull, she had, in addition, condylomata on the palate and round the anus, with tubercles on the pubes, several of them with yellow ulcerated heads.

In this state she came under my care in the workhouse hospital—where she remained about six weeks—but went home without being quite well, being anxious that her confinement, which was approaching, should not take place in a workhouse. She was soon after delivered of a child, which was covered with a syphilitic rash, and which died shortly after its birth.

Some weeks after the wife first complained, her husband was taken ill. His symptoms were several tuberculated ulcers on the dorsum of the penis, with desquamation of branny scales all over the body, and loss of hair. Of the husband it may be observed, that although he accompanied his wife to the quack, and to Dr. Ahern in the first instance, he never complained of himself, and that when he did feel ill, he made no concealment of his symptoms. A child of Walsh's, who had been previously healthy, also got condylomata round the anus and on the palate, which the mother attributed to her having been fed with the same spoon as the diseased child. She never had any symptoms of syphilis but these, and was in other respects in good health. After this statement, every word of which has been or may be attested on oath, I cannot but feel astonished that Dr. M'Ever, in his communication to you, should state

that Julia Walsh never had syphilis, though he did not examine her, and that her disease was produced by corrosive sublimate, though the quack denied ever having administered it. If the testimony of three physicians were not sufficient to prove such a fact, the birth of a child covered with a syphilitic rash should remove any doubts of their accuracy. Dr. M'Ever, however, supplies one link which was hitherto wanting in this chain of inferences, by admitting that the father of the child had syphilis some time before his marriage, which would be quite sufficient to account for the whole train of events which followed.

In looking over Mr. Colles' work on Syphilis, I was struck by the exact resemblance between all the symptoms and facts I have described, and those detailed by him in page 283, with much more clearness and accuracy.

How far this case will bear out the conclusions which he drew from his vast experience, I shall not attempt to say. But without entering on the question as to whether secondary syphilis is contagious or not, a practical question may be asked.

Is there danger in nursing a child affected with syphilitic eruption? And are we justified in saying that the almost universal opinion is, that there is danger, in such case, of the nurse becoming affected with the disease? These questions may, I think, be answered in the affirmative, even admitting that secondary syphilis is not contagious, as the modern advocates of that opinion assert that primary disease may be reproduced in parts of the body where it could be least expected, as in the mouth, on the nipples, &c., and this during the existence of a secondary eruption. There is no class of patients in which this is more likely to occur than in infants, from their attendants passing the towel with which they wash them over every part of their body, which may convey primary disease, if it existed, from one part to another. With reference to the part I took on this trial, I have only to observe, that I am not reported as alluding to Hunter's opinions, which I did at some length. And although I was not aware, and did not profess to be, of the full merits of the question regarding secondary syphilis, I thought I was safe in resting my opinion of the point then at issue (namely, the liability of a nurse to be affected with syphilis by a child at her breast) on such authorities as Sir Astley Cooper, Colles, Blundell, Hey, Travers, Reid, &c., and what to me was not of less consequence, to be sustained by the presence of a surgeon of Dr. Bull's eminence, who, I was aware, had for a long time directed his attention to this subject, and whose opportunities for observation are by few exceeded.

I have the honour to be, Sir, your obedient servant,

D. C. O'CONNOR, A.B., M.B., L.R.C.S.I.

Cork, June, 1846.

* * The subject of this letter is of so much importance to the peace of families, and the whole case involves so many questions of interest with respect to the accurate discrimination and treatment of disease, that we have thought it right to give to Dr. O'Connor's communication an immediate insertion. In the next LANCET we shall offer such remarks on the subject as it may appear to us to demand.—ED. L.

THE LATE HUNTERIAN ORATION.

To the Editor of THE LANCET.

"It will not end here, it must not, it shall not."

THE LANCET, Feb. 21st, 1846, p. 224.

SIR,—The scene enacted in the theatre of the Royal College of Surgeons of England, on the occasion of the last Hunterian Oration, must be a source of profound and painful regret to the sober-minded, reflecting members of that College, who are animated with the desire of seeing the honour of their profession, as a scientific body, sustained with rigid integrity before the nations of Europe. That an occasion consecrated to departed genius—such as is revered by scientific, intellectual men in every part of the world—should have been perverted by the official head of that institution, to the vile purposes of party strife and contention, is a foul blot upon the national professional character, and as such deserves to be denounced and execrated. Of a truth, men of science, individually and collectively, beyond the limits of our sea-girt isle, must regard the surgeons of England as sunk to the very lowest depths of professional and moral degeneracy, when the boasted "head of the profession," on such an occasion, can so far forget the high behests of Science, the reverence due to her

favoured votaries, self-respect, and the honour of the professional character, which it is their especial province to maintain.

The Council of the College have not yet disclaimed participation in that act of aggression, and until that is done, they, as well as the Oration and the Orator, are justly open to the animadversions of the profession. It was said that a vote of censure was passed upon the Orator by the Council; this has since been denied, and it is difficult to imagine in what language censure of sufficient severity to meet the delinquency could be conveyed. No official notice, then, has yet been taken of his conduct, and therein may be seen a pertinacious adherence to the principle of irresponsibility. A man possessed of the necessary ability, and of the dignity of character which the constant perusal of the volume of Nature, unfolded to the observation of the practitioner of surgery and medicine, is calculated to impart, impressed with a becoming sense of the honourable position which, as Orator upon such an occasion, he would occupy in the presence of his audience and of Europe, ought studiously to have avoided the most distant allusion to the political differences of the profession; he would have shrunk from them as a pollution of his subject, a profanation of the place and the occasion. Had he deemed it necessary to disprove a charge of fear or incapability on the part of the Council, he would have been content silently to display a moral courage, by proceeding in his duty with the undismayed tone and manner of conscious integrity and proficiency; would, in a strain of mild, but manly and expressive eloquence, have rivetted the attention of his audience upon the immediate object of their assembling—the commemoration and celebration of the master minds of the profession. He would have marked out for his audience, and especially for the junior members of it, a never-failing, although, perhaps, to many, a difficult and thorny, path to fame, in a friendly exhortation to the study of the natural sciences, and to an imitation of the labours, industry, and perseverance, of the great men whose spirits preside over the temple of science in which they were assembled. Such an orator, at the same time that he would have done honour to himself, would have shed lustre on his profession and on his country; he would have been listened to with a profound attention and respectful admiration, and he would most effectually have proved the falsehood of the charges made against the Council which he represented. But it is to be deeply deplored that the collective Council of the College does not possess a man in moral feeling sufficiently dignified and high-minded. The last Hunterian Oration must have sunk the surgeons of England immeasurably in the estimation of foreigners, who must regard them as men insensible to the claims of genius, seeing no attractions in science, no beauty in morals, but whose actions, even on great occasions, betray the characteristics of a low and vulgar taste.

It is, I believe, not to be doubted, that the Council anticipated, if they did not positively fear, a public demonstration of professional indignation at the first opportunity; and that a party was invited which might endeavour to counteract and stifle it, if possible. The Orator, however, seems to have correctly estimated the character, the spirit, of his audience; he knew there would be more reverence for departed worth than to profane that sanctuary of science by vulgar brawl and clamour; and this was proved by the uninterrupted attention given to those portions of the Oration not political. But he went there—not to render the duty due to the immortal Hunter—no, he appears to be inaccessible to sentiments of so lofty an order,—but to vindicate the Council, and to brow-beat those of his audience who had dared to complain of the injuries heaped upon them. By a resort to defiance and insult, he miserably failed, as must always the promoters of outrage and violence; but he unfolded a character, abjectly deficient in the nobler qualities of the mind. It is but justice to the insulted portion of that audience to say, that despite the injuries and insults that had been heaped upon them, they went there prepared to render the homage accorded to departed greatness; and, but for the exasperating language addressed to them, better feelings would have prevailed, and the sanctuary of surgical science would not have been violated. With the Council alone, then, must the disgrace of that day remain—it belongs only to them. I had encouraged a hope that, ere this, a public meeting of the members would have been convened; that the last Oration would have been publicly condemned as an indignity to the profession—a foul blot upon the national professional character; and that another would have been delivered, appropriate to the occasion, to retrieve the lost honour of the profession.

If the surgeons of England cannot yet obtain their political and social rights—if the Council still offer them indignities

and insults—if they cannot yet command the practice of a more refined morality in the official head of their institution,—they should show to the world that there are men amongst them who will not tamely submit to be branded as inferior—who, if they cannot rise superior to their professional brethren, in other parts of the world, in scientific attainments, moral excellence, and a due respect for the memory of illustrious men, will not be sunk below them, especially by men whose duty it is jealously to preserve the national professional honour. They should also show that they possess, and are ready to exercise, the power to visit this public delinquency as it deserves; that a mere vote of censure will be too poor and meagre an atonement; that henceforth they will abjure association with men who proclaim themselves so utterly lost to every sense of the dignity of their office, of public decorum and public justice. The charm by which the public are, as it were, spell-bound in the belief of the superiority of pure surgery, can easily be dissolved; and it is high time that the practitioners of this great kingdom arose to a proper sense of their true position in society. Those who possess the double qualification from the College and the Hall, are undeniably, as a class, the superior men. By professional education, general acquirements, and numbers, they constitute the medical profession of England, in this the middle of the nineteenth century; and their own supineness alone perpetuates the erroneous impression on the public mind that they are the inferior class. Not to resent, not to endeavour to counteract, this injustice, is to deserve it. I would say to these practitioners—"Represent the claims of your class to the public, and I know that public will soon perceive the fallacy they have so long encouraged and cherished." The relations of the medical profession to the community at large are as yet but imperfectly understood in society; and the public appear not to be duly impressed with what they have a right to expect in men who offer themselves as candidates for their confidence and patronage. On a subject so vitally important to the best interests of the community, it is the duty of the profession to enlighten them, and the information will be received with avidity. If the bulk of the profession be made up of men of merit,—of unobtrusive, retiring character,—these are not men to be trampled down. They should be reminded that silence now is criminal—that it is treason to a great and noble cause.

There are times when men assert their claims, and the grounds of their claims, without incurring the charge of either egotism or arrogance; and such becomes incumbent on them as a peremptory duty, when borne down by injuries and injustice. As the Council of the College have not yet disclaimed participation in the insults of the Oration—as they have not voted the retirement of the Orator from his office of councillor—they have made the affair their own; and the odium, that on a great public occasion, which does honour to the profession of this country, when conducted with becoming ability, decency, and decorum, they have assumed an attitude in the face of Europe, painfully disgusting to sober-minded, right-thinking men, degrading to the professional character, and indelibly disgraceful to themselves.—I remain, Sir, yours respectfully,

Oakham, Rutland, May, 1846.

A MEMBER OF THE COLLEGE OF
SIXTEEN YEARS' STANDING.

THE HARVEIAN ORATION.

To the Editor of THE LANCET.

SIR,—I beg you to believe that some of the Fellows of the College of Physicians who have signified their intention of attending the dinner to be given at the College on the day of the delivery of the Oration, would be the last persons in the profession to do, say, or write anything in honour of mesmerism. The dinner is supposed to have no connexion with the Oration, or with Dr. Elliotson. What the real object of the dinner is, one cannot pretend to say. I presume it is among the *Secretæ Collegii*, of which no one dares to speak.

It is conjectured that Dr. Elliotson will say nothing of mesmerism; but one thing is clear, that whatever is said in the College of Physicians, on any subject, is of no consequence anywhere else. There never was a body so completely dead and buried, without being either respected or regretted by any living man. It must be acknowledged, however, that it beats St. Andrew's, and even the hungry German colleges, in the sale of the title of *doctor*, by which it is at present chiefly known to the public.—I remain, Sir, yours faithfully,

London, June, 1846.

ONE OF THE DOCTORS.

** The distinguished author of this communication has forwarded to us his name and address.—Ed. L.

HOUSE OF COMMONS.

Friday, June 12th, 1846.

THE MURDERS IN NORFOLK.

Mr. MONTAGUE GORE said he wished to ask the right hon. baronet, the Secretary of State for the Home Department, whether he had received any report with respect to the cases of poisoning in Norfolk, and also, whether it might not be proper that the Registrar General should issue instructions to the registrars of districts not to issue any certificate of burial in cases of sudden death where no inquest had been held?

Sir J. GRAHAM, who spoke in a very indistinct tone, was understood to say that the subject to which the hon. member referred, and the question he had put, were of very considerable importance. The investigation before the coroner in Norfolk had, it appeared, closed; but he (Sir J. Graham) had not yet received any report upon the subject. With reference to the registrars of death, it was their duty to obtain the certificate of the householder of the place in which the death occurred, containing a statement of the cause of death. Positive instructions had been issued to the registrars to be cautious in the performance of their duty; but still it was not the duty of those persons to refuse to enter any death. He thought, on the contrary, that the refusal of the registrar to enter any death, without his entertaining any suspicion, would be vexatious and reprehensible. He would take that opportunity of stating what he considered a very serious cause of complaint; he alluded to the infrequency of inquests throughout the country. In the case to which the hon. member had referred, no less than twenty persons had died, there was every reason to believe, from poison administered by one individual; and yet in no one of those cases had an inquest been held. Now, by law, any person having reason to think that a death had occurred under suspicious circumstances, was entitled to call on the coroner to hold an inquest. But within the last few years, there had arisen a disposition, at the courts of quarter session, to dispute the payment of the charges of coroners; and the result was, that inquests had not been held in a great many cases in which, in his opinion, they ought to have been held. He understood that the magistrates of Devon had come to a resolution not to allow the expenses of coroners in cases in which verdicts of "Died by the visitation of God" had been returned. (Loud cries of "hear, hear.") The consequence was, that a coroner of that county had refused to hold an inquest in a case at Ilfracombe, in which it was alleged that an inquest ought to take place. That refusal of the coroner was at present under the consideration of the Court of Queen's Bench, and the resolution of the magistrates would also be brought before it. He (Sir J. Graham) should repeat, that, in his opinion, that determination not to allow the expenses of coroners had operated most injuriously with reference to the performance of the duties of those officers. It certainly appeared to him, that the law, as it at present stood, ought to be more generally carried into effect: if duly carried into execution, it would be found effectual.

MEDICAL NEWS,

FACTS, NOTICES, AND REMARKS.

ROYAL COLLEGE OF CHEMISTRY.—The ceremony of laying the first stone of the new laboratories of this institution, was performed on Tuesday, the 16th, by His Royal Highness Prince Albert, the President of the College, in the presence of the Council and Members. The Prince was attended by the Marquis of Abercorn, the Earls of Clarendon, Ducie, Antrim, Viscounts Palmerston, Sandon, Ebrington, and Newry and Morne, Chevalier Bünsen, Charles Druets, Esq., the Bishop of Durham, Norwich, and Oxford, the Dean of Westminster, the Right Hon. W. Bingham Baring, M.P., Richard Cobden, Esq., M.P., John Bright, Esq., M.P., Thomas Wyse, Esq., M.P., William Marshall, Esq., M.P., Hon. Colonel Cathcart, Colonel Macdowell, Sir J. Clark, Bart., Sir C. Lemon, Bart., M.P., Sir R. Throckmorton, Bart., Sir R. Westmacott, Sir Geo. Cayley, Professors Brande, Graham, Wheatstone, Redwood, Hofman, Blyth, Drs. Paris, Henry Holland, Prout, Southey, Grant, Pitman, and Spurgin. There was a brilliant attendance of ladies. His Royal Highness having placed a history of the college &c. into a cavity of the stone, and laid the stone, Lord Clarendon and the Bishop of Oxford addressed the Prince, and his Royal Highness said,—"My lords, it has given me great pleasure to lay this foundation stone, and I have much satisfaction that I have been able in any way to promote the establishment of a College of Chemistry. I believe that

a School of Practical Chemistry has long been wanted in this country, and I am satisfied that under its distinguished Council and talented officers this College will supply that want. I am sure that when its importance is duly appreciated by the British public, it will be well and liberally supported. Independently of its utility in a scientific point of view, and as affording instruction and a profession to a great number of young men, the nation at large must derive the greatest advantages from it in the improvement of our arts, manufactures, and commerce, and I am sure I may confidently add, our agriculture. I beg to assure the Council that they may at all times command my best assistance in carrying out their views, and that whenever my services are required, I will do all that is in my power to promote the interests and secure the prosperity of the College.

HYOSCYNAMUS NIGER.—*Mr. Editor:* I have been informed, by several persons, that Dr. Lindley, in his Lectures, has made some objections to a paper of mine on *hyoscyamus niger*, which appeared in *THE LANCET*, 1844, and as the mode of his animadversions has been variously stated, I beg of Dr. Lindley to do me the honour to publish in *THE LANCET*, what he may have said before his class of me and of my paper.—I am, Sir, your obedient servant,
JOSEPH HOULTON.

MURDER OF FOUR PERSONS BY POISON.—Since the public mind was startled by the horrible disclosures in Norfolk, four persons have died, and several others suffered, from the effects of poison wilfully administered in food by Mary Cullen, a sister of three of the deceased persons, and who has confessed the crime, and been committed to Wexford gaol. The poison (arsenic) she stated that she had bought on two separate occasions, on the pretext "that she wanted it for the destruction of rats." When will human life cease to be "a drug," and be protected by the legislature, by a prohibition against the indiscriminate sale of dangerous drugs.

COUNTRY PRACTICE OF DUBLIN DOCTORS.—We lately noticed a paragraph-puff inserted in a Belfast paper, announcing that Dr. Stokes would visit that town on a certain day, and remain there some hours. We also informed the uninitiated that these morsels of interesting intelligence are furnished, either directly or indirectly, by the parties noticed in them; that they are, in fact, disguised advertisements, and liable to be charged as such at the stamp-office. It seems, however, that in this particular instance we erred as to the source of the announcement, as we learn from a correspondent who was concerned in the management of the case which led to it. He states, and we, of course, place implicit reliance in his statement, that "Dr. Stokes had no more part in that announcement than he had," and that when told of it, "he expressed his most unfeigned dissatisfaction and astonishment," and that "by no possible means could he have been the instigator of the paragraph." In fact, to make a long story short, we learn that "that paragraph emanated from a member of the family of the patient, who did it in the most benevolent and unblamable spirit, in order that any benefit to be derived from the counsels of Dr. Stokes might be enjoyed by others;" so the doctor stands acquitted of this charge, and we stand convicted of having made it,—all which will, we hope, prove satisfactory to those pensive gentlemen who shudder at our editorial enormities, and cheer the hearts of those sentimental men of gravity, who, whenever we laugh, will have it that we are laughing at them. But the benevolence of this Belfast gentleman! How considerate, to enable his more economical townsmen to avail themselves of so invaluable an opportunity! Having, however, made amends for our inadvertence, after our best fashion, we have to express our fears that offence has been given where it was not intended. In alluding to the practice said to be pursued by some metropolitan practitioners, of holding medical levees at hotels in country towns, it seems that we have been guilty of stumbling on the truth. Now, in discussions on medical ethics, the truth is not best to be told. On the contrary, if there be the slightest risk of its proving inconvenient to exalted characters, it is to be religiously eschewed; and we, not having this maxim at heart, have sinned. We must, however, endure. The question, as we said before, concerns our provincial brethren more than it does us, and will concern them more presently when railways smoothe the road from town to country. We tell them plainly, and in good time, to begin to look about them, and to consider better than they do the policy of lending themselves to any system which is calculated to place them in subordinate positions. It may perhaps answer for a young man to boast of his consultations with metropolitan meteors, but men of standing are not served by assisting at such displays.—*Dub. Med. Press, June 10.*

COUP DE SOLEIL.—The daily prints have recorded two instances of death from sun-stroke, during the present intensely hot season,—one at Kingsley, and the other at Netherton; and of one case, though not fatal, which occurred in Regent-street, London, on Friday, June 12th.

ROYAL OPHTHALMIC HOSPITAL, CHARING-CROSS.—The twenty-ninth annual meeting was held on Monday, June 15th, the Duke of Richmond in the chair. According to the report, 4187 persons had been relieved by operation &c. during the past year, and 1486 restored to sight. Of the whole, 221 were in-patients. Total receipts for the year, 695*l.* 1*s.* 4*d.*; the expenditure having exceeded this amount by 38*l.*

As we claim the gallant Sir Harry Smith as one of the members of a medical family, the following anecdote is accordingly admissible in our pages:

"THE CHILD IS FATHER TO THE MAN."—When Sir Harry Smith was a child, six years of age, his father had a horse to sell. The animal was so thoroughly vicious, that, when a purchaser appeared, no one dared to mount him. On one occasion, a military officer went over to Whittlesea to view this redoubtable steed; and wishing to see its paces, he requested the man who led it to jump up and go through the process of a walk, a trot, and a gallop. As the man evinced a very prudent reluctance to do this, little Harry, who was present, declared that he could manage the horse, having been on its back before. His father had faith both in his word and ability, and master Harry got his "leg up," and managed his charger like a young Alexander on another Bucephalus. It was this act of courage that, through the officer who witnessed it, led to Harry Smith's entering into the army.

HOLLOWAY'S FRIEND.—The temerity of THE LANCET, in daring to impugn the conduct of such a man as Dr. Bright, is really astounding. It is abundantly obvious that these low, scurrilous, and ungentlemanlike medical periodicals, must be put down. No character, however exalted, no individual, however distinguished, is safe from their ribaldry and abuse. The highest honours which her Majesty can venture to bestow, public patronage the most discriminating and judicious, the unanimous suffrages of disinterested and consummate critics, afford no protection against these revilers of all that is great, virtuous, and adorned in our profession. If these self-appointed censors confined their censorious remarks to less esteemed and more obscure persons, we should not perhaps complain; but to insinuate that those who consider themselves to be the heads and *élite* of the profession could say or do anything wrong, is absolutely intolerable. Even supposing for a moment that Dr. Bright patronizes Professor Holloway, is there any thing very culpable in that? The professor may be possessed of qualities which we overlook, but which a more sagacious observer readily distinguishes. Besides, we should be glad to know whether or not a man of character, standing, and reputation, is to be debarred from resorting to every legitimate method calculated to sustain him? Finally, is it not a fact, that when, in the forest, the younger and more vigorous of the quadrumana are ascending lofty trees, the more settled and less youthful seize them by the caudal prolongations of their spinal columns, and so maintain a position not otherwise to be secured. Thus the encouragement bestowed on charlatans by certain practitioners admits of explanation, and perhaps of excuse.—*Dublin Medical Press, June 10.*

PROFESSIONAL ETIQUETTE.—Dr. Joel Lewis, of Pittsburgh (United States), an eminent physician, who flourished there twenty-five or thirty years since, had a valuable cow, which became sick and seemed likely to die. He asked an Irish servant who lived with him, if he knew anybody who followed cow doctoring. "It's meself diz that same," said the man, "there's Jemmy Lafferty can cure any cow in the world, barring she's at the left." "Well, then," replied the Doctor, "go for Lafferty." The cow doctor accordingly came, drenched and physicked the brute for four or five days, in the lapse of which time he waited on Dr. Lewis and pronounced her cured. The Doctor, greatly delighted, put his hand to his pocket book. "Well, Lafferty, what do I owe you?" "Owe me!" replied Jemmy, drawing himself up with great dignity, "sorra the haporth! We doctors niver take money of one another." "My first impulse," said the Doctor, while telling the story, "was to kick the fellow out of the house, and throw his fee after him, but on second thought, the whole affair seemed so ridiculous that I bowed him my acknowledgments with as much gravity as I could assume, and as soon as he left the house lay down on the carpet, rolling over and over to indulge the fit of laughter which I must give way to or burst."

We have received from Greenwich a certificate, of which the following is a copy, dated January 8th, 1845; forwarded to us in illustration of the practice of druggists to act as legally qualified medical practitioners:—

This is to certify that George Booker is very unwell, and has been so ever since last Thursday; he has an eruption upon him, which, at present, has every appearance of small pox. In a few days I shall be able to decide whether it is so or not. I have from time to time supplied him with medicines. Of course he is rendered fully incapable of following any employment, and therefore is under the necessity of declaring himself on his club.

W. HANIMAN, Dispensing Chemist.

EXCLUSION OF MEDICAL PRACTITIONERS FROM THE ENGLISH CLUB AT ROME.—A correspondent at Rome writes to us, without signing his name, to complain of the exclusion of medical gentlemen from the English Club lately established there, and this without any assigned reason; but if the club be of so questionable a character as he insinuates, this exclusion is a matter of high congratulation rather than otherwise.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, June 12th, 1846:—P. H. West, J. E. Watson, J. Smith, J. D. Simmie, A. M. Young, J. Whicher, J. T. Rowland, E. Reckitt, W. H. Ransom, J. Masters, and G. M'Carthy.

APOTHECARIES' HALL, LONDON.

Names of Gentlemen who obtained Certificates of Qualification to practise as Apothecaries, on Thursday, June 11th, 1846:—Michael Walling, Kendal, Westmoreland; John Kemphorne, Bodmin, Cornwall; Lewis Bossy, East-road, City-road, London; and Henry Isaac Fotherby, Louth, Lincolnshire.

CORRESPONDENTS.

The report of the case which was forwarded to us by Mr. W. T. Robertson (Green-hill, Grantham,) has been accidentally mislaid at the printing-office. In a few days it may be discovered and published.

In the present state of the law, the diplomas which *Medicus* (Southwark) has described, do not confer on their possessors any right in England and Wales.

We have received the report of the inquest at Loughborough.

If the letter of Mr. George had come from a practitioner of medicine, his positive opinion that certain symptoms of disease "could only have arisen from" a particular cause, (which he names,) we might have given to it a place in our columns; but it would be useless to raise a controversy upon the non-professional opinions which it contains. We may take this opportunity of observing, that some important errors might have been escaped if the post-mortem examination had been confided to a pathologist who was a stranger, not only to all parties concerned, but (until the inquest was held) even to the alleged facts of the case.

The letter of Dr. Ferguson shall be published next week.

S. S. K.—We know not what sort of work is indicated in the subject, "Vision and the Eye," whether one on optics, or on the anatomy and physiology of the organ, or on its treatment under disease. If our correspondent would procure, through the medium of some friend in London, a catalogue of their publications from the various medical booksellers, he could probably form an opinion on the subject of this question for himself.

A Graduate of Trinity College, Dublin, will be enabled to ascertain the mode of incorporating the various parties whom he names, on examining, when published, the next measure of Medical Reform that is laid before Parliament. The opportunity will occur before the close of the present session.

The paper of Mr. Charles D. Arnot has been received.

A Subscriber.—The elixir of Stoughton is an alcoholic solution of the medicinal principles of wormwood, gentian, cascarilla, and aloes. The relative proportions of these agents are not given in the French Pharmacopœia.

A correspondent has forwarded to us the circular of a new hospital and dispensary in Birkenhead, termed the Ladies' Charitable Institution, which we have preserved for future remarks.

Inquiry shall be made on the subject named by Mr. Alfred Bower.

The necessity for employing the test proposed by Mr. Atkinson so rarely occurs, (or would be thought of only when too late for application,) that we feel assured it would be useless to propound the suggestion in print.

A Looker-on.—The disgraceful conduct of Dr. Frederick Bird, in prompting Mr. Prendergast in his attack on Mr. Waterworth, is under our attention. We should hardly have thought it possible for a public lecturer to have given such indecent support to one of the promoters of the water-death.

THE MILITIA will not be called out under the existing law.

Communications have been received from—Mr. Tennent, (Brighton); A Subscriber, (Hereford); Dr. McCormack, (Bancrana, Donegal); Mr. Balfour, (Edinburgh); Mr. F. D. Walsh; Mr. Camden; Mr. Gibb; Dr. J. A. Wilson; Mr. Houghton, (Dudley); Dr. Basham, (whose request has been complied with); A Militia Medical Officer; Mr. Wilbraham; Dr. John E. O'Reilly, and Mr. Carrill.

The communications of other correspondents shall be acknowledged next week.

NEWCASTLE-ON-TYNE INFIRMARY.

CASES IN THE PRACTICE OF DR. WHITE, PHYSICIAN TO THE INFIRMARY.

LUPUS—EMPLOYMENT OF NUMEROUS REMEDIES, AND FINAL CHECK TO THE DISEASE.

Reported by CHARLES J. GIBB, Esq., House-pupil.

EDWARD R—, aged twenty-six, a servant, unmarried, of tall and slight make, with light hair and eyes, and a fair, thin, transparent skin, of temperate habits, and healthy descent.

July 20th, 1845.—Has a lupus affection of the face, which covers most part of the left cheek, upper lip, and nose, and encroaches to a slight degree upon the contiguous part of the right cheek, in the centre of which there is a cicatrix, marking the former extent of the ulcer; the ulceration is below the level of the surrounding skin; has a dark, unhealthy, even surface, and when exposed to the air for any length of time, becomes covered in many places by a thick scab; the discharge is fetid and sanious; he has little pain, and does not find his health materially affected.

History.—A small pustule appeared near the left ala nasi in December, 1839, and after discharging for some time, began to spread slowly. He was then otherwise in good health, had medicine prescribed him, and spent a few months at Harrogate and other springs, but without any effect upon the progress of the ulceration; and when he became an out-patient here in January, 1841, it occupied the nose, and most of the left cheek, and had entered upon the right. He was given alterative aperients, with a calomel lotion to the sore, until all the secretions were freely produced, and then had administered the liquor potassæ in large doses. This, however, had little or no effect, and it and the external application were changed in the course of a couple of months for the Plummer's pill, and iodide of potassium in the decoction of sarsaparilla, with the nitrate-of-mercury ointment. These medicaments improved the appearance of the sore, but did not very perceptibly lessen its size; and after having used them for four months, they were omitted on account of his being seized with an erysipelas of the face, (which left him in no better condition;) and as, after this, he did not attend very regularly, he pursued no definite course of treatment. In April, 1842, he was admitted an in-patient. The ulceration, occupying most part of both cheeks, had corroded away the point of the nose, and extended deep along the septum. He took the decoction with small doses of the bichloride of mercury, using it likewise as a lotion, but with very little effect. His gums were then kept sore by calomel for six weeks with considerable benefit, he having at the same time the ointment of white precipitate and protonitrate of mercury as alternate applications. Upon omitting these he recommenced the bichloride and decoction, with a powder of arsenic and calomel to sprinkle over the ulcer, and after continuing them for a long time, he became an out-patient, with the ulcer nearly half its former size. Since then, he has attended at intervals of a few months, and had every imaginable plan of treatment fairly tried—the arseniates and the iodides with their combinations, the vegetable tonics, and a host of simple and compound applications, but with little or no permanent improvement. The ulcer has been almost stationary for several months. He uses the naphtha ointment to it, which agrees well, and keeps it pretty clean, and he takes a little of Gregory's powder when the state of his secretions needs it. States that he had ophthalmia in early life, but no ailment since, until the present; has never had venereal disease. Ordered to continue the ointment, and take a tablespoonful of cod-liver oil thrice a day.

Sept.—Evidently improved; ulcer smaller, and less angry-looking. The oil agrees well, and keeps the bowels in a natural state.

Oct.—Ulceration removed from off the right cheek; has less soreness and uneasiness in the face, and his health continues very good.

Nov.—Doing exceedingly well; much less discharge from the nose, and the ulceration on the cheek and external surface of the nose is of but half its former size, and quite superficial.

Dec.—Stouter and more robust-looking; ulceration confined almost entirely to the nose; cicatrices rather livid, but not much sunken or contracted.

Jan. 1846.—Cheeks entirely cicatrized; the extremity of the nose is lost; a small ulceration around the left meatus is No. 1191.

all that is visible. To continue and increase the dose of the oil.

Feb.—External ulceration entirely healed; cicatrices of nose tender, but those on the cheeks hardy, and not so very observable; a slight ulceration and soreness of the internal part of the left nostril alone remains.

April.—The inside of the nostril continues a little ulcerated; the cicatrices are assuming the natural florid hue of the healthy face, and, considering the extent of the ulceration, are surprisingly free of the usual puncturings and depressions that follow the healing of such sores.

Remarks.—The cause of the ulceration was undoubtedly constitutional, and yet no mischief was traceable in any of the viscera, and he had had no syphilitic affection. The thin transparent skin and general conformation of the body bespoke a scrofulous tendency, and such would seem to have led to the development of the disease, as the affection yielded to an antiscrofulous remedy, which, although not generally esteemed so powerful as some of those previously used, seemed peculiarly suitable to his diathesis, and would appear to have corrected that humoral derangement in which the disease apparently resided. Some portion of praise must also be accorded to the naphtha ointment, which, before the administration of the oil, had, in some degree, cleaned and lessened the size of the sore; and it has been found a very valuable application in many of those intractable ulcers.

* * Mr. Gibb makes no comment on the action of the arsenic, under the use of which the first tendency towards recovery appears to have been manifested.—Ed. L.

WESTMINSTER HOSPITAL.

CATHETER BROKEN IN THE URETHRA; REMOVED FROM THE BLADDER BY LITHOTOMY.

Reported by FREDERICK WILDBORE, Esq., M.R.C.S.E., House-surgeon to the Hospital.

WILLIAM G—, a shoemaker, fifty-three years of age, a very stout, well-conditioned man, was admitted into Mark ward, April 11th, 1846, under the care of Mr. Hale Thomson. He stated that a portion of a gum-elastic catheter, two inches in length, was in his urethra, behind a stricture very far down, from which he had suffered for twenty years. He had been an inmate of the Westminster Hospital at three several periods—viz., twelve, eight, and five years ago—for this affection, since which, the stricture had been so troublesome, that he had daily to pass a catheter himself. For the last seven years, the urethra had become so thickened and closed up, that nothing but a small-sized catheter (No. 3) could be passed into his bladder. It was in using this instrument, two days previous to his admission, that a portion broke off, and was retained apparently very near the neck of the bladder. For several years past, he had experienced great irritability of that organ, and all the symptoms of diseased prostate; there had been a constant discharge of mucus with the urine for the last five years. The usual symptoms he had experienced during that period were, on his admission into the hospital, but little, if at all aggravated; he seemed to suffer merely from the alarm of what might be the consequences of the accident. To allay the irritation of the bladder he had so long suffered, a decoction of the pareira brava with liquor potassæ, was ordered to be taken three times a day, and a tepid bath every other night. For three weeks, this treatment produced so much tranquillity, that it began to be doubted whether a portion of the catheter had really been left behind, as was asserted, especially as nothing could be detected when a small staff was passed into the bladder. After this period, however, the irritability of the bladder gradually increased; the mucus was passed in very large quantities, and became streaked with blood; the desire to make water was incessant, and the pain at the neck of the bladder most excruciating. Immediately after voiding his urine, he complained of a sensation of the most tormenting itching over the whole surface of the perinæum, for which he tore himself with his nails in the most violent manner. He could at last only pass his urine in drops, and that only in a kneeling position, with his head pressed firmly against the bed, and he declared that every drop he voided produced the sensation of boiling water passing from him. Under these circumstances, although nothing could be detected by sounding the bladder, the lateral operation was determined upon on

the 12th of May, and was performed by Mr. Hale Thomson in the usual way, in the presence of Messrs. White, Liston, Lynn, and others. Considerable difficulties presented themselves, from the impossibility of introducing a moderate-sized staff—the cartilaginous state of the urethra, and the great depth of the perinaeum of so fat a man. With care, however, a scalpel was carried along the finger by the side of an exceedingly small staff, and the bladder was opened in the usual manner. On introducing the finger, the catheter was found lying across the bladder, and very tightly grasped; it was, however, easily removed, though completely coated with the triple phosphate throughout its whole extent. A gum-elastic tube was placed in the wound, and the patient removed to bed. A slight rigor was experienced immediately after the operation. Twenty drops of Battley's solution in an ounce of camphor mixture were given. At eleven p.m. the pulse was 108, soft, and full, and one grain of acetate of morphia was given.

13th.—Nine a.m.: Passed a good night, and is free from pain; urine flows freely through the catheter, though loaded with blood and mucus; pulse 108; skin moist and perspiring. Ordered, a saline aperient, which acted upon the bowels; and the morphia to be repeated at bedtime.

14th.—Urine passes freely through the catheter, and has less blood and mucus in it. Barley-water and tea the only diet.

15th.—General aspect natural; pulse 96; irritability of the bladder greatly decreased.

16th.—Gum catheter replaced by a silver tube; urine passes as the day before.

17th and 18th.—Irritability of the bladder much lessened, though the urine is of a dark coffee colour, and contains a large quantity of blood and mucus.

19th and 20th.—The patient perfectly easy; pulse soft, 96; skin moist; the urine flowing freely through the tube, now, for the first time, gives an acid tint to litmus paper.

21st.—Symptoms much the same, the urine continuing slightly acid.

22nd.—Tube was removed from the incision in the perinaeum, having been kept there nine days. A gum-elastic catheter was placed in the urethra, and the water flowed continually through it.

24th.—All the urine now flowed from the urethra, the wound in the perinaeum closing rapidly, no water having passed by it since the day before. On the

26th.—The catheter was finally removed from the urethra; and on

June 3rd.—He was ordered to get up.

8th.—The wound in the perinaeum quite closed; the urine passes in a small stream, and is acid; but some little irritability of the bladder still remains. From the moment of the operation to the present date, not a single bad symptom has occurred, save the slight rigor on the evening of the operation, and a little obscure pain on the two following mornings over the pubes. The treatment consisted of opiates, hyoscyamus, colicum, pareira brava, and acidulated drinks.

15th.—The man is now quite well, with the exception of the stricture, which is already much benefited by the treatment pursued for its removal.

24th.—Ordered to be discharged. Cured.

Remarks.—In lecturing on this case, Mr. Thomson remarked that it presented all the untoward circumstances that were usually met with in those subjects considered the most unfavourable for lithotomy. The difficulties might be thus enumerated:—A large fat man, who, thirty years ago, having had gonorrhœa, and subsequently abscesses in the perinaeum, had become the subject of confirmed stricture, from which he had suffered incessantly for the last twenty years. The sedentary habits incidental to his trade, (a shoemaker,) had aggravated his sufferings to an extraordinary degree, and latterly diseased prostate had ensued. He had so often suffered from retention of urine, that the bladder had no doubt become thickened from its long-continued efforts to overcome the closed urethra, so that great thickening and disease of its mucous membrane were to be considered as fully established. In addition to this, the impossibility of detecting the foreign substance in the bladder by the sound, the knowledge that diseased prostate gland so frequently presented the symptoms attendant upon stone in the bladder, and the extreme smallness of the passage precluding the possibility of a proper-sized grooved staff being introduced to cut down upon—all these circumstances, he said, presented a case almost unique as to difficulty. Very fortunately, he was enabled to avail himself of the great experience and sound

judgment of his friend Mr. Liston, at the moment he was about to resort, at the man's own request, to an operation. Mr. Liston having been invited to see the case, fortunately came, when his (Mr. Thomson's) colleague, Mr. White, and himself, had determined at once to accede to the poor man's earnest entreaties for relief. Mr. Liston did him the favour to hold the staff, and his valuable assistance was most serviceable. One peculiarity in the after treatment, it would be observed, was the keeping a silver tube in the wound for nine days, a passage being thus afforded for the mucus and bloody urine that the diseased urethra would not allow of. He had another object in view for so long retaining the tube in the wound, and this was, to afford time for the urethra to recover itself from the irritation to which it had been so constantly subjected for a long period. The plan was most successful, for on introducing the catheter the first time, nine days after the operation, it passed so easily that the man would not believe it was in the bladder until he saw the urine running through it, and he then declared himself better, in every respect, than he had been for a great number of years.

BATH UNITED HOSPITAL.

STRANGULATED INGUINAL HERNIA; ULCERATION OF THE INTESTINE; OPERATION; RECOVERY.—REMARKS ON SUBSEQUENT TREATMENT, AND DIVISION OF THE STRICTURE IN HERNIA.

Reported by J. W. BROWN, Esq., F.R.C.S., Surgeon to the Hospital.

JOHN W— was brought into this hospital about nine o'clock on the evening of September 25th, 1845, with a strangulated inguinal hernia. The integuments were much swollen, greatly inflamed, and the whole abdomen was tender upon pressure. He had vomited frequently, but not fecal matter. The hernia was of long standing, but the existing strangulation was caused by his wearing a truss with the hernia unreduced. The part was so tender that the taxis gave him great pain; it was applied in the warm bath, but being ineffectual, the operation was forthwith resorted to. The hernial sac being laid open in the usual manner, from it issued a large quantity of serum, mingled with fecal matter, and upon the surface of the intestine was found a piece of potato, of the size of the last phalanx of the thumb. The contents of the sac comprised, besides a large fold of intestine, a portion of the ileum, highly injected and very dark. About sixteen or eighteen inches were protruded below the external ring.

Upon examining the bowel, two holes were found in it, one large, everted, and pouting,—the mucous membrane appearing just like a pair of small, puckered, protruding lips. Through this aperture the piece of potato above mentioned had evidently escaped out of the intestinal canal. The other opening was exceedingly small, and I was rather inclined to think that it had been made by the knife of the operator, but the gentleman who assisted me assured me that such was not the case. Two questions now presented themselves: first, had any of the fecal contents of the intestine escaped into the cavity of the abdomen? Upon carefully examining the seat of the stricture, I was of opinion that none of the contents had entered into that cavity. Secondly, how should I treat these openings? After some consideration, I decided upon encircling each foramen with what I venture to call the pudding-bag suture, and then to return the gut into the cavity of the abdomen. I was of opinion, that if I treated the case by the usual mode of artificial anus, with so extensive a portion of the intestine exposed and left out of the cavity, the patient must die from the constitutional irritation inevitably produced, and that it would give him a much better chance of recovery to return it into the abdomen with the aforesaid sutures. The stricture was divided directly upwards, and the bowel speedily reduced. The integuments were drawn together by three or four sutures, over which was placed a damp folded linen cloth, and the patient was put to bed.

Some surgeon may probably ask what became of the sutures, when it is stated that the man got well. They either fell into the canal of the intestine, and passed out at the vent, or otherwise they nestled comfortably, as a shot, or any other foreign body, in the cellular tissue, and were coated with lymph. The pudding-bag suture, unlike any other, embraces and lies in close approximation to the serous membrane only, although it may include in its folds the other coats of the bowel; this membrane and the cellular both belong to the areolar tissue,

which readily takes on the adhesive inflammation, and is with difficulty excited into the suppurative or the ulcerative. I would therefore suggest that the sutures still remain in close contact with the peritoneal surface of the intestine, imbedded in lymph. It is true that I cannot see things out of sight; but I will explain my meaning by telling a story:—A snail ventured one morning, at peep of day, to walk into a beehive; a whole army of bees at once attacked the bold intruder, and stung him to death. It was easy to kill the monster, but to remove him was beyond their powers. A consultation was held, and they agreed to coat him with wax. Are not these sutures conserved in lymph in the same way as the snail was imbedded in the deposit formed by the bees?

Of the after treatment much need not be said. It is enough that the man left the hospital, quite well, in less than a month. One bleeding from the arm, the application of eighteen leeches to the abdomen, with mild aperients, and a strictly antiphlogistic regimen, constituted the whole of his requirements.

There have been several patients with strangulated hernia under my care, in this hospital, who have undergone the operation, within the last few weeks, and in which cases the general plan of after-treatment may be briefly alluded to:—Four grains of calomel are administered as soon as the patient is in bed, with the view of promoting the outlet of excretions which have been dammed back upon the circulation by the shock of so violent an injury to the constitution. After a short time, small doses of Epsom salts and carbonate of magnesia in mint-water, or plain water, are given every six hours, until the bowels are freely opened. The use of aperients, in such circumstances, is deprecated by some surgeons of eminence, and, contrariwise, opium is administered; but I cannot but think that gently to solicit secretions from the mucous membrane is the most likely means to withdraw inflammatory tendency from the serous membrane, and thus obviate peritonitis, "*venienti occurrere morbo*."

The principle of aperients is the principle of counter-irritation—its golden application, that the countervailing means should stimulate a different tissue. But alas for treatment!—of all questions in medicine, this is the most "vexed" one. If every man has not his nostrum, he has at least his crotchets: one cures by bleeding—another by opium.—one stands still and trusts to Nature—while his contemporary canters his hobby of calomel and contra-stimulants. And yet the world wags merrily, and population, nevertheless, increases! I have heard of one good, Christian, faithful patient, who actually took two hundred and fifty of Morrison's pills daily, to—keep him in health; but what is most marvellous remains to be told—he was very well notwithstanding! Surely, then, it behoves us all to be modest on the subject of treatment, and to bear in mind the words of Andral—"that with thirty or forty observations you may settle the diagnosis and pathological anatomy of a disease, but years of research are necessary to establish a satisfactory result in therapeutics."

The regimen I order is strictly antiphlogistic—tea, sopped bread, gruel, and very weak broth—half-a-pound of lean beef to a quart of water when done: strong broths are an abomination. These means are continued for a fortnight, after which, when no untoward circumstances exist, solid animal food is given.

It was remarked that in the above case the division of the stricture was directly upwards, which is according to the rule of the schools; it may not, however, be irrelevant to add, that in all cases of abdominal hernia,—ventral, umbilical, inguinal, and femoral,—I always divide the stricture directly upwards. This mode of dividing the stricture in femoral hernia is not according to the doctrine generally taught. In inguinal hernia, the seat of stricture is always the neck of the sac, formed either by the internal ring only, or, as in old hernia, by both the internal and the external ring. The division of the stricture, therefore, in all cases directly upwards, will be sure to avoid the epigastric artery. In femoral hernia, we are usually taught to divide the stricture upwards and inwards, or directly inwards, to cut Gimbernat's ligament; but by the adoption of this mode, if the obturator artery should chance to arise from the epigastric, and take its course along the margin of Gimbernat's ligament, it might be wounded by the most skilful operator. I once knew this to occur, and as the hemorrhage was excessive, the surgeon with great promptness tied the external iliac artery, which immediately arrested it. Besides, the true seat of stricture in femoral hernia is not in Gimbernat's ligament, but in the "thin fibrous band which crosses the vessels beneath Poupart's ligament."

* E. Wilson, loc. cit.

By cutting this "thin fibrous band" directly upwards, "the ring becomes instantly flaccid," and the hernia is readily reduced.

All helps to memory are good, but one peg is better than half-a-dozen; if, then, we can establish one rule for the division of the stricture in all cases of abdominal hernia, it must be useful, as it avails the mechanist equally with the surgeon—it will help Caesar and Pompey equally, but—*especially Pompey!*

The initiated may perhaps smile, and characterize these feeble "pencilings" as somewhat pleonastical; but the student and the uninitiated, the inexperienced, and those who do not like to take the trouble to think or to investigate, may perhaps regard them in another light.

"A man who has never seen the sun," says Calderon, "is in raptures with the brilliancy of the moon; and he who has seen neither the sun nor the moon, thinks that the brightness of the morning star cannot be surpassed."

ON PUERPERAL FEVER.

By J. M. WADDY, M.D., Physician to the Birmingham Lying-in Hospital.

THERE are some anomalous cases connected with erysipelas, and, probably, with the other exanthemata, in which they run through the whole or a part of their course during the puerperal state, without inducing puerperal fever. Scattered references to this state of things may be found in various authors, but I am not aware that the subject has ever yet been brought prominently before the profession. Eruptions of erysipelas and scarlatina have occasionally manifested themselves on the persons of those who were suffering from puerperal fevers, arising, in all probability, from the contagion of these diseases; but I do not find that attention has been particularly directed to the existence of these exanthemata in parturient women, unassociated with the presence of fever. Dr. Johnstone, the late Dr. Kirkland, and many other writers, have referred to erysipelas associated with puerperal fevers, but not as existing distinct from any particular febrile affection in the puerperal state.

Three years ago I was requested to visit a Mrs. H—, who was then suffering from severe phlegmonous erysipelas of one leg and foot, which ended in extensive sloughing of the parts, so much so, as to destroy the use of the foot: large sloughs also separated from the calf of the leg. When I first visited her I found her pregnant, and apparently about eight months gone. The pain and irritation of the disease appeared to bring on labour prematurely, and she was confined of a healthy child during the most severe period of her sufferings from the erysipelas. She recovered, however, without having experienced any attack of fever.

My friend, Mr. Elkington, has lately seen one or two cases somewhat similar. He informs me, that he attended upon a Mrs. C—, who had an attack of erysipelas of the head and face, occurring the day after her delivery. She recovered, without experiencing any symptoms beyond those of ordinary constitutional disturbance. How are we to explain these phenomena? It appears to me that, in these instances, the period of incubation of the disease—a period varying in duration in all exanthemata, and, probably, in all diseases originating from poisonous matter introduced into the system—has passed away prior to the delivery, and therefore antecedent to all those combined weakening circumstances constituting the puerperal state; and that the eruption of erysipelas is to be considered, together with all the rashes and eruptions of the exanthemata, as so many endeavours of Nature, more or less effective, to eliminate the constitutional derangement from the system generally, and to throw it off by papular, vesicular, and other external eruptions. If this hypothesis be admitted,—and I believe it to be a correct one,—it will elucidate, in a great measure, many of those anomalous circumstances connected with the causes and progress of puerperal fevers which have hitherto so much perplexed us. In ordinary cases, the poisonous matter introduced into the system circulates with the blood, and meeting other matters in the circulation approximating its own nature, it assimilates them to its own poisonous qualities, and the whole is at length, by a certain constitutional and remedial action, thrown off from the system in the form of various eruptions. But should this poisonous principle circulating in the system pass through organs the vitality of which is seriously injured by nervous shocks, mechanical violence, and the various deteriorating influences, which, as a whole, constitute the puerperal condition—is it wide of the mark to

conceive it probable that this poisonous influence should be arrested by these devitalized organs, and be eliminated either from them as foetid discharges,—ulcerations, abscesses, and the like,—or, with them, in the large gangrenous and ulcerative destructions forming the lesions attendant upon some of the child-bed fevers.

There is another form of puerperal fever, which originates from the absorption of poisonous matter, either generated within the body or introduced from without. "It is stated by Pea, that in 1664, a prodigious number of puerperal women perished in the Hôtel Dieu, and that the cause of this mortality was attributed by M. Vesou, physician to the hospital, to the circumstance of the lying-in wards being situated immediately over those set apart for the reception of individuals who had been wounded. The women were attacked with hæmorrhages, and on opening their bodies, they were found to be full of abscesses." ("Cyclop. of Medicine.") Dr. Leake says, "Some of those who survived recovered very slowly,—some had critical abscesses in the muscular parts of the body, which were a long time in coming to suppuration, and when broke, discharged a sanious ichor." The ovaria are frequently destroyed by ulceration; extensive collections of matter have been formed along the course of the psoas and iliacus internus muscles, in some instances escaping as lumbar abscess in the loins, or psoas abscess on the inner and upper part of the thigh. There are also ulceration of the uterus, purulent infiltration of its walls, purulent deposits between the uterus and its peritonæal coat, sphacelus of the uterus—an instance of which I presented before the Pathological Society of Birmingham; putrescence of the uterus, according to Boer and others; and, in fact, purulent collections, occurring in almost all the different organs and viscera of the body. Some of these collections are abscesses, strictly so called; others are purulent depositions, occurring, after the manner of "Rose's abscesses," without any evidence existing of previous inflammation in the muscular and other tissues in which they occur. They are merely purulent deposits. The pus, becoming absorbed from its original source, is conveyed to different and distant parts of the body,—to the muscles, lungs, liver, brain, eye, kidney, &c.,—and there deposited, either in isolated collections, or as purulent infiltrations and softenings of the affected tissues. Every surgeon in extensive practice must have seen similar results occurring after surgical accidents. An extensive ulcer, or the surface of a stump, may suddenly dry up. Symptoms of low, distressing fever, will arise, and the patient, worn down by pain, exhaustion, and fever, will most probably die. On the post-mortem investigation, collections of matter will be found in the different organs, almost identical with those occurring in this form of puerperal fever. In the puerperal state, we have all the circumstances which render it most perilous, combined occasionally with ill-conditioned, ulcerating surfaces, by which, in the devitalized condition of the system, morbid and semi-putrid excretions are thrown off, to be again absorbed into the circulation, poisoning the current of the blood; and which ultimately cause death, either by their poisonous effects on the nervous system, or by the depositions of matter and the destruction of organs producing an amount of mischief which the vital forces cannot repair, and under the influence of which life is almost necessarily destroyed. Drs. Lee, Churchill, Ferguson, Tonnellè, Nonat, &c., describe this disease as a uterine phlebitis, or inflammation of the absorbent vessels and veins of the uterus. Dr. Lee observes, that "it does not appear that any pathologist in this country had observed a case of inflamed absorbents of the uterus before the month of July, 1829, when a fatal example of this disease occurred in St. George's Hospital. A woman, aged thirty, in an advanced state of pregnancy, was admitted into that hospital, under the care of Mr. C. Hawkins, July 1st, in consequence of sloughing of the skin over a diseased bursa of the patella. The removal of the bursa by an operation was followed by great constitutional disturbance, and on the 14th labour came on. Two days afterwards, symptoms of uterine inflammation took their appearance, and on the eighteenth day death made place. The pain was relieved by bleeding, but she never rallied after the attack. On examination of the body some puriform lymph was found in the pelvis, but with no increase of vascularity in the peritonæum. In the broad ligaments some fluid was also effused, and on each side, numerous large absorbent vessels were discovered passing up with the spermatic vessels to the receptacle of the chyle, which was unusually distended: all these vessels, and the reservoir itself, were quite filled with fluid pus, but that in the receptacle was mixed with lymph, so as to be more solid; the vessels them-

selves were firmer and thicker than usual. The thoracic duct above this part was quite healthy; the uterus was scarcely contracted, and the inner surface of the lower half was soft and shreddy, and in a state of slough; the upper part, where no pus was found externally, was also healthy, or nearly so, on its inner surface."

Dr. Lee also states, that "in an epidemic puerperal fever which prevailed in the Store-street Lying-in Hospital, and which proved fatal to many women, Dr. John Clarke and Mr. Wilson, on examining the bodies, found the peritonæal coat and substance of the uterus inflamed, and its veins full of pus."

Meckel relates, that in a case which he examined, "all the veins which surround the uterus, the hypogastric trunks, and the vena cava inferior, were greatly enlarged in volume, the place where the placenta had adhered was distinguished at the posterior part of the uterus by a fungous mass. The veins, the exterior appearance of which had arrested attention, were examined with care: they were separated from the surrounding cellular substance, and in this state the whole system of uterine and spermatic veins presented an extraordinary augmentation of the calibre of the vessels and thickness of their coats; when opened, there escaped from them a true purulent fluid. The vena cava, where the right renal vein entered, presented a resisting tumefaction; when laid open, its coats were double the natural thickness, and the cavity was filled with pus, and a polypus formed of pseudo-membraneous and puriform concretions. Many circumstances might contribute to render the disease mortal; but is it not fair to attribute the occurrence of the fatal termination of the case to the profound lesion of the veins?"

Ribes refers the extraordinary fatality of diseases of the uterus in puerperal women to the presence of pus in the veins. Dr. Lee has published twenty-four cases of uterine phlebitis, and he remarks that a large proportion of the cases termed low child-bed fever, or typhoid puerperal fever, arise from inflammation and formation of purulent matter in the uterine veins. The correctness of this opinion I entirely disavow. I have not yet been able to discover any evidence of pus being formed in the veins. The mere thickening of the vessels is not a sufficient proof of this. It may be, and most probably is, a consequence, and not the cause, of the pus in the veins. We find the veins in varix altered, thickened, and enlarged, to enable them to fulfil the demands made upon them by various accidental circumstances; and it would be folly to suppose that the presence of large quantities of pus could exist in the veins without producing disturbances in the circulation, and corresponding vital changes in the veins themselves, in order to enable them to rid themselves of the presence and obstacles by which they were afflicted. Further, the existence of pus in the veins is by no means peculiar to puerperal fevers. It has been demonstrated by Mr. Gulliver in cases of small-pox, and in other diseases. It has been found in the veins derived from old ulcers, and various other causes; and it is no doubt found in the cases recorded by Lee, Tonnellè, Nonat, and others, arising from absorption. To this conclusion Tonnellè closely approaches, when he says, that two distinct orders of symptoms occurred; the one, peculiar to inflammation of the uterine veins, or of the uterus; the other, indicating an absorption of pus, and infection of the general constitution.

Leake observes, "when matter has begun to form in the omentum, or any of the vital parts, from which it cannot be evacuated, it is then too late to expect relief; the disease must necessarily become fatal, both by a dissolution of parts essential to life, and the confinement of that purulent fluid which will not only corrupt and destroy the surrounding viscera, but, by its absorption, will soon taint the whole fluid mass." Indeed, all the authors who refer this disease to a primary inflammation of the veins and absorbents, are still further at fault. The severity of symptoms do not correspond with the inflammatory origin of the purulent absorption and deposition.

Dr. Lee states, that the local symptoms are often so obscure as to escape detection during life, while the constitutional symptoms—which often resemble, in a striking manner, the effects produced by the introduction of specific poisons into the body—are so violent as to yield to no remedies, however early and vigorously employed. In a note, the editor of the *London Medical Journal* informs us, that "he and Dr. Lee made a post-mortem examination of a case of puerperal fever in which the uterine and spermatic veins were filled with pus, but there were no appreciable signs of inflammation in the structure of the vessels."

M. Tonnellè relates a case of a young woman, aged twenty-

three, who was attacked with puerperal fever on the fourth day after her first labour. An emetic of ipecacuanha and fifty leeches quickly removed the symptoms; but on the fourteenth day, the patient, who was already convalescent, felt very great anxiety, the cause of which could not be ascertained. On the fifteenth day she had violent fever, and a series of severe symptoms quickly arose,—slight delirium, a stupid intoxicated look, agitation, small frequent pulse, nausea, &c.; towards the end of the attack she complained of pains in the legs and forearms. On examination after death, thick well-formed pus was found infiltrated in the substance of the deep-seated muscles of the legs. The muscular fibres in contact with the matter were grey and soft, but immediately beyond, they suddenly appeared of their natural colour and consistence; several small, isolated, and well-circumscribed collections, about the size of an almond, were seen in the solar and anterior tibial muscles, and in the middle of the thigh; the same appearances were observable in the forearm. In the left knee-joint there was also a certain quantity of well-formed pus. The uterine veins were filled with thick laudable pus; their internal membrane of a greyish colour, ragged and unequal. The left ovary was converted into a cavity half filled with pus, which adhered to the rectum and opened into the intestine. Many similar cases are recorded by Dance, Desormeaux, &c. Dr. Every Kennedy relates a case in which every large joint of the body had been engaged in inflammation and ulceration, and yet no lesions could be observed, either in the uterus or the pelvic veins. In many of the cases mentioned by the French writers referred to, the accompanying pain was not more severe than the mechanical distention of the parts would account for. Many of the purulent depositions were in the centre of the muscles, occupying different points of the same muscles, unattended by any condensation of the cellular membrane, or any evidence of previous inflammatory action. The muscular fibres immediately in contact with the matter, appeared steeped and softened, but this appearance was absent in the surrounding parts, which were healthy. That venous depositions may occur in the muscles has been proved by Cruveilhier, who injected the veins with mercury, and found it extravasated in the muscles as well as in the principal viscera and also in the serous cavities. Tonnellè found, in 222 bodies of patients who had died of puerperal fevers—peritonitis in 193; diseases of the uterus and its appendages in 197; in 29 the uterus was alone affected; in 28 the peritonæum only; metritis occurred in 79 instances; superficial softening in 29; softening of the substance in 20; ovarian inflammation in 58, with abscess in four cases; pus in the veins in 20; in the lymphatics in 32; in the thoracic duct in three; in the lumbar and inguinal glands, nine. Thus the lesions of the uterus are very much more frequent than those of the peritonæum. Pus in the veins was associated with suppuration of the uterus in 32 instances; with putrescence or ramollissement of the uterus in 11; with inflammation and ramollissement together in five; with peritonitis alone in 34. With the evidence of these facts before us, it appears to me to be fair to attribute the presence of pus in the veins to its absorption from the inflamed and suppurating textures and surfaces of the uterus. In eight subjects, however, Tonnellè observes, that pus in the veins was the only discoverable lesion, and in 34 cases, pus in the veins was associated with peritonitis only. When, however, we consider the condition of the uterine surface after confinement, any difficulty there is in supposing that some ulceration of the part, or of the vaginal walls, may have occurred in all these cases, followed by that dryness observable in stumps and ulcerated surfaces, in which internal absorption of the matter is going on in the veins, does not appear to me to be very great; and as this hypothesis affords a natural and easy explanation of these phenomena, I shall take the liberty of embracing it until a better is offered me. In some cases, extracted from the "*Archives Generales*," and published in *Johnson's Review* for 1837, we find that the veins were plugged up by "solid concrete pus, analogous to false membrane, evidently coagulable lymph, and showing how Nature endeavours to prevent the further passage of pus in the veins by rendering these vessels impervious. Dr. Ferguson mentions that the uterine veins are often found healthy when the spermatic or renal are thoroughly disorganized, which shows that the mischief in the veins is, in all probability, the effect of the presence of pus, and not the cause of that presence. Besides, Dr. Lee admits that the mischief exists chiefly, if not altogether, in the veins arising from that part of the uterus to which the placenta was attached. "Generally, the inflammation attacks the spermatic veins alone, and, for the most part, the one only on that side of the uterus to which the pla-

centa has been attached; and it may either confine itself to a small portion of the vessel, or extend throughout its whole course, from the uterus to the vena cava. The same is the case with regard to the hypogastric veins, one only being generally affected. These are, however, more rarely affected than the spermatic veins; and this would seem to depend upon the latter veins being invariably employed to return the blood from that part of the uterus to which the placenta had been attached." Dr. Lee refers the cause of the disease, which he terms uterine phlebitis, to the "effect of the orifices of these veins being left open after the separation of the placenta, by which a communication is indirectly established between the venous system and the atmospheric air, in a manner somewhat analogous to what takes place in amputation and other extensive wounds. Such a condition of the uterine veins, in consequence of a separation of the placenta, must be favourable to the production of inflammation; and inflammation, when once excited, is seldom limited to these orifices, but extends, with greater or less rapidity, along the continuous membrane to the spermatic and hypogastric, and from thence to the vena cava," &c. Now I maintain that this hypothesis is untenable. The analogy between the internal surface of the uterus and a stump is, in this view of Dr. Lee's, imperfect, as the uterine veins are not torn across, or incised, as in amputations; they are not exposed, as in an open sore; and they are more or less immediately contracted or obliterated by the contraction of the uterus. Further, in traumatic phlebitis, we can generally trace the consequence to the cause. Inflammation in the vein is set up in the course of a day or two as the result of the mechanical injury. Uterine phlebitis may not occur for two or three weeks after labour. Again, in ordinary phlebitis, the surgeon traces the mischief generally to some foulness of the instrument, to some poisonous taint communicated to the vein, and by it conveyed into the system; and without some cause of this sort occurring, phlebitis is never the expected result of amputations or other surgical operations. I believe that genuine phlebitis, arising from mechanical injury, is comparatively rare. I will not say that it never takes place; but I believe it occurs very rarely, and that in by far the greater number of cases it will be found that poison introduced from without, or generated on the surface of the ulcer, or within the cavity of the uterus, or in the vagina, will be found to be the source of nearly all cases of phlebitis, whether they arise after surgical operations, or after the separation of the placenta. Besides, traumatic phlebitis is generally, if not always, accompanied by sympathetic fever of a highly inflammatory type, whereas the fever of this disease is decidedly of a low and putrid character. Sometimes the symptoms seem to overwhelm life at once by their irresistible influence over the nervous system, alike defying all the remedial powers of nature and of our art, and consigning many to an early and unexpected tomb.

The attack in these cases is often insidious, and the local symptoms are obscure. Sometimes, however, they are very severe, as they depend upon the nature and extent of the morbid changes. In putrid puerperal fevers, says Leake, the belly rapidly swells, the countenance of the patient alters, the tongue is dry, hands tremble, lips are livid, nostrils dilated; the cheeks are often of a deep-red colour; the patients sink into a state of prostration, the pulse becomes excessively rapid, and, lastly, tremulous. The disease may commence from twenty-four hours to several days after delivery. It is generally ushered in by uterine pains, more or less acute, rigors, suppression of the milk and lochia, quick pulse, furred tongue, nausea, vomiting, occasionally diarrhoea. The low typhoid symptoms so accurately described by Leake, soon set in with drowsy insensibility, violent delirium, &c. The surface of the body becomes sallow, and is sometimes covered with petechial or vesicular eruptions. Tympany and increased abdominal tenderness often supervene; hurried, anxious respiration; tremors and subsultus tendinum; the tongue is brown, and some of the remote organs of the body, such as the lungs, heart, brain, liver, and spleen, &c., become more or less rapidly and extensively disorganized. The brain, the pleura, the eyes, the joints, and, in fact, every organ of the body, may suffer from this terrible disease.

In cases in which matter is deposited in the joints, the general symptoms will often resemble those of acute rheumatism.

CASE.—A washerwoman went out to work on the fourth day after a miscarriage, and caught cold. She applied to the *Maternité*, Jan. 8th, 1836, three weeks after her miscarriage. Her lochia had ceased from the fourth day, and she had ever

since complained of flying pains in the abdomen. A few days ago she had a rheumatic attack of the elbow and left knee, attended with feverishness. Leeching afforded no relief. When admitted into the hospital, she complained much of the left elbow-joint, the slightest movement of which occasioned severe agony; the left knee was also swollen and very painful, apparently from effusion into the synovial capsule, swelling out on each side of the elevated patella; the skin covering the joint was red, and inflamed in patches; the abdomen was free from uneasiness on pressure, although the bowels were relaxed; pulse 116; respiration frequent; tongue parched, red at the tip and corners; wakefulness, but no tendency to delirium. On the following day the left shoulder-joint became painful and inflamed, and the diarrhoea increased; the prostration of all the vital powers now increased daily; the abdomen became tympanitic; the tongue was covered with a brown dry crust; the urine and feces were sometimes passed unconsciously, and the patient was frequently delirious. On the 22nd she was seized with violent rigors, which lasted for several hours, and was followed by profuse sweating. She lay almost insensible, being generally either delirious or comatose. She lingered on for eight days more, the affected joints remaining in the same painful swollen state to the last.

Dissection.—The affected joints were first examined. The cellular substance around the left shoulder-joint was infiltrated with pus, but none was found within the articular capsule. The synovial fluid was more yellow and viscid than in health. The elbow-joint contained a small quantity of well-formed pus; the surface of the capsule was granulated. A larger quantity of purulent matter was found in the knee-joint. There was also a small abscess in the spleen. The uterus and its appendages were healthy, with the exception of the veins, which were thicker than natural, and gaped like arteries when cut across.

Professor Osiander has seen several of these cases, and treats them as forming a distinct variety of puerperal fever.

Birmingham, 1846.

OBSERVATIONS ON

ACUTE INFLAMMATION OF THE STOMACH AND BOWELS, PRODUCED BY THE INTERMIXTURE OF VERDIGRIS WITH THE FOOD.

REMARKS ON THE MEDICAL TREATMENT AND GENERAL MANAGEMENT OF COOLIE LABOURERS EMIGRATING FROM CALCUTTA AND MADRAS TO THE MAURITIUS, BRITISH GUIANA, AND THE WEST-INDIA ISLANDS.

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It has been already stated, that in acute inflammation of the mucous membrane of the stomach and alimentary canal, supervening on the introduction of the salts of copper, intermixed with the food, our chief success in the treatment, in arresting the progress and rapid extension of the inflammatory action, consisted in resorting promptly to antiphlogistic measures; abstracting blood generally and locally; administering emetics of ipecacuanha frequently; and afterwards placing the patients in a warm salt-water bath. On the day following, if the acuteness of the symptoms had not been reduced, the topical bleeding was renewed, linseed poultices were applied to the abdomen, and the bowels evacuated by calomel and castor-oil purgatives; the doses of ipecacuanha, combined with tincture of opium, were repeated from time to time.

By pursuing this line of treatment, of sixty patients and upwards, men, women, and children, attacked within a few days of each other, and all with nearly the same symptoms, three-fourths were convalescent on the sixth, seventh, or eighth days; the recovery of the others was more protracted, but ultimately established, with the exception of the case which terminated so rapidly, and of two other men, one of whom lingered for two months, and died on board from the effects of chronic dysentery; the other, in addition to the symptoms of chronic dysentery, became the subject of dropsical effusions into the abdomen, and anasarcaous swellings of the lower extremities, but survived the passage from British Guiana. As soon as the vessel anchored off Baboo Ghaut, Calcutta, he was sent to the native hospital.

The pathological appearances produced by acute inflammation—the immediate consequence of the introduction of verdigris into the stomach—have been described. In adverting to the remote and more slowly-developed effects of this poisonous substance on the mucous membrane and subjacent tissues of the stomach and intestinal canal, I shall have occa-

sion to refer to the post-mortem examination of the man who died from chronic dysentery.

In Calcutta,—in the mofussil districts of Bengal,—in fact, in all climates within the tropics,—acute idiopathic dysentery is a disease of frequent occurrence. When acute inflammatory action has commenced in the alimentary canal from other causes than the introduction of poisonous substances into the stomach, the remedial measures, particularly in the case of Europeans, must be prompt and decided: if the medical man hesitate, and attempt to temporize with the disease, to his dismay he will find that within eight and forty hours the symptoms assume a formidable aspect, and, when least expected, an unfavourable termination takes place.

In the treatment of the acute form of this disease among Europeans recently arrived in India, with sailors of robust constitution and full plethoric habit, who (from committing excesses in eating and drinking in the bazaar when ashore) have contracted this complaint, the remedial measures to be adopted differ in no wise from those already proved to be efficacious in arresting the rapid extension of inflammation in the mucous membrane and sub-mucous tissues.

As soon as the acute inflammatory stage of the disease has been checked, the sufferings of the patient diminish in proportion. By continuing to prescribe medicines of a mild non-irritating nature, which at the same time act on the secretions of the liver,—by the repeated application of poultices, stimulating frictions, and, if necessary, small blisters to the abdomen,—by the daily use of the semicupium and restriction to low diet, I have found, that in general a favourable termination of the case has taken place from the eighth to the twelfth day. In some patients, however, convalescence has been more prolonged, in consequence of an irritability of constitution, a passive resistance on its part to become acclimatized, and to withstand the effects of a tropical sun; ultimately these cases lapse into the chronic stage of the disease.

At certain seasons of the year, European vessels trading to India, unprovided with medical advice, arrive at Calcutta, with two, three, or more of the crew suffering from the chronic form of this disease, (dysentery,) their strength exhausted, their features pale and haggard, their constitution (but a few months, mayhap a few weeks before, robust) now broken down. In their emaciated frames, we behold nothing but living, moving skeletons; at the first glance, no person, much less a medical man, who has had any experience, can fail to detect the seat of disease. Their symptoms proceed from the last stage of chronic dysentery.

At sea, I do not know any cases of disease which try the patience of a medical man more than those of chronic dysentery, whether they occur among the passengers or crew of the vessel; but none are more protracted, more obstinate in yielding to the influence of medicine, or more distressing in their termination, than the cases of chronic dysentery so constantly met with among the coolie-labourers emigrating to Mauritius and the West Indies.

Again, another class of patients arrive in Calcutta during every month of the year, despaired of by their friends, and recommended, as a last resource, to proceed to Calcutta, partly for change of air, partly to obtain further medical advice. They are Europeans, residents in the Mofussil, located in the indigo, silk, and sugar districts, at a distance of twenty, thirty, and sometimes even forty miles from a military station. In the months of June, July, August, and September, they become a prey to the epidemic disease of the district; the symptoms, slight and insidious at first, are neglected; the inflammation, incipient at the commencement of the disorder, and limited in extent, but not sluggish in its progress, soon assumes a more acute form, and becomes diffused over a wider range of surface; the disease has taken a firm hold of the system. Subsequently, a train of symptoms arise, which excite some alarm in the patient's mind, and immediately, by the advice of his friends, he has recourse to the most popular specifics for this disease. The severity of the symptoms is checked for a few days, and he fancies that a complete cure has been effected, and prides himself on his success; his confidence in the specific virtues of these much-extolled medicines is unbounded. Ere long he is undeceived. The relief he has experienced proves to be merely temporary; there has been a transient lull in the acuteness of the symptoms; but, in reality, the disease has taken a firmer hold on the system, and is more deeply and more extensively seated than he or his friends are aware of. Frightened, at length, by the recurrence of the same symptoms, by the reduced state of his strength and health, and by the continued discharges from his bowels, he calls for his palanquin, and sets off for the

station, some twenty or thirty miles distant. He arrives there fatigued and exhausted from the effects of so long a journey. The routine treatment for this complaint is pursued without a decided impression being made on the disease; the form which it now assumes is that of obstinate chronic dysentery. In this state of health, at the recommendation of his friends, and with the sanction of his medical adviser, he proceeds to Calcutta.

Such is almost a verbatim statement of the routine condition of those who have placed themselves under my care. The prominent features in those cases of the more advanced stages of the disease have been, emaciation of the body, debility of the muscular system, depression of spirits, and exhaustion of the vital powers; the countenance pale, haggard, careworn, and of a sallow, sub-jaundiced hue. Restless and feverish at night, the patients seldom enjoy sound sleep without the aid of opiates; their rest is broken and disturbed; the skin is generally rough, dry, and arid, or, on the reverse, bathed in a profuse perspiration; the pulse excitable, compressible, but varying in degrees of strength and quickness; the tongue pale and moist, loaded with a thick coating of sordes at the root, but frequently red, glazed, fissured, rough, and parched. In some patients there is partial loss of appetite; in others, a craving, an irresistible desire for animal food, but in each a constant dread to indulge in eating, from an impression, that as soon as the food enters the stomach it passes away through the bowels, and increases the number of alvine discharges. The stools are frequent, accompanied with griping, forcing pains in the abdomen, loins, and sacrum; in consistence thin and slimy, white or ashen-coloured, streaked with blood and mixed up with shreds of coagulable lymph; when evacuated, some pain, and an acrid, burning sensation, close to the sphincter ani, trouble the patient.

The alvine excretions do not at all times correspond with this description; sometimes they are not liquid, present a dark olive-green colour, and are streaked with blood and muco-purulent matter on the surface; in other cases they are serous, or sero-sanguinolent, resembling the juice of boiled meat, or the washings of fresh meat, and leave on the patient's linen a pale-red stain: oily, fatty discharges from the bowels have been noticed, on two or three occasions, in cases of chronic dysentery which occurred among Europeans.

The abdomen, when examined, is generally found sunken, drawn back towards the spine; a dull pain, some tenderness on pressure, and occasional spasmodic twitches in the ilio-cæcal region, direct attention more immediately to this part of the abdomen as the seat of disease. The appearance of the abdomen varies in the course of the day; air is secreted in abundance, the viscera become inflated, the abdominal parietes become tense, tumid, and puffed out; when percussed, it emits a tympanitic sound: when this secretion of air takes place, the patients invariably suffer from sharp, lancinating, spasmodic pains; as soon as the secretion ceases, and the flatus is expelled, they experience instant relief.

In connexion with the subject of acute and chronic inflammation of the mucous membrane of the stomach and intestinal canal, produced by the intermixture of verdigris with the food, it will be necessary to refer to the pathological appearances noted in the post-mortem examination of the return coolie from Demerara, who lingered for two months under this form of disease. The examination was made fourteen hours after death; the morbid alterations in the structures of the intestines were entered in the case-book at the time of inspection, and are now transcribed.

Post-mortem examination of Seyboo, a returned coolie from Georgetown, Demerara.—The mucous membrane of the stomach and small intestines was in a healthy condition to within one or two inches of the cæcum caput coli; unequivocal marks of the acute and chronic stages of inflammation exist in this portion of the alimentary canal; the slight vermilion-red and velvety intumescence of the mucous membrane indicates the commencement of the inflammatory process. Close to the caput coli, the mucous membrane presents a deeper tinge of red, which, near the ilio-cæcal valves, partakes of a deep-violet colour. The colon, from its commencement throughout its entire extent, even to its termination, may be regarded as the seat of disease. In it are well marked every degree, every stage, of inflammation; ulcerations, of various dimensions and shapes, circular, longitudinal, elliptical, varying in size from a pin's point, a mere abrasion of the mucous membrane, to those several lines in length and breadth; in two or three places they are equal in circumference to a rupee piece. The softening of the mucous membrane appears to have commenced below the valves of the cæcum; the colour of the

membrane in the vicinity of those recent abrasions, or commencing disorganization of its tissues, has a light-red or pinkish colour; in the interspaces between the well-defined deep circular ulcers, the membrane presents a dark-slate, deep-blue, or violet tint. In consistence, the mucous membrane is soft, pulpy, gelatinous, easily scraped off with the back of the scalpel, or broken down into a soft mass by pressure between the fingers. The mucous membrane in the seat of the ulcerations appears to be destroyed in its entire depth, punched or scooped out. On the complete or partial destruction of the mucous membrane depend the shape, the size, and the general character of the ulcers.

The ulcers encircling the opening between the ileum and cæcum, and partially situated on the valves, are of smaller dimensions than those four or five inches lower down. The bottom of each ulcer appears depressed; its surface is polished, glistening, of a dark-red colour, and numerous studded with minute points, apparently the termination of capillary bloodvessels. The mucous membrane surrounding each ulcer in this portion of the intestine is soft, tumid, shreddy, red at the edges, with traces of minute bloodvessels ramifying in different directions. The edges of these ulcers vary considerably, although within a short distance of each other. They are uneven, jagged, in a state of slough, surrounding the broad ulcers, but smooth and polished in general where the ulcer occupies a less extent.

In the case of this native, in whom the origin of the disease was distinctly traced to the intermixture of verdigris with the food, a greater amount of disorganization existed in the rectum and lower division of the colon than elsewhere. From the sigmoid flexure of the colon to the verge of the anus, the intestine was denuded of mucous membrane, with the exception of a few circumscribed patches and exudations of shreds of lymph. The internal surface presented one sheet of ulcerations, almost every particle of the mucous membrane and sub-mucous cellular tissue having been destroyed by this softening, disorganizing, ulcerating process. The colour of the mucous membrane which had not been destroyed was changed to a deep purple. The muscular coat, in many parts, was exposed, and amongst its fibres the process of ulceration had made extensive ravages. The surface in several places was studded with collections of coagulated blood and lymph; in these points or exudations of lymph, minute bloodvessels apparently terminated.

This man was one of those coolie labourers who, in common with many others, had concealed a quantity of cold rice, fish, ghee, &c., and had allowed these articles of diet to remain for several days on the copper thalie. The surface of the plate became encrusted with verdigris, which afterwards getting mixed up with his food, produced those symptoms already described. To the action of the verdigris on the mucous membrane of the large intestine may be attributed the chronic inflammation and extensive ulceration noted in the post-mortem examination.

Gwalior, India, 1846.

ON THE TREATMENT OF GONORRHOEA.

By F. HARRINGTON BRETT, Esq., F.R.C.S., Surgeon to the Western Institution for Diseases of the Eye, and late Surgeon to the Governor-General's Body Guard, Bengal.

It has often been held as a doctrine, that to cut short gonorrhœa engenders sequelæ far more serious than the disease itself. I believe that this malady, when once it has gained a hold of the structures it invades, and extends along the mucous surface of the urethra, by not having been cut short at its commencement, involves the gravest consequences. Gonorrhœa, in its early stages, does not occupy much more than two inches of the canal. The mucous membrane is alone affected with a purulent inflammation from a specific cause. I confine these remarks especially to this form and stage of the disease, without reference to the various shades and gradations of urethritis of a milder kind, from whatever cause produced. My object is, to show that a judicious application of astruents, and the exhibition of such remedies as are known to have a specific effect in subduing the disease, when employed from the commencement, in a manner which I shall presently describe, cure, in four or five days, and prevent the evil consequences of the disease; their failure is owing to the defective mode of their application. I do not believe that stricture is so often the result of the use of injections unless these are employed without proper precautions. Strictures are far more frequently the result of chronic urethritis.

It is satisfactorily ascertained that the effect of copaiba and

of cubebis is through the medium of the urine, as it flows along the canal, and in no other way; and therefore that it can only act in *emissione*. The principles of these medicines are held in solution in a manner which has not yet been imitated artificially. A case illustrative of this is cited in THE LANCET, Oct. 18, 1845, p. 431, in which there was an artificial opening in the centre of the penis, and in which the posterior part of the canal, affected with urethritis, was cured by the exhibition of copaiba, whilst the anterior part was not cured until the urine was artificially injected along that portion of the canal.

By analogy with our present treatment of purulent and muco-purulent inflammation of the conjunctiva and other mucous surfaces by astringents, I believe that one great indication is to control the degree of discharge from the mucous membrane by the use of astringents, whilst, at the same time, we endeavour to act on those diseases by the use of such specific remedies, as are known from experience to change the morbid action. The rapidity with which the cure of a muco-purulent inflammation of the conjunctiva may be expedited by the application of the unguentum nigrum is illustrative of this position.

Having premised these remarks, I proceed to describe the mode of treatment which I have found to be of the greatest power in cutting short the malady without danger. We must not overlook the extension of inflammation along the canal, of irritation or inflammation of the neck of the bladder, the prostate gland, vesiculae seminales, vasa deferentia, and testicle, as the effects of injections, (and it is undeniable that they are so;) but these consequences are owing to the improper manner of using them, and are to be carefully provided against.

Let us suppose a patient to have presented himself at the early stage of the affection—the sooner the better. My treatment is as follows: Rest and temperate habits being enjoined, I immediately commence with astringents and copaiba. The astringents which I prefer are, the nitrate of silver, a quarter of a grain to the ounce, used once only in the twenty-four hours,* and the sulphate of zinc and alum, from ten to fifteen grains of each to the ounce; at the same time, the capsules of copaiba are exhibited in large doses an hour after every meal. One large dose of the capsules (five or six) is given, when the patient goes to bed so soon as he feels himself sleepy. The great object is to prevent the nauseating effect of this highly efficacious medicine; for this purpose it must not be taken on an empty stomach, and if the patient can sleep for an hour or two after each dose, it is highly desirable that he should do so; for the same reason, very little fluid should be taken, ("toutes les liquides, l'eau de Seltz, &c., entravent l'opération du copahu," is verified by experience.) A small quantity of jam or jelly may be occasionally taken if nausea occurs. The patient is directed to void his urine very frequently—every half-hour or oftener, in ever so small a quantity,—previous to which he injects with a very small glass syringe, not so large as a silver Anel's syringe for injecting the lachrymal sac, and containing not more than half a fluid drachm; this is retained for a few moments, and is carried off by the vis à tergo of the urine, now suffered to escape. If so small a quantity of fluid is injected, it is sufficient to reach along the seat of disease, and it is not necessary to compress the urethra beyond. The rash use of injections without regard to the quantity and distance is as dangerous as the unrestrained progress of gonorrhœa itself. But this is not all: I particularly insist on the importance of stopping the exit of the urine by compression of the orifice, at the same time that the effort is made to evacuate, by which means the copabinized urine rushes into the lacunæ, the lacuna magna especially, where the disease also extends.

Thus we have a repeated constriction of the capillaries of the mucous membrane, and a frequent application of the remedy to the part. I have often seen the discharge cease in two days, without the slightest evil consequences; though it is generally necessary to keep up the influence of the copabine in gradually diminished doses, and the injection of the sulphate of zinc and alum at longer intervals, and of diminished strength. Of course it would be absurd to suppose that these measures can be commenced upon when a patient presents himself with chordee, and every other symptom of acute inflammation, who has neglected to consult the surgeon at the onset of the complaint. This would be as impossible as to attempt to cure, by similar treatment, an acute purulent

or gonorrhœal ophthalmia, with chemosis and strangulated vessels, threatening sloughing of the cornea, without the previous use of antiphlogistic measures. We must first subdue these highly acute symptoms by antiphlogistics, diluents, and rest; but we shall nevertheless do well to commence with the copaiba; for when once the urine is impregnated with its principles, we have made one important step in the vanquishing of the disease. Generally speaking, the distinctions between "virulent" and "mild" are those of degree only, and not of any distinct character of the complaint, or of the virus, and these distinctions and degrees of the affection are owing to the time elapsed before remedial measures are sought for, as much as to the constitution and habits of the patient. A patient attacked for the first time, in whom the tissues are most susceptible, will suffer more severely, especially because he does not so soon seek for advice until compelled by much pain and inconvenience. He is often unconscious of the existence of a discharge for the first day or two; but when his attention is attracted to it, he then finds that inflammation has set in with much severity. One further advantage of the above treatment, especially in private practice, is, that when once the disease is brought under control, the patient need not make any particular alteration in his accustomed diet, wine, &c., and does not require to be drenched with demulcents and diluents.

An old army practice has been advocated—viz., to cut short the complaint by the introduction of a bougie, smeared with a strong ointment of the nitrate of silver.* That the nitrate of silver does change the character of the discharge, on the principle of counter-irritation, there is no doubt. There are some cases in which it may be of advantage, passed about an inch along the passages, when the treatment I have indicated is, at the same time, pursued. But much caution is requisite, and it is very seldom required. It is a dangerous remedy, and quite capable of producing mischief greater than that of the disease.

Dorset-street, Portman-square, May, 1846.

ON THE OBSERVANCE OF METHOD IN CONDUCTING POST-MORTEM EXAMINATIONS,

ESPECIALLY WHEN THEY ARE INTENDED FOR LEGAL PURPOSES.

By H. LETHBY, M.B., Lecturer on Chemistry at the
Medical School of the London Hospital.

17.—THE spinal cavity should next be laid open, and the state of the venous plexuses all along the surface of the cord observed. Notice whether blood or serum has been effused between or upon its membranes.

18.—Carefully remove the cord, and, as in the case of the brain, dissect it, from one end to the other, by making a series of thin transverse slices: observe if there has been any disease, softening, effusion, or flattening from a tumour or dislocated vertebra.

19.—Examine the spinal cavity for fracture and dislocation.

20.—Open the chest, and notice whether blood flows freely from the cut integuments, and whether it is dark or florid. In cases of poisoning by the mineral acids and alkalies, and by carbonic and hydrocyanic acids, the blood is generally dark and fluid, running very freely from the external incisions.

21.—Are the lungs collapsed or full, pale or congested, adherent or not? Does the cavity of the pleura contain any abnormal liquid? Are the lungs diseased?—or have they been wounded anywhere? The import and value of each of these inquiries will strike every one. It must be remembered, however, that congestion of the lungs, although often indicative of a violent death, may arise from natural causes, such as pneumonia, bronchitis, disease of the left side of the heart, and from that low state of vitality which often precedes lingering diseases, when the circulation flags, and the blood accumulates in the pulmonic vessels; this has been called the pneumonia of the dying, and is recognised after death by its comparatively florid tint, and by its only occupying the most dependent parts of the lungs. Congestion also arises from any agency which operates in excluding air from the lungs, as in strangulation, drowning, hanging, and poisoning by carbonic or prussic acids, and it has frequently been observed after death from intoxication, opium, and arsenic.

22.—After the heart has been examined, (and this should be the next step of the inquiry,) the lungs, together with the

* The nitrate of silver is too irritating an astringent to be used often; and when the solution is stronger it is apt to produce severe inflammation, but nevertheless, I think that it has the effect of changing the morbid action and expediting the cure, if used occasionally at long intervals.

* See a communication from J. P. McDonald, Esq., THE LANCET, Nov. 1st, 1845.

trachea and larynx, are to be removed, and all made the subject of special examination. Open the larynx, and search for disease, croupy effusion, or any foreign body, as food, which may have got between the rima glottidis, and occasioned suffocation. Slit open the trachea down to its minutest divisions, and observe whether the lining membrane is inflamed or covered by blood or frothy mucus. The former may result from pneumonia or bronchitis; the latter from drowning, strangulation, or prussic acid.

23.—Examine the heart, first *in situ*, and notice the condition of the pericardium; the relative distention and colour of the two auricles and ventricles, whether the cavæ are gorged with blood or not; and lastly, whether the coronary arteries are enlarged, ossified, or otherwise diseased. This last question has once or twice been made the subject of legal quibble, because it has happened that some sudden deaths have arisen from diseased coronary arteries.

24.—Open the right and left sides of the heart, and observe the relative quantity, colour, odour, and consistence of the blood; then remove the heart, note its size, the thickness of its parietes, examine its valves, and search for any abnormal communication between its right and left sides. The average weight of the healthy female heart is from six to eight ounces; the male, from eight to ten; and it has been noticed that there is a pretty constant ratio between its size and that of the individual's hand.

It is important to notice the condition of the pericardium and the valves of the heart, because, in debilitated persons, and in others suffering from rheumatism, disease of the heart has sometimes come on without exhibiting any prominent symptom, and such cases have now and then proved suddenly fatal. This, however, would be always indicated after death by its characteristic deposits. Again, with reference to the contents of the heart, it has been observed that the right side is generally gorged with black fluid blood whenever there has been an impediment to the pulmonic circulation, as after death from hanging, drowning, opium, and from prussic and carbonic acids; in some other cases of sudden death, also, the same appearances have been manifested, as, for example, after death from lightning, extreme terror, and from blows on the epigastrium. The blood also is generally very dark after poisoning by the mineral acids, but then it is for the most part firmly coagulated. In almost all cases of slow or lingering death, the heart contains large coagula of nearly colourless fibrin, called polypi, and they would seem to indicate that the blood had been among the last of the elements to die, or that it had lived long enough for its red particles to subside, and for the fibrin, as in the case of a buffy coat, to separate and form a dense and pale coagulum: this condition of things may be often seen after death from inflammatory diseases, while it is rarely manifested in cases of poisoning. The evidences, therefore, which are furnished by the contents of the heart, are among the best in giving us a clue to the cause of death; they will, in fact, nearly always tell us where the act of vitality began to be interfered with; for if the right side of the heart is full of black fluid blood, and the left empty, or containing but little, and that also black, it assuredly indicates that the respiratory function has been greatly interrupted, and that death began at the lung; while, if the right side is replete with black blood, and the left contains some of a scarlet hue, then the action of the heart was the first to be arrested, and death began there or at the brain. Again, an almost empty condition of both sides would tell us that there had been great loss of blood, by hæmorrhage or previous emaciation. And, lastly, the appearance of a clot of fibrin in either of its cavities might indicate a lingering death or the existence of some acute inflammatory affection.

As regards the examination of the heart for any opening between its two sides, it is important to search for it, because it may be made the subject of cross-questioning, and the medical witness perhaps compelled to admit that such a condition might have existed without suspicion for years, and yet be the occasion of sudden death under some severe mental emotion. How can this be gainsaid if the proofs have not been sought into?

25th.—When the chest has been emptied of its contents, search for any fracture of the ribs or vertebræ.

Tredegar square, June, 1846.

“Man may learn the prudence of yielding sometimes, from this, that a stiff-neck is considered a disease.

“Physicians risk their lives often; most men, even soldiers, seldom.”

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

JUNE 9.—MR. HAWKINS IN THE CHAIR.

OBSERVATIONS ON VENEREAL DISEASES IN THE UNITED KINGDOM, FROM STATISTICAL REPORTS IN THE ARMY, NAVY, AND MERCHANT SERVICE, WITH REMARKS ON THE MORTALITY FROM SYPHILIS IN THE METROPOLIS, COMPILED FROM THE OFFICIAL RETURNS OF THE REGISTRAR-GENERAL. By WM. ACTON, Esq.

THE author states that his object in the present paper is not merely to give the dry statistical details of the official reports, but to call the attention of the Society to the practical facts founded on the calculations contained in the large published folios, and which hitherto have not met with any notice from the profession. He states, that in the army returns, the report extends over a period of seven and a quarter years, and includes the various venereal affections (8072 in number) of the soldiers quartered in the United Kingdom, amounting to 44,611. He furnishes a table, in which is seen that nearly one man in every five—or, more correctly, 181 per 1000—is attacked with venereal disease. According to the army classification, one man out of thirty-one is attacked with true syphilis; one in twenty, with *ulcus penis non syphiliticum*; and one in eighteen, with gonorrhœa.

The author further alludes to this classification of sores, and regards it as incompatible with the present notions on venereal diseases. He calls the attention of the medical authorities of the army to the large proportion of cases of secondary symptoms, which, according to their classification, amounts to one in every four men attacked with primary symptoms.

Mr. Acton next notices the large proportion of cases of swelled testicle occurring in the ranks, as the returns show that one in every three men attacked with gonorrhœa suffers from swelled testicle, which he attributes to the soldiers probably taking violent remedies unknown to their surgeons, and to the numerous cases occurring amongst cavalry soldiers; but he directs attention to the fact, whatever may be the cause, as more frequent than in civil life.

The author alludes to the frequency of venereal diseases in the American and Belgian army, and speaks of the probable causes of venereal diseases being most rife among our troops.

Passing to the navy returns, the author gives tables of venereal diseases in the home service, showing that one out of every seven sailors suffers from venereal diseases. The author regrets that in these returns the cases of secondary symptoms are not separated from the primary ones. He notices the large proportion of swelled testicles in the returns of the navy equalling that in the army.

In order to compare the proportions in the merchant service, the author furnishes a table, drawn up by Mr. Bust, surgeon of the “Dreadnought” hospital ship. It appears that the large proportion of one out of every three patients admitted labours under venereal diseases. He also gives a table to show that among the surgical out-patients at St. Bartholomew's Hospital, nearly one-half are affected with venereal disease.

The author calls the attention of the profession to the impossibility of checking venereal diseases, except by police or government regulations, and enters into a calculation founded on the returns of the period of a soldier's stay in the hospital, of the time he is incapacitated from duty, and of the expense of his maintenance whilst he is laid up.

The author, turning to the registered cases of deaths from syphilis, supplies a tabular statement furnished by Major Graham, showing, that during the last half year the mortality from syphilis has been two a week, and that one in 18,067 falls a victim to the disease.

He divides the deaths into males and females, showing that there were twenty-six deaths among the latter, and twenty-seven among the former, and contends that prostitutes do not (as some have supposed) perish in large numbers from syphilis. He calls attention to the novel fact, that the greatest mortality takes place among children under one year of age; but that no period of life, from the age of seventeen to sixty-four, is exempt from the fatal cases of the disease. Out of thirty fatal cases of infantile syphilis, we find the child born with traces of it in thirteen cases, and the complaint proved fatal in from one hour to thirty-nine weeks; in twelve cases the disease commenced between the first and twenty-sixth week after birth; and in seven cases the period of the first appearance is not mentioned. The author enters into some details as to how syphilis proves fatal in the infant, and then discusses how it kills adults; he shows that death from disease of the bones is now seldom met with, and he points to the few cases of death from phagedæna, in late years, as compared with former years. He alludes to the opinion entertained by

some persons, that women who have suffered from syphilis are more liable to other complaints, and shows that such a notion is unfounded, and concludes by expressing a hope that he has filled up one of those blanks on the subject of venereal diseases, which the premature death of Parent Duchatelet prevented that able philanthropist from supplying.

Mr. SOLLY said that it had been frequently asserted that syphilis was the cause of death to the fœtus in utero. Many accoucheurs of eminence were of this opinion. Had Mr. Acton any statistics on the point?

Mr. Acton had not alluded to the frequency of abortions mentioned by Mr. Solly, inasmuch as we possess no statistics on the subject, and he (Mr. Acton) had confined himself, in his paper, to those facts which admit of demonstration by figuring; he might, however, mention, that he was very doubtful how far syphilis could produce abortion. He had, in his work "On Venereal Diseases," stated that pregnant women, who labour under constitutional syphilis seldom miscarry, but bear apparently healthy children, which, as the paper states, become affected some few weeks after birth. Accoucheurs formerly, he believed, set down to the score of syphilis much that they now attribute to other causes; and without decrying the influence of syphilis, he thought we should not lose sight of the other numerous causes of abortion.

Dr. SNOW said he had seen several instances in which the fœtus died of the effects of syphilis, either in utero or a few days after birth. One patient, whose husband had suffered from syphilis before marriage, had had five children born about the end of the eighth month. Of these, only the last was living, and it had been treated as soon as it was born with mercurial ointment to the knee, in the way recommended by Sir B. Brodie. Of the others, one or two were still-born, and the rest died three days or a week after birth, the last which died having syphilitic eczema. Another patient had three very healthy children, which were still living; and after the birth of these, the husband contracted syphilis, and he and his wife had the disease in the secondary form; and the treatment for this was scarcely concluded, when the wife became pregnant again. The child was still-born at about the full period, and there was effusion of blood into the serous cavities, particularly that of the peritonæum. He (Dr. Snow) considered, that however valuable the registration might be for many purposes, it was no criterion of the number of deaths from syphilis. He believed the number of infants who perished of this disease was much greater than that stated in the table. Those he had seen to die of syphilis were not so registered.

Mr. COULSON agreed with the author in attributing the great mortality of infants from syphilis to the operation of the mercury, given for its cure, on the bowels. He adopted a practice in this affection, for which he was indebted to Sir B. Brodie, by which the serious evil he had just alluded to was obviated. This practice consisted in spreading mercurial ointment on a piece of flannel or lint, and surrounding the knee or some other joint with it, for a period of twenty-four or forty-eight hours, at the expiration of which time the symptoms usually disappeared. If the application produced too much irritation, it was desirable to remove it before the expiration of either of these periods, and again apply it if necessary. He gave no mercurial internally.

Mr. DAVIS spoke of the difficulty of arriving at a correct conclusion as to the real number of cases of syphilis in the army, in consequence, among other causes, of men being frequently sent on duty before they were quite well, and the same case being afterwards, on re-admission, entered as a fresh case.

Dr. MACLAUGHLIN believed that in reality there was not more syphilis in the army, in proportion, than among any other number of individuals of the same station in life. In proof of the difficulty of arriving at just conclusions respecting the amount of syphilis in the army, he stated that men had been admitted and re-admitted into the hospital, labouring under this complaint, as many as thirty times, as if each time the case were a distinct infection, when in reality it was not so. With respect to the frequency of hernia humoralis, as mentioned by the author, the same fallacy existed. It bore nothing like the proportion of one case to every four of gonorrhœa. A man affected with hernia humoralis went out of the hospital with the disease, and perhaps a month afterwards, came in again with the same complaint, and thus kept going in and out of the sick ward several times in the course of six months, with, in reality, a return of the original affection, and not a fresh attack of it. These sources of fallacy were fatal to the correctness of the army statistics, as

given in the paper. He eulogized the plan of treating syphilis and its complications by army surgeons.

Mr. ACTON, in reply to the last speaker, observed that he had no intention of impeaching the treatment of the army medical authorities; he drew his deductions from the published records of our navy and army, and had suggested the same probable explanation of the facts as stated by them; but as facts, they were no less curious and deserving the attention of the profession, particularly at a period when so much public attention was directed to the condition of the soldier.

Mr. LLOYD, in reference to the frequency of death as the direct result of syphilis, remarked, that at St. Bartholomew's he had constantly from two to three hundred cases of this disease under his care, and yet, during a long professional career, he had only seen four cases of death during the active stage of syphilis, and even these deaths could not be fairly attributed to the syphilis alone. One of these cases had been under the care of the late Mr. Abernethy; it was a case of severe rupia, succeeding to phagedæna, in which mercurial fumigation had been applied. The moment salivation took place, the patient fell down in an epileptic fit, which recurred at intervals of a few hours, until the patient died. There was effusion between the arachnoid membranes. In two other cases, the patients suffered from an œdematous state of the sub-cellular tissue, while labouring under syphilis, and it might be fairly questionable, whether the latter disease alone had destroyed life. The last case was one of phagedæna, in which mercury had been improperly applied, with the effect of producing great constitutional debility, and a fatal result. He had never seen a case of death from syphilis in a child in his own practice, and he did not believe that the internal administration of mercury, when judiciously resorted to, was bad. Cases of abortion, and of death of the fœtus shortly after birth, were more common in cases in which the disease affected the father, than when the mother was the subject of the complaint. Why it was so, it was difficult to explain.

Mr. WADE had been surprised to hear Mr. Acton say that syphilis was not a cause of abortion, for he, Mr. Wade, was fully convinced that it was. Several cases had come under his care, in which women aborted two or three times successively in consequence of syphilis, but who afterwards bore healthy children in consequence of having been placed under an extended course of mercury. Of course, these remarks applied to the secondary form of the affection. The father having the disease was more likely to produce abortion in the mother than if she herself were affected.

Mr. CESAR HAWKINS thought the paper would have been more complete had the statistics of the various Lock hospitals been added to the other records. He suggested, in respect to the influence of syphilis in producing abortion, that one source of fallacy might exist in the influence of mercury, when this was given, particularly in former times, on its production.

Mr. ACTON observed, that as to the utility of adding returns from the Lock Hospital, he must say, such information would have been very desirable; but that institution enjoyed very little public or private support; there was great disinclination in the public to supply it with funds, patients in its wards were few, and Mr. Acton was unaware of any statistics it possessed, and doubted much if they were open to the public; the few reports which it had published were very meagre, and its present position, so far from the centre of town, rendered it little accessible to the poor, who formerly confided in it. Of late years its position had been taken by the other metropolitan hospitals, for, as this paper shows, the poor flock to St. Bartholomew's, where we find half the surgical out-patients suffering from venereal diseases; and at the so-called free hospitals this proportion is still larger. He believed he had neglected no source whence he could have obtained his statistics, which he believed would be valuable in future years, as means of comparison.

Mr. LLOYD had not found hernia humoralis a disease so liable to relapse in civil as it appeared to be in military hospitals. After active depletory treatment, which he always employed, he did not see three cases of relapse in twelve months.

CASES OF VARICOCELE TREATED BY PRESSURE, WITH OBSERVATIONS.

By T. B. CURLING, Lecturer on Surgery, &c., London Hospital.

The author states that, three years ago, a case of varicocele, cured by the application of pressure to the spermatic veins, came under his notice, and being struck with the peculiar adaptation of this plan of treatment to counteract the injurious effects of the dilated veins, he determined to give it a trial.

He has since treated many cases of varicocele by pressure, and as a sufficient period has now elapsed to enable him to form a just opinion of the value of this plan of treatment, and of its advantages over other methods, he ventures to submit the results of his experience in the management of this complaint to the consideration of the fellows of this Society.

The author details three cases of varicocele cured by pressure: the first, at the end of nineteen months; the second, at the end of seven months; and the third, a case of double varicocele, in ten months. He also alludes to four other cases, in which this plan of treatment was successful in curing the disease. He remarks, that in these cases the dilatation of the veins had taken place at a comparatively early period of life, was neither excessive nor of long duration, but was productive of inconvenience and uneasiness, which could be only partially remedied by the suspender; they were precisely the cases in which it was presumed that pressure, by relieving the veins of the superincumbent weight of the blood, would enable their coats to recover their proper size and tone.

Two other cases are related in which great and immediate relief of the distressing symptoms occasionally attendant on varicocele was afforded by pressure, but the patients had not remained under treatment a sufficient period to enable him to judge of the ultimate results.

The author remarks, that little attention is paid to constitutional treatment in varicocele, which is commonly regarded as exclusively a local disease. In the class of cases in which the benefit derived from pressure is most apparent, the patients are persons between eighteen and thirty years of age, of weak frame and constitution, and subject to dyspepsia, and whose venous system and circulation are feeble. In these cases the operation of local remedies may be aided materially by general treatment.

After noticing the liability of this disease to relapse, and for this reason recommending the continuance of the truss for some time after all symptoms of the affection are removed, the author adverts to another class of cases, in which the application of pressure is capable of giving considerable relief, though not of curing the disease. They are cases met with at a somewhat advanced period of life, in which the plexus of dilated veins is of large size and of long standing, but productive of only slight inconvenience, which may be remedied by the suspender. The application of pressure, however, not only removes the slight uneasiness, but also counteracts the tendency to further dilatation, and prevents the wasting of the testicle, though the enlargement is too great to admit of the vessels being reduced to their former size.

From these observations, the author considers the treatment by pressure to be applicable, either for the cure or relief of the majority of cases of varicocele occurring in practice, and its simplicity, freedom from all risk, and efficacy, in his opinion, render it superior to every other method of treatment that has hitherto been tried. In all the cases which he has treated, he has employed the moc-main-lever truss, which seems better adapted to make the necessary pressure at the abdominal ring than any other instrument that he knows of. In general, the truss need be worn only during the day. When the scrotum is pendulous, or the plexus of dilated veins considerable, he advises the addition of the silk-net suspender.

Mr. LLOYD was always able to relieve varicocele without employing a truss. Dilatation of the veins alone in varicocele did not cause pain or inconvenience, any more than a simple varicose condition of the veins of the leg produced suffering. It was when inflammation came on that the pain and inconvenience were experienced. Alay that inflammation, and you relieved your patient.

Mr. CURLING, in answer to a question, said that he had seen one case in which the use of the truss had been discontinued for four months, and there had been no return of the complaint. In answer to Mr. Lloyd, he observed, that the treatment recommended in the paper had reference only to those cases in which the patient really suffered from the disease. These sufferings might exist independent of inflammation, as the sense of weight &c. experienced by patients in this disease, and the means taken to prevent it, would testify.

Mr. SOLLY referred to the case of a hard-working smith, who, after wearing a truss for six months, had been cured.

Mr. COULSON, though he had not employed a truss in his own practice, had known instances in which varicocele had been relieved by such application. When varicocele became troublesome, he was in the habit of drawing the scrotum through Wornald's "scrotal ring," by which means the testicle was drawn up close to the abdominal ring, and this, with

a suspender, succeeded in affording relief. The apparatus was removed at night.

Mr. PARTRIDGE had seen a gentleman who suffered from varicocele complicated with a hernia, which it was difficult to return, and in whom the scrotum was so painful that he could not bear even the pressure of a suspender. The hernia was so difficult to return, that he was ordered to lay in the recumbent position for six months. The hernia was then reduced; he wore a truss, and the varicocele had since much diminished in size.

Mr. STREETER alluded to the remark of Sir C. Bell, to the effect, that he had known varicocele much relieved, when, having been mistaken for hernia, a truss had been applied to it.

MEDICAL SOCIETY OF LONDON.

MAY 11, 1846.—MR. DENDY, PRESIDENT.

COPAIBA IN INFLAMMATION OF THE MUCOUS MEMBRANES.

Mr. ROBERTS related a case of nephritis, in which, after bleeding, and the ordinary treatment of that disease, some inflammatory symptoms still remaining, and suppression of urine more particularly, he exhibited copaiba in ten-drop doses three times a day, with the effect of restoring the secretion.

Dr. WILLSHIRE regarded the practice in this case as a fresh fact in favour of the use of balsams. In America it was given with good effect in the acute stage of gonorrhœa; eminent surgeons had given it in sub-acute cystitis. In Dublin, turpentine was administered with benefit in cases of chronic inflammation of the air-passages.

Some discussion took place respecting the use of balsam of copaiba in the acute stage of gonorrhœa.

Mr. LINNECAR never employed it until after antiphlogistic remedies had been resorted to, as it had a tendency to produce a metastasis of the inflammation to the neck of the bladder, owing, as he believed, to its extreme diuretic power.

Mr. MIDDLETON remarked that there was no doubt that the balsam, when given in the acute stage of the disease, immediately relieved the pain; but whether the practice was a good one, was another question.

Some conversation afterwards took place respecting affections of the air-passages, in which several members took part.

MAY 18.—OVARIAN DISEASE; COLLOID MATTER IN THE CYST.

Dr. WALLER detailed the particulars of a case of ovarian disease occurring in a woman fifty-two years of age, in which all the symptoms and signs of the affection were well marked. It was eventually determined to draw off the fluid, but on introducing the trocar for that purpose, no fluid whatever came away, and only a small quantity of a substance resembling calves'-foot jelly. It was evident that the tumour was full of this substance. It was agreed, after a consultation with Mr. Walne, to remove the tumour entire—a proceeding not before contemplated, in consequence of the very depraved state of health of the patient. Before this operation, however, could be resorted to, inflammation of the cyst and peritonæum came on, and the patient died. On examination after death, the cyst filled almost the entire abdomen, and contained a jelly-like fluid, in a quantity so large, as to fill a pail. There were adhesions to the left side of the abdomen, but none above or below. Would this patient have survived an operation earlier performed? He (Dr. Waller) believed that she would not, and was glad no such step had been resorted to.

Dr. G. BIRD had seen more than one such case, and several had occurred in the practice of his brother, Dr. F. Bird. The mass filling the tumour was of a colloid character and pinkish hue, intersected by a thin, hyaloid-like membrane, containing a jelly similar in substance to the vitreous humour of the eye. There were no means of distinguishing this substance from the fluid whilst in the abdomen. Dr. F. Bird had a notion that this class of cases was peculiarly adapted for operations, and that they usually did well. He (Dr. G. Bird) referred to a very interesting case of the kind lately exhibited to the Society, and reported in THE LANCET.

Dr. T. THOMPSON made some remarks on the treatment of ovarian dropsy by medicines, and believed that he had seen benefit result in this disease from the administration of alkalies in large and long-continued doses. He briefly referred to two or three cases in which, during the use of a solution of

potash, ovarian tumours disappeared. He thought the potash did not act simply as a diuretic, but had a specific property in these diseases.

Dr. WALLER and Dr. G. BIRD believed that no kind of medicine had any effect in ovarian disease.

Mr. BISHOP had never met with a case of ovarian dropsy in which he had not succeeded, when he resorted to tapping, in getting away the fluid. After the case detailed, however, it was clear that a surgeon would have done his duty in the case, if, after using the trochar in the proper place, no fluid flowed, he did not proceed further in treating the case by operation.

Dr. G. O. REES had seen cases of ovarian disease, in which the cysts contained colloid matter, in Guy's Hospital.

References was then made by various speakers to the treatment by pressure and mercurials, a practice which they all condemned.

Dr. THEOPHILUS THOMPSON gave some particulars of a case of cancer of the lung, in which all the signs and symptoms of the disease were clearly developed, but no post-mortem examination could be obtained.

MONDAY, MAY 25.

Dr. GOLDING BIRD read an elaborate paper on the treatment of paralysis by electro-magnetic currents, which will be found at page 649 of THE LANCET.

STATISTICS OF CONSUMPTION.

Dr. THEOPHILUS THOMPSON gave a short report of some particulars which he had observed, during the last twelve months, as visiting physician to the Hospital for Consumption and Diseases of the Chest. The number of patients treated by him during the year was 760, of which 286 were phthisis in various degrees of advancement. Amongst seventy-seven cases of advanced phthisis, fifty-six were men, only twenty-one women; but of the cases of incipient phthisis, the number of males and females was nearly equal—a fact leading to the conclusion that the apparent preponderance of the former was attributable to the unwillingness or inability of women to leave their homes under circumstances of advanced disease. He remarked on the importance of prolonged expiratory murmur, when unconnected with bronchitis or emphysema, as an early indication of phthisis, and a sign which, when once established, rarely disappears. He also particularly noticed, as a phenomenon of great interest and practical importance, the “*inspiration saccadée*” of some French authors—not the jerking respiration of spasmodic asthma, nor the interrupted inspiration of diffused pleurisy, but the division of the inspiratory murmur, as though the entrance of the air into the cells required several successive efforts. He had occasionally observed this sign at the back, as well as the front part of the chest. It sometimes disappeared under treatment; but there was reason to think it characteristic of a condition of the lungs which frequently immediately preceded, or accompanied, tubercular infiltration. It was remarkable, that of ten cases recorded during the year, the phenomenon had been in nine instances confined to the left side. He had, during the last twelve months, taken notes of eight cases in which a murmur was heard in the second intercostal space, on the left side only, and was probably referable to the pulmonary artery. In two of these patients, the murmur disappeared under the use of iron; but in most, it was succeeded by more or less distinct manifestations of tubercular disease. He deferred any comments on cases of heart-disease, bronchitis, and other pectoral affections, and concluded by mentioning the results of his observations regarding cod-liver oil, which he had administered in thirty-seven of the recorded cases. In three, the medicine was discontinued in consequence of the distressing nausea which it occasioned; in twelve, the reduction of strength appeared to be slightly retarded; in twelve, there was no perceptible effect; in ten, the increase of strength, plumpness, and energy, was remarkable. When the fattening process was established, it generally became obvious within a fortnight. The author did not attribute to the oil any specific influence on the local disease; but believed it to be singularly efficacious in promoting nutrition. He had found it most useful to the pallid and phlegmatic, and, in private as well as public practice, had observed more decided amelioration under its employment than could be referred to any other remedial means with which he was conversant.

This being the last night of the session, the Society adjourned, after a short address from the President, until September next.

BRITISH MEDICAL JOURNALS.

SEBACEOUS CONTENTS OF AN OVARIAN TUMOUR DISCHARGED IN THE URINE.—CONTENTS OF OVARIAN CYSTS.

“Dr. MONTGOMERY presented a specimen of a fatty substance, resembling butter, which had been melted and afterwards congealed, which had been sent to him by Surgeon Brabazon, of the Downpatrick Infirmary, who described it as having been obtained from the urine of a female patient in that Infirmary, who had been admitted for an abdominal tumour which was supposed to be ovarian. After she had been some time in the Infirmary, the substance began to be deposited in the urine as it cooled, and the abdomen gradually diminished in bulk. Dr. Montgomery considered that this might be elucidated by referring to some other cases exemplifying the different modes in which ovarian tumours may be resolved. The matter now produced he found would liquefy at the heat of urine just discharged. It was probably liquid in the body, though we know very little of the state of the contents of ovarian cysts during life. In a case communicated by Dr. Hardy, a matter similar to this, but of a white colour, was found in the ovium. Surgeon O'Brien, of the Clare Infirmary, had described the case of a woman labouring under vesical calculi, the nuclei of which were human teeth. These had probably passed from the ovium, although in that case there were no symptoms of ovarian tumour. A case had been communicated by Dr. Houston, of a tumour blocking up the rectum, which, on being laid open, was found to envelope a maxillary bone, with thirteen teeth. There is another mode in which ovarian cysts may be evacuated—viz., discharged of their contents through the parietes of the abdomen. Of this Dr. Montgomery has seen three cases: one, in which pellets of hair and teeth were discharged through an opening near the umbilicus, had come under his notice during last summer. In a similar case in Dr. Stevens' Hospital, a lock of hair protruded through the opening, but then not sufficiently detached from the internal parts to admit of its being removed, any attempt to that effect causing hæmorrhage.”—*Idem*.

The glairy, albuminous contents of one of these ovarian tumours we have recently seen discharged by the rectum, the patient recovering perfectly, no trace of tumour being left behind.

AROMATIC PASTILES OF CATECHU.

This preparation, which owes its origin to the Italians, may be easily made, according to the following formula:—Take of extract of liquorice and water, of each three and a half ounces. Dissolve by the heat of a water bath, and add Bengal catechu, in powder, 462 grains; gum Arabic, in powder, 281 grains. Evaporate to the consistence of an extract, and then incorporate the following substances, previously reduced to fine powder:—Mastic, cascarrilla, charcoal, and orris root, of each thirty grains. Reduce the mass to a proper consistence, remove it from the fire, and then add, English oil of peppermint, thirty drops; tincture of ambergris and tincture of musk, of each five drops. Pour it on an oiled slab, and spread it out by means of a roller to the thickness of a sixpenny piece. After it has cooled, apply some folds of blotting paper to absorb any adhering oil; moisten the surfaces with water, and then cover it with sheets of silver leaf. It must now be allowed to dry, then cut into very thin strips, and these again divided into small pieces, about the size of a fenugreek seed. These are extensively used by smokers for masking the disagreeable smell of the breath.—*Pharmaceutical Journal*.

THE MICROSCOPICAL APPEARANCES OF FÆCES

Being given in Mr. PAGET'S reports in the same journal, show that science is not much troubled as to the delicacy of its pursuits.

“The usual microscopic constituents of human feces are thus enumerated by Dr. Gobee. 1. A large quantity of vegetable cellular tissue, with or without epidermis and hairs. 2. Vegetable hairs. 3. Vegetable spiral vessels. 4. Elongated quadrangular plates, of light-yellow colour, in great abundance, of uncertain nature; they are not affected by acetic acid, and are insoluble in cold ether, but iodine displays transverse striae on them. [Probably they are portions of muscular fibre. I have found such, tinged pale-yellow by the bile, in the fluid discharged through an artificial anus.] 5. Large quantities of crystals of phosphate of ammonia and magnesia. 6. Fat-globules or cells in various quantity. 7. A great quantity of granules. 8. Few epithelium and mucus cells. 9. Much of the brown-colouring matter of the bile.”

THE LANCET.

LONDON, SATURDAY, JUNE 27, 1846.

THE WATER-DEATH has been fortunate in the acquittal of ELLIS, who took his trial for manslaughter at the Central Criminal Court on Saturday last. Some of the points connected with the career and trial of this quack, against whom a verdict of manslaughter was given by the coroner's jury, under Mr. PAYNE, the coroner for the City of London, are deserving the attention of the censors of the press. It appears from the evidence, that six years ago the prisoner ELLIS had been "in the lace trade;" that since this period he had been abroad; but the attempt to show that he had been acquiring a knowledge of medicine in any foreign university, or that he had even purchased one of the many purchasable degrees of the Continent, entirely failed. No competent witnesses in a charge of so grave a kind as that of manslaughter were called to prove his knowledge of the most elementary organization of the human frame, whose maladies he, with such guilty temerity, pretends to understand. The witnesses called to attest his skill and ability were some silly ladies and gentlemen, believers in the *water-death*, some of whom had boarded and lodged with ELLIS, at Petersham.

It came out in evidence, that Mr. DRESSER, the party whose life had been sacrificed, was, after his arrival at Petersham, able to walk about the grounds, and was recovering from the sciatica, for the relief of which he had been conveyed to the establishment. When the symptoms of the disorder, which ended in his death, set in, he was gravely examined by the quack, a disease was assigned to the symptoms, (of which ELLIS knew just enough to give the name hepatitis,) and the cold-water death was forthwith brought to bear upon this imaginary disease. The dissolution of the patient speedily followed.

After the death of Mr. DRESSER, but before any judicial inquiry was thought of, the quack ELLIS gave a written paper, that he called a diagnosis, which we reproduce, as necessary to our remarks:—

"Mr. Richard Dresser came here on Friday last, to seek relief from what he termed rheumatism, giving no other particulars: the case was thought admissible. But it soon appeared that he had been suffering from hepatitis of the sub-acute character, giving rise to suppuration, occasioning exudations of lymph, and a rapid extension of the disease to the adjoining viscera. The symptoms were, tympanitis, total inaction of the bowels, and sluggishness of the urinary organs, very severe pain in the left leg, from the groin, along the thigh to the ankle, coldness of the extremities, and loss of power. He was treated as is usual to subdue the symptoms; the pain was soon suspended; the bowels, though stubborn, acted freely, after the means had been tried, and ever seemed to do so; and the urine either passed of itself, or was drawn off. The appetite allowed of his taking a little farinaceous nourishment; but disease proceeded insidiously; sub-acute inflammation advanced gradually, though there was no sign of active progress; the organ became generally the seat of suppuration; the pulse became quicker and softer, with much perspiration; the countenance became pale and sallow. There was tumefaction of the liver, with a doughy, œdematous, or boggy feel of the hepatic region generally. The enlargement or bulging was very great about the false ribs. Oppression, with dyspnoea, or short breathing, immediately preceded his decease, which took place at twenty minutes before eight this morning, June 2nd, without either a sigh or a struggle. In

three or four hours after his decease, the fluids filled the chest and throat, and oozed copiously out of the ears, nose, and mouth.—Signed, J. E."

The post mortem, conducted by Messrs. WATERWORTH and HICKS, two highly-respectable medical men, showed that not a word of the pathological farrago contained in this pretended diagnosis was true. The man simply died of congestion of the internal viscera.

There are two reasons which may be advanced for the production of this diagnosis. One, that it really described what ELLIS, in his ignorance, supposed to be going on in the system of his patient; the other, that it was given to Mrs. DRESSER as a solemn placebo, without any meaning at all, except that of preventing the poor woman from making any inquiry into the cause of her husband's death. Of these, the latter is most probably the truth.

We need not tell our readers that the relation of the case, as given by ELLIS, exhibits no more diagnostic or pathological knowledge than just sufficient to enable the writer to string together a few common technicalities, without any order or probability, and, indeed, with the most direct contradiction in the different parts of his story. We do not hazard much in saying, that actual disease never did and never could produce such a case. The patient was at the place of his destruction, from Friday evening, when he was well enough to ride from London to Petersham, to Tuesday morning—only three clear days altogether; and during this brief time, there occurred, according to the diagnosis, inflammation of the structure of the liver, rapid extension of disease to the neighbouring viscera, and the termination of inflammation in effusion of lymph and suppuration generally throughout the liver. All these phenomena of the most sthenic disease were found in a patient in whom there were, coldness of the extremities and loss of power, with "no active signs of progress," and in whom the "disease proceeded insidiously," and the "inflammation advanced gradually." That "he was treated as is usual," means, that for this miraculous meeting of the chronic and the acute, he had a bath on Saturday, Sunday, and Monday, at 65° or 85°, with the plentiful application of wet cloths to the surface of the body. If it were not for the fatal event, and the fatal events of a similar kind to which we are continually liable, the gullibility of the poor patient himself, and the assumed wisdom of the hydropath throughout, might be laughed at as the grossest and most incredible absurdities.

To the medical judgment the case is clear enough. The patient, DRESSER, had a feeble heart: this alone tends to impede the circulation, and gives a predisposition to internal congestion. To put such a patient at any time into water of a temperature below blood-heat, must have tended to weaken the action of the heart, and to determine the blood from the surface to the internal organs. But when congestion and failure of the heart's power were already present, immersion of the whole body in a bath of this temperature could have no other effect than to exhaust the already ebbing powers of life. The evidence given at the inquest and on the trial shows that there was no reaction—that the perspiration that followed the bath was cold—in fact, the sweat that foreruns dissolution.

The reflections excited by such a case are of the most painful kind. ELLIS goes back to Petersham, acquitted in

the eye of the law, to practise in the same style upon any dangerous case that may enter the establishment, or that may become dangerous during the patient's stay there. And it may be remarked, that these are the same "groves of Peter-sham" so lackadaisically bepraised by Sir E. BULWER LYTTON in his letter about "Hydropathy." There is, in effect, no protection of the public against the murders of quackery. ELLIS returns to his former haunts with the dictum of Lord TENTERDEN in his favour, that though he, a man lately in the lace trade," professes to cure all sorts of diseases, and though he may take the responsibility of life and death upon himself, yet when he comes before a jury on a charge of murder or manslaughter, he is in exactly the same position as Sir ASTLEY COOPER would have been under a similar charge. This was the dictum delivered on the trial of St. JOHN LONG, and of which ELLIS and the whole company of quacks take the benefit. We will put a parallel case, and ask, what would a judge say if a haberdasher had advertised himself as an experienced and skilful driver, and having induced persons to mount his coach, had, in utter ignorance, precipitated them over a precipice, and killed his passengers? Would any judge dream of putting such a miscreant on the same footing as a really experienced driver? Yet this is the injustice to which medical men are subject, under the pretence that the medical art, the profession of HARVEY, SYDENHAM, HUNTER, and JENNER, is yet "in its infant state," as the *Morning Chronicle* impertinently affirmed in relation to this very case.

One point we are constrained to mention—namely, the support afforded to hydropathy—the water-death, as we shall continue to call it—by members of the medical profession. Although this case of ELLIS manifested such flagrant ignorance, and such deplorable trifling with life and death, medical traitors were found within the pale of the profession, to attempt to screen the actor from punishment. We regret to say it, but very recently, since we adverted to the subject in Mr. MAYO's case, it has come to our knowledge that a distinguished physician, to whom the medical practitioner has been taught to look as anxiously desiring the improvement and weal of the profession, has so far forgotten himself as to recommend patients to these water-death establishments. Knowing this, will the profession send patients to him? This is the question to which the betrayed profession must give a practical answer.

The following advertisement is at present going the round of the daily papers:—

"KING'S COLLEGE HOSPITAL.—The Committee of Management beg to inform the Friends of this Hospital, that his Grace the Archbishop of Canterbury has consented to take the Chair at a Meeting, to be held on Saturday, the 27th of June, in the New Hall of King's College, for the purpose of raising a Fund for the purchase of a Site, and for Building thereon a New Hospital. The Committee earnestly entreat Noblemen and Gentlemen who may be friendly to the Hospital, and anxious to promote the religious education of medical men, to lend their aid and influence in obtaining as large a meeting as possible upon this important occasion, not only for the sake of forwarding the object immediately in view, but to show becoming respect to the Most Rev. Prelate, who has so kindly consented to preside. The Chair will be taken at Three o'clock precisely.

"The Meeting will be addressed by the Bishops of London and Oxford, the Lord Ashley, the Vice-Chancellor of England,

the Vice-Chancellor Knight Bruce, Archdeacon Manning, and others.

"M. BIGGS, M.A., Chaplain to the Hospital.

"King's College, London, June 17."

We cannot compliment the committee of the King's College Hospital fund, or the Rev. M. BIGGS, on the good taste displayed in this advertisement. It is not a very delicate insinuation, that medical men are a set of atheists, infidels, and so forth. We suppose we must look at the proposed hospital as something more than other infirmaries. It is to be a kind of Home Mission for the conversion of the medical heathen—an institution for propagating the gospel among "medical men"—very gracious and taking topics for the eloquence of the church dignitaries who are to address the proposed meeting. If the overflowing zeal of the hospital chaplain could lead him to make so discreditable an implication, it might have been reasonably expected that the medical staff of the institution would interfere to prevent such an indirect slander on their professional brethren. We certainly know of no valid reason why this hospital should, above all others, pretend to such lofty puritanism; we do not know that its medical staff is particularly free from worldly stain. Who are to be the missionaries? Will Messrs. FERGUSON, SIMON, and PARTRIDGE, elect themselves to the office, or will the great work of evangelization devolve on the Rev. Principal and Mr. BIGGS. If Mr. BIGGS be really in earnest in his desire "to promote the religious education of medical men," we advise him to begin at home, to commence his labours within the college walls. Dr. TODD, for instance, and Mr. BOWMAN, and Dr. GUY, may be exhorted to the cultivation of scientific and literary probity; and another of the teachers, Professor MOSELEY, may perhaps be prevailed on to stop the discreditable career of his reverend parent, Dr. WILLIS MOSELEY—a person we shall have hereafter to deal with, and certainly one of the most flagitious of all the quacks which infest the metropolis.

But we are fain to say that the whole affair is one of the most transparent cant and hypocrisy—a cant and hypocrisy, too, of the worst kind. The authorities at King's College well know that the students of their institution can claim no real superiority on the ground of morality or religion over those of University College, or St. Bartholomew's, or the Borough. The religion of advertisements, and of an annual prize, and of a set speech, made more for the eyes of the public than the ears of the students, are but poor Pharisaical displays. We have not a word to say against, but everything to say for, the highest training, intellectual, moral, and religious, of medical students. There is, however, something in the last degree repulsive and intolerable in seeing a statement put forth by King's College, which, for the purpose of adding a little paltry money to the collection, and for the snobbery of getting a crowd of noblemen and gentlemen who may be "anxious, &c.," to gather round an archbishop, would be willing to sacrifice the character of the medical profession. The occasion and the purpose ought to be sufficient without advertising for a respectable company to keep the primate in countenance. The money to build King's College Hospital should be raised by no such canting and hypocritical means. Charitableness to the poor has no need to be mixed up with uncharitableness towards the whole medical profession. In the name of honesty, let us not have a COLLEGE OF CANT.

SALARIES OF POOR-LAW MEDICAL OFFICERS.

To the Editor of THE LANCET.

SIR,—There was an announcement made in the premier's opening speech at the commencement of the present parliamentary session, which doubtless gave great satisfaction to many besides myself. Sir Robert stated, that it was proposed, that government should take into its own hands the remuneration of medical officers holding situations under the new poor-law. I hope and trust that this will not prove an empty promise. It is high time something were done in the way of protection to medical men, who in all parts of the country are suffering under the operation of the "amended poor-law." How many hard-working members of the profession are mercilessly driven, for a wretched sum, to double their daily toil, by a compulsory undertaking of the care of the sick poor, through dread of threatened opponents, sometimes in the shapes of nephews of assistant-commissioners, half-pay army surgeons, and the like. On the principle, that "half a loaf is better than no bread," the poor country doctor undertakes more work than he is well able to get through. In many instances, surrounded by a too-numerous family, whose future lot his heart aches to think of, harassed in mind and body by the anxieties and physical fatigue of his ill-requited task, he envies the excise officer, the toll-gate keeper—nay, I had almost said, the 8s. a week labourer. I do hold that this is a most cruel position in which to place a member of a respectable profession. In his struggles for his daily bread, he is led into this temptation by the misnamed protectors of the poor. He must either neglect his sick charge, or in doing them justice, must straiten the means of his own family. On the cover of THE LANCET, May 9th, is an advertisement addressed to "duly qualified" medical men, willing to undertake the duties of two districts in the Bicester Union—viz., the Stoke-Lyne District, population 1536, with a salary of 20*l.* per annum; and the Blackthorn District, with a population of 1335, salary 18*l.* per annum. Having formerly had the care of both these Districts, in addition to the Bicester District—the whole at no time consisting of less than 17 parishes, with a scattered population of nearly 8000 souls, for a salary of 120*l.* a-year, (at an annual loss to myself of from 40*l.* to 60*l.* for a period of eight years, without reckoning time, skill, or attendance,) I think I am well qualified to speak to the shameful inadequacy of the sum offered in the above advertisement for the duties required. The Blackthorn or Southern district, consisting of five widely-lying parishes, for which the munificent salary of 18*l.* per annum is offered, has been from time immemorial the seat of fever, and all the miserable concomitant diseases of marsh miasm. Now who that is not a "guardian of the poor," will stand forward and say that this is a "remuneration" for educated and "duly qualified" medical men to minister to the wants of their afflicted, toil-worn, and half-starved fellow-creatures? About seventeen pence a week, a sum too little for the merest child that tends the threshing machine, or frightens the sparrows from the corn, is offered to the health officer of the parish! There may be cases of still greater hardship than the above. Multiplied notices of such may perhaps excite attention in the right quarters. For your unwearied exertions in the behalf of a "down-trodden" body of men, the profession can never be too grateful. Is it too much to hope that some day or other an enlightened government may feel itself compelled to stand between the English labourer and his churlish masters—the miscalled "guardians of the poor."—I am, Sir, your obedient servant,

Bicester, Oxon, June, 1846.

THOMAS DAWSON.

ON BREACHES OF CONFIDENCE WITH MEDICAL PRACTITIONERS AT ASSURANCE OFFICES.

(LETTER FROM MR. CAMDEN, SURGEON, HOUNSLOW.)

SIR,—A patient of mine, about ten or eleven years since, wishing to effect an assurance on her life, gave my name as her medical referee, and usual medical attendant, to an office in Chatham Place. I accordingly gave every answer, under the idea that it would be, as they (the offices) term it, "strictly confidential." I perfectly well knew what would be the result of her application, from the statement contained in my reply, and you may judge what was called strictly confidential, when I inform you, that in a week or so after, I met my said patient in company with three or four of her friends, when I received a most sound rating for having informed the office that she had had a severe attack of (I use her own words) spitting of blood, and a great likelihood of a return. She further said, that they

told her so at the office, and as she told me what I said in my letter, I could not doubt it; that had she thought I should have said a word about the hæmoptysis, she would not have given my name, but as it was, she must go to another office and give another medical referee. I could give the name of the office, but at this length of time, I might, perhaps, be unable to prove it; but at any rate, there is one office there to which I should not reply. This is another instance of breach of confidence on the part of assurance offices, quite confirming Mr. Stookes' assertion.—Your obedient servant,

Hounslow, June, 1846.

G. J. S. CAMDEN.

THE QUACKS AND THEIR ABETTORS.

To the Editor of THE LANCET.

SIR,—The public and the profession are certainly under a great obligation to you, for the bold and unsparing manner in which you have attacked quackery, quacks, and their supporters, and if you can, by continued exposure of it and them, suppress the system, you will achieve a noble work, surpassing in extent and excellency the many benefits THE LANCET has already conferred on the profession and the community.

Let me crave your indulgence for offering a few remarks, arising out of the article in THE LANCET of the 13th instant, referring to this subject.

The leading features of quackery are, I conceive, the use of secret remedies, and the attaching to these remedies something like an universal applicability to diseases in general.

Now, let us inquire how these two characteristics of quackery are sustained by the certificate of the late Dr. Barlow, given to Mr. Hunt.

Dr. Barlow writes, "The perfect unreserve with which he explains his principles, and demonstrates the modes of their application." Instead of secrecy, we have here a candid unreserved explanation of principles; and, further, a practical exposition and exhibition of his principles; and, instead of universal applicability of them to diseases in general being claimed, they are confined to stammering.* This simple statement is sufficient, in my opinion, to relieve the late Dr. Barlow from the charge of having been a supporter of quackery. Perhaps, had you known that Dr. Barlow was dead, you would have allowed the good rule of *nil nisi bonum de mortuis* to prevail, even had he been what you conceive him to have been. Oh, Sir, it is a startling fact, to see the late Dr. Barlow arraigned as a supporter of quackery. Believe me, the whole profession of Bath cry *proh pudor!* at such an imputation against their late respected colleague, who lived among them in the exercise of his profession about thirty-five years; and during that long period, he was marked by the most rigid adherence to all that was honourable and upright. He was eminently *integer vite*, and might, indeed, without flattery, be addressed by his professional brethren,—

"O et præsidium et dulce decus meum."

His is a name held in esteem by all who personally knew him, and also by a large number who only knew him by repute and character, from his writings and exertions in reference to the advance of medical science, and also of medical reform.

As far back as 1817 or 1818, I learnt to respect the name of Barlow, from perusing his paper on medical education, no mean or small part of medical reform; the more enlarged and extended field of general medical reform you entered upon some years after. Had Dr. Barlow been alive, I doubt not that he would have infused a spirit of greater activity into our operations connected with the late attempts to obtain medical legislation.

The high opinion I formed of him at the time mentioned, being personally unacquainted with him, was amply confirmed by my residence in this city during the last twelve years of his life.

Perhaps this feeble attempt to rescue the memory of an ornament of our profession from the charge of abetting quackery may be deemed unnecessary, as some may find, as I do, the refutation of the charge in his testimonial to Mr. Hunt. Still, a sense of duty to departed worth has made me anxious to shield the funeral urn of the honourable and honoured late Dr. Barlow from even the appearance of anything to tarnish the lustre of its spotless brilliancy.

In conclusion, let me add, that valuing THE LANCET as an instrument of great good, I am most sincerely desirous that

* For Dr. Barlow simply styles Mr. Hunt "a corrector of stammering."

no alienation of friendly feeling should arise towards it, by its including among the delinquents of professional honour any parties who are *sans tâche et sans reproche*.—I am, Sir, your obedient servant,
P. BALLANTINE FERGUSON, M.D.

Bath, June, 1846.

* * We were quite aware of the death of Dr. Barlow, and we are sure we have as great an admiration of his career, and respect for his memory, as Dr. Fergusson or any of his warmest friends can desire. Our respect is, indeed, such, that we should desire to rescue his name from the suit and service of a common advertising quack. But we were dealing with a specific subject. Dr. Fergusson has given his own definition of quackery. Of his first position respecting secret remedies, there can be no question; but regarding his second, that "universal applicability" is necessary to constitute quack treatment—if this were granted, there could be no quackery in individual diseases, no empiricism in specialties. The grounds of accusation urged by ourselves against the itinerant empiric were distinct—namely, that he offered the example of an unprofessional person engaged in treating disease, to the disgrace of regularly educated practitioners, and that his mode of treatment was secret. Of the truth of both these points we are quite satisfied, in fact, we have had them confirmed by his own words. Though in the case of Dr. Barlow, he may not have dared, from the high character of this physician, to obtrude the plan of treatment as a secret, we know that in the cases of pupils, and medical men generally, who are entrapped into giving testimonials, a promise not to divulge nor to practise the plan is obtained before it is communicated. Under these circumstances, we do not believe Dr. Fergusson or any other honourable man would give the same certificate as that given by the late Dr. Barlow to the quack curer or "corrector of stammering."

We shall do our best to put the whole system to the rout, and we have a right to expect and demand the coöperation of the entire profession. The enormous sums stolen annually from the profession by the quacks is beyond belief; and the mischief to public health and public morals is equally gigantic. We must not relax from pity because one quack is not quite so vicious as the rest. The principle is the same, whether a man merely takes the money of the profession for treating stammering, or rob the profession and murder the public by hydropathy. Dr. Fergusson may depend upon it, the whole thing is too rank to be destroyed by delicate drawing-room attacks. Individuals must not be spared, whatever their virtues or their station, when the interests of the whole profession are at issue.—Ed. L.

THE M.D. DEGREES OF EDINBURGH AND ST. ANDREWS.

To the Editor of THE LANCET.

SIR,—Will you oblige me, in your next, by stating your opinion respecting the degree of M.D. of the Universities of Aberdeen and St. Andrews? Most of the physicians in this city are Edinburgh graduates, and seem to think (ay and speak) lightly of those holding degrees from the above-named Universities. To select the most eminent physician and the youngest graduate of St. Andrews in this city, by way of comparing the merits of each, as regards their preliminary education. The Edinburgh physician was three years studying, the first in Edinburgh, the second in Paris, the third and last in Edinburgh, where he took his degree at twenty-one years of age. The graduate of St. Andrews was five years an apprentice to one of the surgeons of the Bristol Infirmary, and one year a dresser at one of the largest hospitals; became a member of the Hall at twenty-one, of the College at twenty-two, commenced practice, and had been in practice five years, when, owing to the bill of Sir J. Graham, he determined on obtaining the M.D. degree of St. Andrews, which he did, after a good practical examination of two hours. Which of the two, I ask, Sir, is likely to be the better practitioner, the man who studies by the bedside at a hospital for six years, or the man who studies at a University, and not necessarily by the bedside, for three years? And yet, forsooth, the Edinburgh

M.D. turns up his nose at the St. Andrews M.D. Will you be kind enough, Sir, to give your own opinion on the subject, and oblige, with others, your obedient servant,
BRISTOLIENSIS.

[If the statement made by our correspondent be correct, it certainly would be more becoming if the nose of the Edinburgh M.D. were to be content with a less lofty altitude than is here described.]

MEDICAL FEES AT ASSURANCE OFFICES.

To the Editor of THE LANCET.

SIR,—The point raised by Mr. Stookes, in his controversy with Widow Sutton and Son, appears to me to be one of considerable importance, and one on which it would be well to have some definite principle of action established among the members of the medical profession. I therefore send you the subjoined documents, partly with the view of eliciting further discussion, and partly to strengthen the hand of Mr. Stookes, who has hitherto fought his battle almost single-handed. The letter I addressed to one secretary was not written without due consideration, and shows clearly, and I hope concisely enough, that my opinion was then entirely in accordance with that of Mr. Stookes, and I need scarcely say, that instances of *mala fides*, on the part of insurance companies, adduced by Mr. Self, have only confirmed me in believing "his quarrel just." Had not my friend assured me that delay might subject him to serious inconvenience, I would certainly have refused even this general report.

"Having known Mr. — for four years and a half, and being the ordinary medical attendant of his family, I have no hesitation in stating, that so far as my observation, inquiries, and examination go, no person with whom I am acquainted is more habitually healthy, and more completely free from constitutional taint or organic disease. He is at present in the enjoyment of perfect health."

Along with this report I enclosed the following note:—

"To the Secretary of the Scottish Provident Institution.

"May 2, 1846.

"SIR,—At the request of my friend Mr. —, and solely from a desire to accommodate him, I herewith transmit to you a general statement regarding his health, for the use of the Directors. At the same time, I feel bound to inform them, through you, that I shall consider it my duty, henceforward, peremptorily to refuse all such applications, without a fee from the company requiring the information, for the following reasons:—

"1. The evidence is sought, not by the proposer, but by the company, for their advantage, and it may be to his loss.

"2. If the company deem it necessary or desirable, to obtain other information than that furnished by their own medical referee, in common fairness they are bound to pay for it.

"I am happy to say, there is a rapidly-growing determination among the members of the medical profession to decline giving gratuitous advice to insurance companies.

"I am, Sir, &c."

My friend did not perceive the reason of my scruples till I asked him—Do you consider yourself bound to furnish evidence against yourself? And if my report were unfavourable, while that of the company's referee was favourable, would not you consider it an extreme hardship to have to pay me for defeating your application? Strong, however, as my persuasion is, that the present system is mean and indefensible, and one of the many devices for "bleeding the doctors," against which you have so vigorously and perseveringly battled, I shall let no false pride prevent me from avowing my error, if any arguments that may be elicited shall convince me that I have taken up wrong ground.

I am, Sir, your obedient servant,

A. P. STEWART, M.D.

Mount-street, Berkeley-square, June, 1846.

FIT COMPANIONS.

A CORRESPONDENT sends to us for insertion the following note, which was addressed by a hungry dentist to Dr. Elliotson, a short time since, and published with a triumphant announcement by that doctor, as a set off against the "detractions and sneers of his professional brethren." *Facilis de-census averno*:—

"Mr. Hayes presents his compliments to Dr. Elliotson and begs to inform him that he will have much pleasure to 'ex

tract teeth in the mesmeric state,' as also if his humble aid would tend to advance that noble science, mesmerism, by publicly certifying to the result of operations under that state, he will at all times be happy in so doing. Mr. Hayes has twice operated in the mesmeric state, and has practiced mesmerism non-professionally for some years. Mr. Hayes has Dr. Elliottson's 'cases' and the *Zoist* on the table in his reception-room, notwithstanding the detractions of Dr. Forbes, and the sneers of professional brethren.—13, Brook-street, March 10th, 1846."

The least that the editor of *The Zoist* can do in return, would be, to place upon the table in his reception-room a copy of the *Weekly Chronicle* of April 19th, 1846, marked at the heading "Middlesex Sessions, Friday, (before Mr. Serjeant Adams)," page 1, column 5.

THE FUNERAL CLUBS.

To the Editor of THE LANCET.

SIR,—The extensive circulation of your periodical amongst the members of the medical profession induces me to bring before your notice the serious evils that have occurred from the establishment of funeral clubs in this neighbourhood in Yorkshire, and in Lancashire. I am far from wishing to interfere with the poor man's real or imaginary rights, but I do think compulsory measures are called for when such rights are grossly and wickedly abused.

I was at one time so far impressed with the idea that funeral clubs were a source of benefit to a poor man, that I established one in a parish where I was officiating as curate; but had I seen the great abuses that might arise, and the awful crimes to which such clubs might become subservient, I should have been most strenuous in efforts of a contrary tendency,—that no poor man, however viciously inclined, might have had to struggle against the temptations they present to him.

The principal point of objection to these clubs is, that a party becoming a member of one club may, at the same time, subscribe to several others, that thus a large amount is claimable after a few small payments, should the death of a husband, wife, or child, take place.

Some means may surely be devised to prevent the temptations to which such clubs give rise. On the present plan they offer a premium to the most awful crime that can be contemplated. Not many years ago several convictions took place in Lancashire and Cheshire, of parties who had murdered their children for the sake of the funeral money; and within the last few weeks, a woman at Runcorn was committed to Chester Castle, upon the coroner's warrant, for the murder of three of her children, led to the commission of this unnatural crime by the prospect of receiving 7*l.* 10*s.* from a club in Liverpool. There have been other instances which I cannot detail, though I forwarded the particulars to the Home Secretaries, feeling assured that the Government would take means to prevent the occurrence of such crimes.

I need not call to your recollection the murders committed some years ago, in Edinburgh and London, by men, who, from the father of those crimes, were called Burkers. Investigation led to the abolition of that dreadful system, and I trust, ere long, the legislature will take means to prevent the further development of this new system of murder, by which a husband, tempted by filthy lucre, forgets the affection he owes to the partner of his bosom, or a parent imbrues her hands in the blood of her helpless offspring.

The profession, whose interest you advocate, will, I am sure, lend a helping hand to detect, and bring to justice, parties suspected of the crimes to which I have referred, and I trust they will investigate every case in which suspicion can arise of foul treatment by any of the hidden arts of infamy by which murder can be accomplished, that thus a new crime may not be added to the number that already disgrace our Christian country.—I remain, Sir, your obedient servant,

Vicarage, Mathersey, June, 1846.

W. C. FENTON.

MEDICAL NEWS, FACTS, NOTICES, AND REMARKS.

THE WATER-DEATH.—VERDICT AT THE CRIMINAL COURT.—On Saturday, June 20th, James Ellis, the laceman, took his trial at the Central Criminal Court for the manslaughter of Richard Dresser. The coroner's inquisition on which he was tried charged him with having "injuriously, rashly, negligently,

and feloniously, caused certain cloths saturated with water to be placed upon the body of Richard Dresser for a long period of time; and that he had also rashly, injuriously, &c., placed him in a bath containing a large quantity of water; and that by these means he caused him to be mortally disordered in his body, and likewise occasioned a mortal congestion of the heart and lungs, of which he languished until the 2nd of June, and then died."

Mr. Bodkin opened the case for the prosecution; Mr. T. Hubert, Mr. W. G. Dresser, Mrs. Harriet Dresser, (widow of the deceased,) Mr. Waterworth, Mr. Hicks, &c., reiterated their evidence at the inquest, the substance of which appeared in THE LANCET of June 13th, pp. 666-7.

Lord Chief Justice Tindal summed up, and the jury returned a verdict of *Not Guilty!*

GLANDERS IN THE HUMAN SUBJECT.—Two more deaths have been recently recorded in a daily paper, as occurring at Melton Mowbray,—one being that of a groom who had tended a glandered horse, and the other that of the knacker who skinned the animal after it had been destroyed. Another party had since been taken ill—it was feared, of the same malady, but he is better. A pig, however, which had lain on some straw previously used by the glandered horse, had manifested signs of disease, and been destroyed.

The members of the Parisian Medical Society held their anniversary dinner in the Palais Royal, on Monday the 15th inst. The chair was taken by the President, Dr. F. Clane, on whose right was seated Baron Paul Dubois, and on his left, Professor Velpeau. The healths of the King of the French, Queen Victoria, (proposed by the Baron Dubois,) and "success and prosperity to the Parisian Medical Society," were given, and the Vice-President, Dr. Fleming, next proposed, "the former Presidents," amongst whom he particularly noticed Baron Dubois, Professor Ricord, and Dr. Mott, and referred to the services rendered by them to the Society. Thanks were returned by Baron Dubois.

Dr. Yates (of Birmingham) proposed the health of the officers for the year, which was responded to by the Treasurer, Dr. Oliffe, "Chevalier of the Legion of Honour."

Next was proposed, in conjunction with the medical staff of the Parisian Hospitals, the health of their distinguished guest, Professor Velpeau. The learned Professor expressed himself highly gratified, both at the compliment paid him, and the fraternal manifestations of professional sympathies evinced by the present meeting between French and English practitioners, and he hoped that no untoward circumstances occurring would ever destroy a cordiality based upon the laudable desire of advancing the progress of medical science.

Dr. McLean (late of Lima) proposed the Medical Institutions of Great Britain, a toast responded to by Dr. James Boyd.

Various other appropriate toasts followed; Dr. Odling, the Secretary, returning thanks for that of the Council &c.; and in several speeches from the members, the flourishing condition of the Society was alluded to, as also the fact of its being the only British medical and scientific institution on the Continent.

LEICESTER INFIRMARY.—At the quarterly board meeting on Thursday, June 18, Mr. T. Macaulay brought forward a motion to rescind an engagement with Mr. R. Whitchurch as assistant dispenser, which had been entered into by the weekly board on May 19, the salary given being equivalent to 65*l.* a year, as Mr. Whitchurch was to have 30*l.* while the preceding year he had to pay 35*l.* for board. Mr. Harding, being sent for, stated, that Mr. Whitchurch's appointment was matter of necessity, as they had not been able to get pupils, and he (Mr. Harding) could not get through the business without one.—It appearing doubtful whether the general board had power to rescind the engagement entered into by the weekly one, an amended motion for terminating the engagement at the end of three months was put, but lost by the casting vote of the chairman.—Mr. Macaulay then gave notice that at the general meeting in September he should move for a rule increasing the number of honorary medical officers. The paper from which this is copied also states that the treasurer has received 100*l.* for the infirmary, as a legacy from the late Miss Linwood.

THE POTATO.—To the Editor.—Sir: On the 4th of August, 1832, THE LANCET published a paper of mine on the original country of the potato, (*solanum tuberosum*.) Therein I stated that Clusius, an eminent botanist of the sixteenth century, supposed that potatoes were not unknown to the ancients, and that the arachidna of Theophrastus was this plant. A cottager, named John Digby, residing near to Bux-

ton, states, that he has produced from what he terms berries, not formed from any blossom, the true potato. As Buxton is not far from Norwich, I trust that the spirit of Sir James Edward Smith still lives, and that some botanist from that city will visit Digby, from whom I have had a very rational letter, in which he refers me to the Rev. George Jarvis, vicar, Buxton.—I am, Sir, your obedient servant,

JOHN E. O'REILLY, M.B., Coll. Trin. Dub.

Belturbet, Armagh, June, 1846.

THE "WEATHER."—Are we to think that atmospheric variations are absolutely without influence on the public health? Such a conclusion would be too much in opposition to general experience. Yet, from all our observations, the only conclusion that we are at present able to draw is the following:—The weight and the temperature of the air, whether considered by themselves, or in their variations, do not appear to exercise any appreciable influence on the public health, or at least on the movement of the hospitals. The degree of humidity of the atmosphere, and the direction of the winds, on the contrary, appear to exert a well-marked influence. Although this conclusion is, in great part, negative, we shall not regret to have stated it, if further researches should confirm its justice, as the overturning of a belief in imaginary influences must tend to advance the cause of etiology.—(*Report on Public Health in Paris, for 1845.*)

CLEANLINESS OF THE POOR.—The following petition of all the physicians and surgeons of the town and county of Southampton has been forwarded for presentation to Parliament:—

"That disease is constantly occasioned and aggravated among the labouring classes and the poor by their want of personal and domestic cleanliness; and the over-crowding of their dwellings in very many cases renders their cultivation of habits of cleanliness almost impossible.—That the rich are deeply interested in the health of the poor, not only on economic grounds, but also because many infectious disorders, which eventually attack individuals of all ranks, originate in and spread from the densely-crowded quarters inhabited by those who are the poorest.—That if the labouring and poorer classes had opportunities of bathing frequently, and the means of washing and drying their clothes out of the rooms in which they live, at a moderate expense, their condition would be in some respects greatly improved, and the consequences of their availing themselves of those opportunities would be beneficial to all classes."

BRISTOL DISPENSARY.—At a special general meeting of the subscribers to the Bristol Dispensary, held in North-street, on Thursday, June 18th, Mr. Robert Norton was re-elected to the office of apothecary to the northern district, for the usual term of five years. An alteration was made in the number of sick notes to each guinea subscriber being increased to five, commencing with the next year; and as the increase of labour to the apothecaries will be considerable, their salaries are to be raised from 200*l.* to 230*l.* per annum.

QUACKERY.—THE TAPE CURE.—NEW AND EXTRA-ORDINARY DISCOVERY!!!—Rheumatism, Gout, Headache, Lumbago, Pains in the Bones, Joints &c. cured by the application of a Yard of Common Tape.—This wonderful secret was accidentally revealed three months ago to the present Proprietor, whilst engaged in an experiment. The tape (which has been previously prepared in a very powerful Solution, the Combined Properties of which appear to produce almost a Miraculous effect) is simply bound next the Skin of the Patient, either as bracelets, garters, or a necklace, without causing the slightest pain or pressure. The original fluid in which the tape has been steeped, then slowly begins to operate upon the Surface of the Skin, and produces somewhat the appearance of Friction, without the smallest heat, itching or unpleasant sensation to the Sufferer.—The progress of the cure is then continuous, in three hours relief is afforded, in twelve the externals of the Complaint are reduced, and in twenty-four the patient walks erect and free from pain, as though a new vitality were breathed through all his veins. The incredible virtues of this Samaritan Tape demand that its healing effects should be made public, and the sphere of its utility limited only by the confines of the world.—Remember, this Invaluable Specific and Speedy and Certain remedy is to be procured only of the Inventor, from 11 till 4, and from 6 till 8, at his private Residence No. 4, Ampton-street, Gray's-inn-road. Price one shilling.

*** It appears to us that the inventor of the above is entitled to the friendship of Dr. Richard Bright.

At a congregation held at Cambridge on the 12th instant, Henry Goode, of Pembroke College, and William Francis Chorley, of Caius College, took the degree of Bachelor of Medicine.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, June 19th, 1846:—J. Rogers, W. P. Charsley, B. Butterworth, W. C. Cooksey, B. P. Matthews, E. Simpson, A. H. Pairy, R. W. Ledward, G. C. Sharman, A. T. Mott, J. M. Bowie, J. B. S. Brown, W. Hurman.

APOTHECARIES' HALL, LONDON.

Names of gentlemen who obtained certificates of qualification to practise as apothecaries, on Thursday, June 18th, 1846:—William Henry Freeman, Spring gardens; John Palmer, Loughborough; Rowland Lloyd, Dolgelly, North Wales.

CORRESPONDENTS.

We have received "the bill" from Wisbeach; but the authority for ascribing the production to the pen of Dr. W. is anonymous. So is the statement that the doctor has "met in consultation a notorious bonesetter, who takes hundreds a year out of the pockets of the medical men of that neighbourhood." We have not forgotten the metropolitan pranks of the gentleman in question; but decline to insert statements respecting him without a previous confidential authentication of the facts.

A. B. C. D.—Residence is required in all the universities of Scotland at the present time; but whether the regulation is enforced or not, we are unable to state. Letters addressed to the heads of the Universities and Colleges would be the means of eliciting the information which our correspondent is desirous of obtaining.

It was not intended to publish the letter of Mr. J. Tennent. The acknowledgment of the communication in *THE LANCET* was an inadvertence. We fully agree with by far the greater portion of the remarks which Mr. J. Lilley addressed to us, in his letter of May the 18th, relative to the establishment of a Faculty of Medicine. We dissent from the views of Dr. Bremner, Senex, and Dr. M'Douall, on the same subject. The number of communications which we have received in relation to the question have rendered it impossible for us to find space for them in our columns.

In answer to the letter of the *Medical Electrician*, (Cheltenham,) we need only remark, that if he be not the person employed on the electro-magnetic telegraph in that town, he is certainly *not* the person alluded to by Dr. Golding Bird.

Mr. Johnson, (of Berwick,) has forwarded to us a specimen of the inflorescence of *hyoscyamus niger*, in which, in two flowers, instead of five stamens and anthers, there are six of each. We thank him for the curiosity. He is wrong, however, in supposing that this specimen would be *botanically* properly designated hexandria monogynia—it is simply an anomaly. It may be true that, *exceptio probat regulam*; but the rule derives no colour from exceptions.

A Pupil.—The "School of Physic in Ireland," connected with Trinity College, Dublin, is an efficient establishment, and exhibits the names of many admirable lecturers. It may be safely recommended.

We feel obliged to *A Victim of too many Medical Corporations* for his sound advice. The state of affairs in Parliament has absolutely precluded the introduction of a Medical Bill into the House of Commons during the present session—that is, with the slightest prospect of converting such a Bill into a statute of the realm. At the present moment, the difficulties are greater than ever, as there is every reason for believing that a change in the ministry is near at hand. The utmost that can be done at present is to watch for the golden opportunity.

The communication of Mr. Gower shall be returned, as he has requested.

A search shall also be made for the paper which Mr. Richardson (of Galway) forwarded to us in the month of December last. It had totally escaped our recollection, and we hope that the loss of it, if it should be lost, will not subject Mr. Richardson to any further inconvenience than the transmitting to us another copy for publication.

H. G.—We feel confident that such an action could not be maintained, although the conduct of the party was in the highest degree unjustifiable.

Although *THE LANCET* of this week extends to FORTY PAGES, the great length of—it is to be hoped—a very valuable index has prevented the insertion of several interesting communications.—*Ed. L.*

Communications have been received from—Mr. Stilwell, (Epsom); Mr. Bower Harrison, (Broughton); Dr. Arnott, (Gorleston); Mr. Pretty; Dr. W. B. Herapath, (Bristol); Mr. Anderson, (Oakham); A Medical Pupil; Bristolensis; Mr. Johnson, (Berwick); A. B. C. D.; Mr. Grafton; Mr. James Edwards; Mr. Pascoe; Dr. Thomas; Mr. Pemberton; Dr. F. J. Wood; Dr. Williams; Mr. Crabtree; Mr. Paul Brooker; Dr. Hinds; Mr. Lefevre, (Monkton Park); Mr. H. Cooper; Mr. Hargraves; Mr. Hickson, (Liverpool); Mr. W. S. Smith; Mr. Rolphe; Mr. Hart, (Leadenhall-street); Mr. Hector Gavin; Mr. Price; Mr. Ward; M.R.C.S.L.; Mr. Edwards; Timon; Dr. J. F. M'Evers, (Cork); Verba, (with the quack advertisement); Hastings; Mr. Proctor; Mr. Christopher Spencer, (Norwich); Mr. Drayford.

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